TECHNICAL APPENDIX

Study of the Relationship Between State-Owned or Operated Transportation Facilities and Local Comprehensive Plans

Prepared for:

Washington State Legislature
Legislative Transportation Committee

Prepared by:

BERK & ASSOCIATES, INC.
Henderson, Young & Company
JHK & Associates, Inc.
Molyneaux Associates, Inc.
Porter & Associates, Inc.

February 1995

STUDY OF THE RELATIONSHIP BETWEEN STATE-OWNED OR OPERATED TRANSPORTATION FACILITIES AND LOCAL COMPREHENSIVE PLANS

TECHNICAL APPENDIX

Table of Contents

Exhibits

Section 14: Funding Options for Regionally Significant Facilities 14-1

Exhibits

SECTION 1
LOCAL GOVERNMENT SURVEY FINDINGS

Introduction

In August 1994, a survey of local governments was conducted by Henderson, Young & Company to determine the treatment of state transportation facilities in local comprehensive plans. Surveys were distributed with the assistance of the Association of Washington Cities and the Washington State Association of Counties to approximately 250 counties and cities that are planning under the Growth Management Act. A total of 104 responses were received, consisting of 22 counties and 82 cities.

The results of the survey are presented below: the number of respondents is listed at the beginning of each answer.

Survey Results

1. **What is the current status of the transportation element of your comprehensive plan (to comply with the Growth Management Act)?**

   18 = 100+% (completed and adopted)
   25 = 100% (completed, under review)
   38 = 50-99% (under development, more than half finished)
   17 = 1-50% (under development, but less than half finished)
   6 = 0% (not yet started)

   Please answer the following questions based on your best judgment of how your transportation element does (or will) address the following questions:

2. **Which state transportation facilities* are you including in your comp plan? (check as many as apply)**

   71 = State highways, but not limited access facilities
   38 = Limited access highways and interstate facilities
   10 = Washington State Ferries
   10 = Other
   12 = State transportation facilities are not included in our comprehensive plan

   *"state facilities" include state highways and interstates (State Routes) and the Washington State Ferries.

3. **If you include any state transportation facilities in your comp plan (Question 2), what are you doing about level of service (LOS) standards on state facilities?**

21 = Using the state's standards (i.e., Service Objectives)
17 = Using standards developed by the RTPO
29 = Using standards developed by your City/County
10 = Using other operating standards
4 = Not using standards, but use projects listed in state's transportation plans
12 = Not using standards, and not using state's transportation plans

4. **If you include any state transportation facilities in your comp plan, (Question 2), are those state facilities included in concurrency (i.e., development will not be approved if state transportation facilities are below acceptable LOS)?**

45 = YES
29 = NO

5. **Are transportation facilities a factor for establishing the boundaries of urban growth areas?**

State transportation facilities	45 = YES	52 = NO
Local and/or regional transportation facilities	49 = YES	47 = NO

6. **Do you treat the following issues differently in the urban growth areas (UGAs) than in the rural areas, or do you treat them the same in UGAs and rural areas?**

	Urban v. Rural	
	Different	Same
Levels of service on state transportation facilities	27	34
Levels of service on your transportation facilities	28	33
Concurrency requirements	10	48
Programming and prioritization of transportation projects	22	35

7. **Has the creation of urban growth boundaries increased, decreased, or not changed the need for transportation facilities?**

	Increased	Decreased	No Change
Need for state facilities inside UGAs	21	1	65
Need for state facilities outside UGAs	6	5	69
Need for local and/or regional transportation facilities inside UGAs	35	1	52
Need for local and/or regional transportation facilities outside UGAs	14	4	63

8. **Has the creation of urban growth boundaries increased, decreased, or not changed the prioritization of projects for transportation facilities?**

	Increased	Decreased	No Change
Priority of state facility projects inside UGAs	24	1	63
Priority of state facility projects outside UGAs	6	5	68
Priority of local and/or regional facility projects inside UGAs	35	1	54
Priority of local and/or regional facility projects outside UGAs	8	10	62

9. **Do you have, or are you likely to adopt any of the following?**

	Yes Have Now	Yes - Likely to Adopt	No
SEPA mitigation payments for your roads	27	22	39
SEPA mitigation payments for state roads	14	9	62
GMA impact fees for your roads	9	37	43
GMA impact fees for state roads	4	15	64

10. **Does the transportation element of your GMA comprehensive plan include policies about managing access (i.e., driveways, intersections, on-ramps, etc.) for the following?**

	Have policies	No policies
State transportation facilities	38	50
Local and/or regional transportation facilities	55	36

11. **Do you include access management as a factor in the following?**

Design standards	67 = YES	20 = NO
Functional classifications	46 = YES	40 = NO
Programming and prioritization process	24 = YES	61 = NO
Development guidelines	65 = YES	23 = NO
SEPA guidelines	41 = YES	44 = NO

12. **Has your agency received any Access Permits from WSDOT as part of any development review?**

23 = YES
71 = NO

13. Will improvements to state facilities need to be made in order to achieve concurrency?

40 = YES (please answer question #14)
53 = NO (skip to question #15)

14. <u>If you answered yes to Question 13</u>, Are the improvements to state facilities needed for concurrency included in any of the following?

state's transportation plans or programs	21 = YES	11 = NO
Regional Transportation Plan	23 = YES	9 = NO
Local transportation plans	29 = YES	7 = NO

15. Do you have a specific process for prioritizing road improvements?

72 = YES (please answer question 16)
30 = NO (skip question 16: you have completed the survey).

16. Are LOS deficiencies one of the factors in prioritizing road improvements?

LOS on state transportation facilities	32 = YES	31 = NO
LOS on local and/or regional facilities	58 = YES	13 = NO

SECTION 2
STATE AND LOCAL PLANS

TABLE OF CONTENTS

SECTION 2
STATE AND LOCAL PLANS

Introduction

The purpose of this section is to document the treatment of state transportation facilities within the state, regional, and local planning process. This information provides insights into the following policy issues raised by the Legislative Transportation Committee:

- Which state transportation facilities should be required to be addressed in local GMA "tools"?
- Which local government Growth Management Act (GMA) "tools" should be required to address state transportation facilities?
- What should be acceptable solutions for achieving concurrency?
- Who should identify and select the solutions for achieving concurrency?

These policy issues focus primarily upon the relationship between the state and local agencies. However, the local comprehensive plans are shaped in many ways by the policy direction provided by the Regional Transportation Planning Organizations (RTPO's). Therefore, this section also documents the current status of regional planning efforts and their influence on the treatment of state facilities.

The remainder of this section describes the state, regional, and local planning processes in a sequential order, followed by conclusions which summarize the interrelationships of these plans with respect to state transportation facilities.

State Transportation Plans

The State of Washington has actively been developing statewide transportation plans and policies during the past five years. These plans provide the framework for addressing the role that state transportation facilities play in providing statewide and regional mobility. Several of the most significant studies are summarized below.

Washington State Transportation Policy Plan

This significant statewide effort included five annual reports addressing statewide transportation issues. The *first* report described the vision and goals for the state. Policies and recommendations were developed addressing mobility in urban and rural areas, transportation and land use planning, freight and goods movement and preserving the existing transportation system. The *second* report focused on energy and environmental issues and transportation programming and finance. The *third* report addressed bicycle transportation, public private partnerships, transportation for people with special needs, freight and goods movement and tourism development. The *fourth* report addressed public transportation, rail

right-of-way preservation and improving the efficiency of the transportation system. The *fifth* report addressed pedestrian travel and developed recommendations on freight mobility, and cultural, natural and historic resources on transportation corridors. The recommendations are summarized in a report entitled, "Transportation Policy Plan For Washington State: Summary of Approved Policies."

Statewide Transportation Systems Plan

This plan identifies the draft service objectives for the maintenance, preservation, and improvement of state highways, airports, and ferries. This plan also shows the cost to meet these objectives and the relationship between current funding and the cost of proposed programs.

Statewide Multimodal Transportation Plan

This plan identifies the systems plans for safety improvements, movement of goods, rail corridors, ferry routes, airports and ports, bicycle routes, public transportation providers, private transportation providers and mobility needs.

Regional Planning Process

Interviews were conducted with most of the 14 Regional Transportation Planning Organizations around the state. The intent of these interviews was to determine the status of regional planning efforts, to specifically address how the RTPO's are including the state transportation policy plans, and to identify relationships between the regional and local GMA plans.

It is difficult to generalize the status of the regional plans, since they are at different stages of completion around the state. The RTPO's are actively preparing regional transportation plans, but with few exceptions these plans are not completed. Most are following a cooperative approach of integrating state policy needs and local issues through a "bottom-up" planning process. Notable examples of this approach are the PSRC, TRPC, and SWRTC.

The following observations can be made regarding the issues most relevant to this study:

- Few RTPO's have selected which LOS standards to use on state facilities. Many have acknowledged the state's service objectives as a starting point in this process. The state facilities which are most under review are those which are considered "regionally significant".
- The most common LOS method is the volume/capacity ratio, which can be applied on a facility or screenline basis. Several RTPO's are looking at "multimodal" or "system level" performance measures, rather than traditional traffic engineering measures. For example, travel time is seen by some RTPO's (e.g., PSRC) as a preferred measure.

- Treatment of state facilities will be a factor considered by the RTPO's during the review and certification of local plans.
- Many items are being left to the discretion of the local agencies, with minimal direct involvement from the RTPO's. These include the following:

  -Urban Growth Areas
  -Concurrency Management Systems
  -LOS Standards on Local Facilities
  -Access Management
  -Priority and Programming of Local Facilities

Overall, the RTPO's interviewed primarily see their role, within this process, as being coordinators among their constituent local members and the state. In this sense, they are generally not taking a strong advocacy position.

Local Planning Process

The following sections discuss key aspects of the local planning process as they relate to the treatment of state transportation facilities.

Influence Of State Policy Plan On Local Comprehensive Plans

The state transportation plans and policies discussed previously provide guidance to local agencies with respect to the state's interest in maintaining transportation mobility. The State Policy Plan has provided guidance with respect to the following:

- Multimodal Emphasis- State plans strongly encourage the integration of various modes into the local transportation plans.
- Land Use and Linkages- The state acknowledges that the success of local plans will lie in the successful link between land use and transportation.
- Prioritizing Needs Important to the Statewide Interest- The state's Multimodal Transportation Plan stresses the need to prioritize those transportation facilities which contribute to local, regional, and statewide interests.
- Setting "Service Objectives" on State Transportation Facilities- The Statewide Transportation System Plan provides initial WSDOT guidance regarding the desired levels of service (or service objectives) for each state facility. The final service objectives are to be negotiated with local and regional agencies.
- Balancing LOS and Other Needs- State facility transportation needs involve a wide range of issues, among them Level of Service. Other significant statewide needs, such as safety, preservation, and maintenance, often must be weighed, along with LOS, during the setting of implementation and funding priorities.

While this guidance has been helpful to local agencies, there are several specific areas of growth management planning in which the state's plans are relatively silent or do not provide a clear indication of the state's interest. These areas of need include the following:

- Level of Service Methods- Local agencies have been left to their own initiative to develop LOS methods to meet their own needs. These methods, often innovative and instructive to policymakers and the public, have not been coordinated at the state or regional level.
- Urban Growth Area Boundaries- The establishment of growth management boundaries has involved a balance between local and regional policy and political needs. These decisions have been left to the local and regional agencies, the result being some significant differences among these agencies regarding the parameters for selecting appropriate UGA boundaries.
- Concurrency Requirements and Procedures for State Facilities- While the surveys showed that almost 50% of local agencies say that state facility improvements must be made to achieve concurrency, there has been limited guidance by the state regarding how concurrency should be applied to state facilities.
- Funding Commitments for State Facilities- A great fear of local agencies is the potential that state facilities be included in local concurrency programs, but without the necessary state funding commitments to make the improvements to those facilities to achieve or maintain concurrency.
- Local Prioritization and Programming- The state has a Priority and Programming system which accounts for some level of service factors and other statewide concerns. There has not been, however, guidance to local agencies regarding the prioritization process to be used for local (and sometimes state) facility improvements which affect the levels of service on state facilities.

Local Plan Treatment Of State Transportation Facilities

The survey of local agencies (See Section 1) provides information on the extent to which the local transportation plans handle state transportation facilities. There are three components which are important to consider:

- Inclusion of State Facilities- Which state facilities are specified within the comprehensive plans?
- Level of Service- Do the local plans address levels of service on state facilities?
- Concurrency- Do the local government concurrency management systems include state facilities as part of the test applied to new development applications?

Each of these issues are addressed in the following sections.

Inclusion of State Facilities

According to the survey, 79 percent of local agencies do include state transportation facilities (highways and/or ferries) in their local comprehensive plans. Of these, half include state highways only, 14 percent include limited access (freeways) only and 35 percent include both.

Of the remaining 21 percent that do not include state facilities, 35 percent are in the central Puget Sound Region and 65 percent are elsewhere. Most of the jurisdictions that do not

include state facilities are of small to medium size (1,000 to 5,000) and most have very few state highways running through their jurisdictions (e.g., Mercer Island, Dupont and Index).

In general, most local agencies seem willing to and have included state facilities in their transportation planning activities. However, the surveys reveal that there is very limited regional consistency among local agencies and that there needs to be a better link between concurrency and programming provisions of local plans as they relate to state facilities.

Levels of Service on State Facilities

Of those agencies including state facilities in their comprehensive plans, 25 percent have included the state's draft service objectives, 40 percent use local or regional level of service standards, 20 percent use some other standard, and 15 percent do not use a standard. Typically, the rural areas reported that they did not have traditional level of service problems relating to capacity and congestion. However, the rural areas had other issues such as maintenance of shoulders and farm-to-market roads.

Most of the reporting local areas did include some type of LOS standards, and in many cases applied innovative LOS approaches to meet the local planning needs. The survey results show, however, that there is still a need for better regional consistency and coordination with WSDOT with respect to setting LOS standards on state facilities. Several comments were also made that innovative LOS measures must be practical, meaning that they must be both easily understood by the public and easily measurable with available data collection techniques.

Concurrency

According to the survey, 50 percent of the local agencies indicated that improvements to state facilities must be made to achieve concurrency. This number increases to 60 percent when looking at limited access facilities and 65 percent when looking at ferries. It should be noted that close to 55 percent of the counties versus 40 percent of the cities indicated that improvements must be made to state facilities in order to achieve concurrency. This result is not surprising given the added reliance of counties (especially rural counties) on state facilities to serve significant local and regional travel needs.

Of the local governments surveyed, only 45 percent indicated they would include state facilities in their concurrency programs. However, of those local agencies who are including state facilities in their plans, up to 60 percent indicated that they would include state facilities in their concurrency programs. This distinction partly reflects the higher degree of completion of the local plans compared with concurrency programs. The other observation is that those agencies with knowledge of state facility needs (as evidenced by their inclusion in local plans) are more willing to include state facilities in the local concurrency programs. State facility needs, identified in the local agency concurrency programs, may also affect the ability to (e.g., congestion and poor LOS on a state facility may "over flow" to local routes causing them to exceed performance standards) achieve concurrency on non-state local facilities.

Of those agencies surveyed, 60 percent acknowledged that improvements to state facilities to meet concurrency were included in state and regional plans, while 80 percent of the local plans included the necessary improvements on state facilities. Only 10 percent indicated that improvements to state facilities to meet concurrency were not included in an official plan.

Most agencies acknowledged that the need for improvements to state facilities should be in local plans and typically the facilities were included in the plans. The survey results indicate a relatively broad understanding of state facility needs to meet concurrency provisions; however, there is no linkage yet between these identified needs and their explicit inclusion in concurrency programs affecting local land use decisions. There is a need for commitments to include those facilities in the local plans to insure consistency with local land use decisions, but the local agencies must have a commitment for programming and funding from the state if the facilities are included.

Transportation Mitigation Under GMA and SEPA

Currently, 30 percent of the local agencies use SEPA mitigation to require new development to make improvements to local roads, while only 17 percent use SEPA mitigation for state roads. Overall, the use of SEPA to enforce mitigation of transportation impacts was much more prevalent in large urban areas. For example, half of the large urban areas indicated that they use SEPA mitigation for local roads, with almost 30% requiring mitigation for state roads. In small urban and rural areas, however, the usage of SEPA mitigation falls to less than 20 percent for local roads and only 5 percent for state roads. These results are surprisingly low, given the long-standing requirements of SEPA and the particular importance of maintaining adequate state facilities in the small urban and rural areas.

Since the GMA legislation, many more local agencies have indicated they are likely to integrate concurrency and impact fees into the traditional SEPA process. Fifty percent of the responding agencies (urban and rural) indicate that they have adopted or are likely to adopt impact fees for local roads, although less than 25 percent indicate an interest in including state roads in an impact fee program. These results indicate a general unease among local agencies to include state facilities within an impact fee program. This may be related to the very limited assurances from the state as to its ability to actually implement the improvement within the six-year time frame imposed by the impact fee provisions of GMA. Overall, while the use of SEPA and GMA mitigations are expanding and many agencies have active programs or are planning on integrating concurrency and impact fees into their SEPA process, there is still a need for more and better use of these "tools".

Conclusions

State, regional, and local transportation plans have been developed over the past four years throughout the state using the basic direction provided by the Growth Management Act. The State Policy Plan has provided good overall policy direction relating to issues of statewide

significance. More guidance is needed, however, with respect to the treatment of state transportation facilities within regional and local plans. This need is reflected in the purpose for the current LTC study.

Regional transportation plans being prepared by the Regional Transportation Planning Organizations (RTPO's) are in various stages of completion. The plans in the major urban areas are largely complete and reflect a good recognition of the multimodal requirements of GMA and ISTEA. Given the regional emphasis of these plans, state transportation facilities form integral portions of the network. The regional plans are less specific regarding LOS standards for state facilities, but the RTPO's show a positive relationship with WSDOT in the coordination of state facility needs in the context of other regional priorities.

Local comprehensive transportation plans have done a fairly good job of including state facilities within their identified transportation networks. Many have acknowledged the state's draft service objectives for these facilities. The local plans have been less successful in relating the state facility needs and LOS to the development of concurrency management systems required by GMA. To date, very few local agencies have explicitly included state facilities within their concurrency programs. With respect to the regulation of new development, the use of SEPA mitigation or GMA-based impact fees is sporadic and, typically, focused within the larger urban areas. Overall, these findings indicate that there remains a gap between the longer-range visions expressed in the comprehensive transportation plans and the realities of short term land use controls embodied within concurrency or SEPA management.

SECTION 3
LEVELS OF SERVICE AND CONCURRENCY

TABLE OF CONTENTS

SECTION 3
LEVELS OF SERVICE AND CONCURRENCY

Introduction

Levels of service (LOS) and concurrency are two of the most challenging aspects of including state transportation facilities in comprehensive plans. This section of the study deals with the issues, beginning with a summary of key provisions of the law, and moving through the definition of LOS, review of the applicability of LOS to state facilities, discussion of authority for setting LOS standards, and concluding with the purposes of LOS (i.e., planning, programming, prioritization, and concurrency).

The Law

The Growth Management Act (GMA) requires transportation elements of local comprehensive plans to use LOS standards.

Standards to Gauge System Performance

The plan must include "Level of service standards for all arterials and transit routes to serve as a gauge to judge performance of the system. These standards should be regionally coordinated." RCW 36.70A.070 (6)(b)(ii).

Requirements to Achieve Standards

The plan must also include "Specific actions and requirements for bringing into compliance any facilities or services that are below an established level of service standard." RCW 36.70A.070 (6)(b)(iii).

Standards to be Achieved Concurrent with Development

"... local governments must adopt and enforce ordinances which prohibit development approval if the development causes the level of service on a transportation facility to decline below the standards adopted in the transportation element of the comprehensive plan, unless transportation improvements or strategies to accommodate the impacts of development are made concurrent with the development ... For the purposes of this subsection, "concurrent with the development" shall mean that improvements or strategies are in place at the time of development, or that a financial commitment is in place to complete the improvements or strategies within six years." RCW 36.70A.070 (6)(e).

What is Level of Service?

The Issue

The GMA uses, but does not define, the term level of service. Absent a definition, local governments planning for transportation under the GMA have interpreted the meaning and application of the term in a variety of ways, with significantly different consequences for the treatment of state transportation facilities.

Current Practice

There are a number of LOS methods that are currently being used. The parameters of this study include two kinds of state-owned or operated transportation facilities: roads and ferries. The LOS methods in current use are presented below in two categories: LOS approaches for roads, and LOS approaches for ferries.

LOS Approaches for Roads

There are many LOS approaches for roads. The following are the principal techniques: volume to capacity ratios, travel time or speed, index of congestion factors, person carrying capacity, and multi-factor (condition and operation).

Volume/Capacity (V/C) Ratio

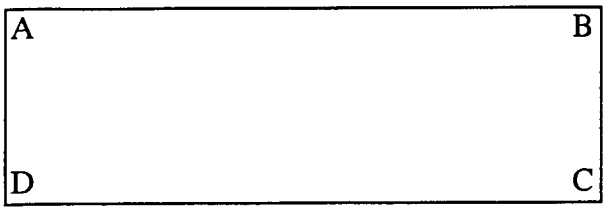
V/C ratios at individual intersections, links or segments. The most common approach to LOS for roads is the ratio of traffic volume to the design capacity of a facility. The measurement can be at intersections, or for links or segments of road. The measurement can be at the peak period of travel during the day, or it can be the total traffic throughout the day.

A common use of this measure is to convert the ratios to letter grades A - F, similar to grades in school (A = best, C = average, F = failing). Any road that has more traffic than it was designed to carry (i.e., ratio is greater than 1:1) is failing, and therefore it is LOS F. This technique is widely used. Examples include the cities of Tacoma and Sumner.

The following example demonstrates the use of V/C ratios. A segment of road defined as A-B has a current traffic count (volume) of 22,000 vehicles per day. The segment A-B is designed to carry 20,000 vehicles per day. The LOS ratio is 22,000 ÷ 20,000 = 1.1. The volume exceeds the capacity, therefore the road "fails" (LOS F).

V/C ratios averaged for multiple facilities. Another use of V/C ratios is to average the performance of a number of intersections or segments. Averaging represents behavior that a driver on an overcrowded facility (i.e., LOS F) will look for and use alternate routes that have less congestion and therefore, better travel times.

The following example demonstrates averaging of V/C ratios. The data applies to four segments represented by the following diagram: A-B, B-C, C-D, and D-A.



The following table shows the volumes and capacities for each segment separately, and at the bottom of the table the totals are used to calculate the average V/C ratio.

Link:	Volume	÷	Capacity	=	Ratio	=	Grade
A - B:	22,000		20,000				
B - C:	6,000		8,000				
C - D:	12,000		16,000				
D - A:	7,000		8,000				
Total	47,000	÷	52,000	=	0.90	=	E

Averaging can be done using different "areas" to define the facilities that are included in the average. King County uses geographical "zones" to average the LOS of segments of road, while Bellevue uses "zones" to average the LOS of intersections. Pierce County uses "screenlines" (lines drawn across a traffic area with each arterial road that crosses the screenline included in the average for that screenline). Lee County, Florida uses corridors, with all arterials within the same corridor included in the average for that corridor.

Travel Time or Speed

The amount of time consumed to get from point A to point B is the driver's personal test of LOS. For all but the sightseer, less time enroute is positive, slower speeds (than legal limits) are negative. This LOS can be expressed in time (i.e., minutes and seconds) or in speed (i.e., miles per hour).

The V/C ratio attempts to express the concept of time or speed by including a number of factors in the calculation of the design capacity of a facility including: number of signals per mile, number of driveways and/or intersections, and the direction of travel (i.e., one-way vs. two-way travel).

Travel time or speed measures avoid the imprecision of V/C ratios by directly measuring the time or speed enroute. There are, however, several limits to time and speed measures. First, there is relatively little data available because of the high cost of conducting field studies for each facility. By comparison, V/C ratios use less costly traffic count data for volume, and the capacity is only recalculated if there is a change in the factors that determine the capacity.

Another limit on the use of time and speed measures is the lack of comparability from one facility to another. Measures of travel time do not include a factor for distance. Measures of speed include distance, but do not express speed limits (i.e., the design speed). One option might be to express the ratio of actual speed to design speed (in a manner similar to V/C ratios). This approach would still require costly data collection, and regular updates in order to determine travel speed. By comparison, V/C ratios can be compared among transportation facilities because the ratio is on a scale from high to low performance that is comparable among facilities.

Examples of communities that use travel time or speed to measure LOS include Renton, Washington and Altamonte Springs, Florida.

Index of Congestion Factors

The Washington Department of Transportation (WSDOT) has developed an index based on factors that quantify the congestion of a road. The higher the index number, the greater the congestion (i.e., low index scores are better than high index scores).

The factors included in the WSDOT index include:

- Functional classification
- Peak hour and daily traffic
- Volume/capacity ratios
- Truck percentages
- Average vehicle occupancy (urban @ 1.2; rural @ 1.4)

Person Carrying Capacity

Person carrying capacity is a measure that takes into account the seating capacity of vehicles (i.e., high-occupancy vehicles, transit). The measure can be developed like a volume/capacity ratio, but the volume is measuring people (drivers and passengers) and the capacity is measuring seats (whether occupied or not). In the case of transit vehicles with the ability to carry standing passengers, the capacity includes standing passenger capacity as well as seat count.

As an example, on segment A-B, the total number of passengers and drivers is 16,000, and the total capacity (seats + standing) is 20,000. The ratio is 16,000 ÷ 20,000 = 0.80 (LOS D).

Variations on this technique are in use in Miami, Florida ("practical capacity") and King County Metro ("average vehicle ridership").

Multi-factor: Condition and Operation

The City of Sedro Wooley has developed a multi-factor measure that includes the condition as well as the operation of the road network. The following are the factors used in their measure:

Condition	Operations
• Pavement Quality	• Parking Availability
• Paved Surface Quality	• Bicycle Facilities
• Road Width/Shoulder Adequacy	• All-Weather Serviceable
• Sight Distance Adequacy	• Weight Limits on HAUL Routes

LOS Approaches for Ferries

The approaches to LOS measures for ferries are either supply-side measures, demand-side measures, or a combination of the two.

Supply-side Measures

Supply-side measures count the availability of ferry transportation without direct reference to actual or expected usage.

- Frequency of service is measured by the interval between ferries. This is similar to "headway" measures of bus and rail transit systems. The WSF sailing schedule is the public's contact with this level of service.

- On-time performance measures the extent to which the published schedule is maintained. It can be measured by the percent of sailings that are on-time, or by the average number of minutes that ferry arrivals are late.

Demand-side Measures

Demand-side measures count the number of boardings without direct reference to the capacity of the vehicles (except that there cannot be boardings in excess of capacity).

- Passenger loadings per vehicle measures is like a transit system measure of ridership divided by the number of vehicles (or vessels) to indicate the capacity that is being used.

Combined Supply and Demand

A combined measure compares the supply to the demand.

- The WSF has developed a measure called "Boat Waits" that tracks the number of boats that sail while cars and passengers wait in line for their turn to board and sail. The higher number of boats that sail while customers wait, the lower the LOS.

Recommendations

1. *Clarify terminology: level of service vs. service objective vs. performance measure.*

2. *Level of service standards should be considered a relatively short-term tool for growth management and transportation planning purposes. A performance measure should be developed as a substitute for level of service (which are primarily based on traffic V/C ratios). WSDOT should report annually to the LTC on progress in development of such measures. The performance measure should account for the following:*
   - *Movement of persons (as well as, or in lieu of vehicles)*
   - *Movement of freight and goods*
   - *Measure travel time*
   - *Multimodal travel*
   - *Public perception (as a reality check on objective "measures" of the performance of the transportation system)*
   - *Rural commercial needs (i.e., all-weather roads, farm-to-market roads)*

Rationale for Recommendations

1. A performance measure approach is more desirable than the LOS measured by V/C ratios, but a transition period is needed while a performance measure is created.

2. It is not desirable to mandate a specific LOS methodology at this time. The state of the art is being advanced by the many creative approaches by Washington local governments, and a mandated methodology would stop the creativity. Any mandate would have to be phased in to allow existing approaches to be converted without disrupting local plans.

3. The principal disadvantage to the current diversity is the difficulty in comparing the performance and standards of facilities used by more multiple jurisdictions when they use different LOS methods. This problem may be surmountable by development of a translator that enables various LOS methods to be compared using a common language.

4. There is a substantial investment in the current LOS methodologies and individual local governments will be reluctant to lose their investment without assurance that the replacement is (1) better than their approach, (2) feasible for their jurisdiction (i.e., data and staff are capable of using the new method), and (3) worth the cost of changing methods.

5. There is no consensus about which current LOS method is best. The Puget Sound Regional Council technical committee on LOS spent 2 years working on the issue and ultimately agreed that the current approaches need more testing in the real world of growth management. The following is a summary of significant advantages and disadvantages of principal LOS methods:

   A. Measures of capacity to move vehicles
      - Traditional measures (volume to capacity of segments and/or intersections)
        Pros & Cons:
        - Easy to implement (widely used and understood).
        - More likely (than other methods) to cause denial of development.

      - System averages (i.e., zones or screenlines)
        Pros & Cons:
        - More indicative of driver behavior (find the less traveled route).
        - Many jurisdictions not familiar with, or unable to provide data for this approach.

      - Travel time, speed or delay
        Pros & Cons:
        - Substantial field data collection required.
        - Indicates true movement (compared to v/c ratio which assumes the congestion characteristics of various factors: direction of travel, signal intervals, etc.)

   B. Measures of capacity to move people and goods
      Pros & Cons:
      - More relevant than movement of vehicles.
      - Still in developmental stages.

6. Levels of service on one mode of travel (e.g., roads) are affected by the availability and level of service of other modes (e.g., ferry, transit, non-motorized, etc.).

7. There are consequences of any decision about LOS methods.

   A. If specific LOS is mandated, the results will depend on the LOS method.
      - Higher LOS and/or smaller geographical service areas (i.e., zones for averaging LOS) tend to produce more denials of development, but better mobility.

   B. If specific LOS is not mandated, there will be a variety of approaches used.
      - Different methods applied to the same set of facts can produce different results:
        - approval vs. denial
        - congestion vs. mobility

- It will be difficult to determine consistency among plans because different methods are not comparable.

What Facilities are Subject to Level of Service Standards?

The Issue

The issue is whether or not state roads are supposed to be included in local comprehensive plans for levels of service and concurrency.

Current Practice

The Growth Management Act requires transportation elements of comprehensive plans to include "level of service standards for all *arterials* and transit routes..." (emphasis added) RCW 36.70A.070 (6)(b)(ii). Some local governments have interpreted the word "arterial" in general terms to include all major roadways, including highways and freeways. Others have interpreted the term to include highways, but not limited access freeways. Still others have used a specific definition of the term arterial (from sources other than growth management) to conclude that highways and freeways are not covered by GMA because they are not "arterials".

The survey conducted as part of this study (see Section 1 for full survey and results) indicates that 88% of local plans already take some state facilities into consideration. The largest portion (68%) includes state highways, and 37% includes the interstate system and other limited access freeways (the two combined exceed 88% because many local governments include both types of state roads).

The current legal and administrative distinction between state roads and local roads does not mesh well with comprehensive planning under the GMA. Some state roads carry substantial amounts of regional and even local traffic. The LOS for such roads is strongly influenced by local land use decisions. In some instances, local governments are able to use state facilities in lieu of local roads to meet local and regional transportation needs. State roads need to be classified according to their state or regional significance.

There are several systems of classifying state roads (e.g., National Highway System, Trunk and Branch System, etc.). Some of these provide useful guidance in determining state or regional significance, but our research indicates that none of the existing classifications provides the exact distinction needed for growth management (see Section 13 for further analysis of the classification issue).

Recommendations

1. *State transportation facilities should be categorized according to their primary significance: state vs. regional.*

Option 1

*Legislate the **process**--Designation of facilities should be a cooperative process between the state and local governments (through the regional entity). No participant in the process can act unilaterally.*

Step 1: Select regional entity (90 days)
Step 2: Select criteria for state vs. regional (30 days)
Step 3: Nominate facilities (or segments) as state or regional(30 days)
Step 4: Review and adopt assignment of facilities to categories (30 days)

If the state and region cannot agree on the classification of a facility or segment, it shall be classified as follows:

Criteria	*State Significance*	*Regional Significance*
Areas Connected	*Major Centers*	*Regions and Intraregional*
Trip length	*Longer trips*	*Shorter trips*
Through v. local travel	*Primarily Through*	*Primarily local/regional*
Freight Movement	*Long Haul*	*Intraregional*
Spacing	*Only Route in Corridor*	*Other Routes in Corridor*
Access	*Mostly limited and some local access*	*Mostly local, but some limited access*

Option 2

*Legislate the **answer**--Criteria for the assignment shall be based on the table shown in Option 1*

The following is suggested as the initial assignment of state transportation facilities:

Facility	*State Significance*		*Regional Significance*
Interstates	*X*		
Interstate Access Points		*?*	
Principal Arterials: Outside Urban Areas	*X*		
Principal Arterials: Urban Interregional	*X*		
Principal Arterials: Urban Regional			*X*
Principal Arterials: Urban		*?*	
Principal Arterials: Rural Fringe		*?*	
Minor Arterials			*X*
Collector Arterials			*X*
Ferry Routes: Serve Statewide Travel	*X*		
Ferry Routes: Serve Local/Regional			*X*

2. *Information about state facilities should be required in all local comprehensive plans. The information requirement should be separate from the concurrency requirement. Local governments should include information about state facilities in the same manner as information about local facilities in all local comprehensive plans and support documents, except facilities of statewide significance should not be required in capital facilities plans or financing plans, nor for concurrency. The following table summarizes the information requirements for state and regionally significant facilities:*

Requirement	*RCW 36.70A.070 Subsection*	*State Significance*	*Regional Significance*
Inventory	*(6) (b)(i)*	*Yes*	*Yes*
LOS Standards	*(6) (b)(ii)*	*Yes*	*Yes*
Actual & Forecast LOS	*(6) (b)(iv)*	*Yes*	*Yes*
Identify facilities below LOS standard	*(6) (b)(v)*	*Yes*	*Yes*
List State projects		*Yes*	*Yes*
Include State projects in CFP	*(3) (c)*	*No*	*Yes*
Financing plan for State capital projects	*(6) (c)*	*No*	*Yes*

This recommendation includes clarification of the meaning of "arterials and transit routes" vis-a-vis state facilities in local comprehensive plans. Specifically clarify that state facilities are included (subject to the limitations of the recommendations below). RCW 36.70A.070(6)(b)(ii)]

3. *WSDOT and RTPOs should add this requirement to their checklists for review of local plans. RTPOs should consider local compliance with this recommendation as a requirement for certifying local transportation elements of comprehensive plans.*

Rationale for Recommendations

1. There needs to be a distinction between state significance and regional significance that reflects the responsibility for funding and making improvements to the system.

   A. State facilities are too diverse for a "one-size-fits-all" approach.

   B. Too many categories can create problems of administration and understandability.

   C. Two categories allow distinction on some critical issues (i.e. who sets LOS, whether or not to require concurrency, who/how to fund needed improvements).

2. Existing classification plans (e.g., trunk and branch, national highway system, functional classification) do not fully make the necessary distinction between state vs. regional significance, but they provided useful information for making the distinction.

3. The initial system is based on functional classification, but specific segments of some facilities may need to be reassigned based on a collaborative review of the criteria. A new criteria-based approach may be possible, but it creates an additional system for everyone to deal with.

4. Planning for local land use and transportation systems should not be done without understanding current and planned state transportation facilities. The information requirement enables local governments to demonstrate awareness of the role of state facilities in the total transportation system, and the relationship of state facilities to the community's land use plan (regardless of the use of such information for concurrency).

5. Inclusion of state transportation facilities in local plans is a logical extension of the growing use of planning technologies (e.g., traffic models and geographic information systems). These tools customarily include state transportation facilities, making this recommendation easier to follow for users of such technologies.

6. 88% of local plans already take some state facilities into consideration (65% consider non-interstate state highways), therefore the recommended approach is already widely used. (A grace period should be given to enable local governments to comply with the recommendation).

Who Sets the Standards?

The Issue

If state transportation facilities are included in local government comprehensive plans, should the LOS standards for those facilities be established by the entity adopting the plan (local government) or by the agency responsible for construction, operation, and maintenance of the facility (state government)?

Current Practice

The GMA requires local governments to develop comprehensive plans and to adopt LOS standards for arterials and transit routes (RCW 36.70A.070 (6)(b)(ii)). The concurrency requirement (RCW 36.70A.070 (6)(e)) is based on "...standards adopted in the transportation element of the comprehensive plan..." (which are adopted by local governments). Planning goal number 12 of the GMA uses "locally established minimum standards" as the benchmark of adequate public facilities (RCW 36.70A.020 (12)).

The August 1994 survey of local governments (see Section 1 for the full survey and results) asked local governments that included state transportation facilities in their plan to indicate the source of the LOS standards that they used for state roads. The largest group (31%) used standards they developed locally. The other principal sources of standards were state service objectives (23%), standards established by RTPOs (18%), and other operating standards(

11%). A significant group (13%) reported using no standards for state facilities (but included state facilities in their plans) and 4% used no standards, but relied on the capital projects in state transportation plans.

This diversity of sources of standards makes it difficult for local governments to comply with the requirement that their plans be consistent with the plans of surrounding jurisdictions and the region.

Recommendations

1. *Each region should designate an entity that will perform regional responsibilities for state transportation facilities (i.e., designating state facilities of regional significance, establishing LOS for such facilities, prioritizing capital projects needed to achieve LOS standards.*

   The regional entity shall be designated by the local governments in the region. It may be an MPO, RTPO, County, WSDOT District office, Countywide Planning Policy legislative body, or a new entity. If local governments do not designate an entity within 90 days, the RTPO shall be the regional entity.

2. *Establish level of service standards through a collaborative process between the state and regional representatives of local governments:*
   A. *State significance:*
   The state will consult with regions, then the state will establish the standard for level of service for facilities of state significance. If necessary, the state may act unilaterally (after consultation) because the state will be paying for the facilities, and concurrency is not required.

   B. *Regional significance:*
   *The state and RTPO will cooperatively establish the standard for level of service for facilities of regional significance. Neither party can act unilaterally. The state's interests will be addressed by the state's representative on the RTPO. The parties must continue to collabora*te until a solution is reached.

3. *WSDOT should revise its service objectives to accommodate more specific local conditions. Specifically, identify circumstances where (1) LOS B or A may be appropriate for some facilities in rural areas, (2) rural areas should be measured by the existence and/or condition of all-weather (farm-to-market) roads, and (3) LOS E or F may be appropriate for some facilities in urban areas.*

Rationale for Recommendations

1. If local governments are asked to impose concurrency and partially fund state facilities of regional significance, they need to have a significant role in establishing the LOS standard

because the standard is the key to concurrency and costs. Local governments are full partners in providing the transportation network. Their authority should be commensurate with their responsibility. Their authority to set LOS standards, establish priorities, and participate in funding decisions should be commensurate with their willingness to use regional funding tools to finance their share of impacts on the state transportation system caused by their land use decisions.

2. Regional mechanisms are needed to represent local interests, but there is controversy about existing regional entities. The recommendation allows the local governments in each region to identify the mechanism that is most acceptable to them (i.e., RTPOs, MPOs, Counties, WSDOT District Offices, Countywide Planning Policies mechanism, or other).

3. WSDOT's service objectives are not sensitive to the differences among various rural areas, and the need in some urban areas to allow enough congestion to achieve mode-split goals.
   A. C may be too low for some rural areas (should be B or even A to discourage development in rural areas). In fact, LOS may not be as relevant for rural areas as the existence and/or condition of all-weather (farm-to-market) roads.
   B. D may be too high for some urban areas. If LOS doesn't go to E or F, it will be difficult to achieve mode-shift strategies (i.e., transit, non-motorized, HOV, etc.).
   C. LOS for facilities of regional significance should be established regionally (i.e., using the process established by SHB 1928).

What is the Role of Concurrency?

The Issue

The concurrency requirement is one of the primary implementation tools for growth management. One issue for state transportation facilities is whether to impose a land development regulatory device on facilities that are owned by a level of government that is not in the business of regulating land development. Conversely, an issue for local governments is whether to impose some discipline on local land use decisions by including transportation facilities that are affected by their decisions.

Current Practice

48% of local governments that include state facilities in their plans require concurrency for those the state facilities.

Recommendations

1. *Concurrency should be required for facilities of regional significance, but concurrency should not be required for facilities of state significance.*

Concurrency for regionally significant facilities should not be required if regions do not have full partnership with state in setting LOS standards, or if financing is not available.

2. *All jurisdictions within a region should be required to consistently apply LOS standards on state facilities of regional significance during review of development for concurrency.*

3. *Clarify relationship of "concurrency" to" adequate public facilities" and "appropriate provision", and clarify the facilities to which the requirements apply.*
   - *RCW 36.70A.070 requires "concurrency" for "arterials and transit routes"*
   - *RCW 36.70A.020 requires "adequate public facilities" for "streets, roads, highways, sidewalks"*
   - *RCW 58.17.110 requires "appropriate provision" for "streets or roads, alleys, other public ways, transit stops"*

4. *Clarify meaning of "financial commitments" for concurrency (or require list to be prepared by rule). Examples could include:*
   A. *Facilities under construction*
   B. *Subject to binding agreement for construction*
   C. *To be paid by revenues that can be imposed or expended at the discretion of local governments (i.e., local taxes, fees, charges, intergovernmental entitlements)*
   D. *Grants for which awards have been made*
   E. *Irrevocable commitments from developers*
   F. *Appropriated in state biennial budget*

5. *Clarify the meaning of a 6-year limit for achieving concurrency. Select one of the following:*
   A. *Six years for concurrency means 6 years from approval of development (rather than 6 years from occupancy and use), OR*
   B. *Provide "financial commitments" for longer periods (i.e., up to 6 years from occupancy and use). This may require longer-range transportation plans and budgets.*

Rationale for Recommendations

1. Traffic on facilities of state significance is primarily through traffic on long trips between regions or major population centers. Because of the low volume of local traffic, local land use decisions have less impact on performance of facilities of state significance, therefore concurrency is not an appropriate requirement.
2. Facilities of regional significance are impacted more by local traffic, therefore local land use decisions need to be linked to these facilities via the concurrency requirement.
3. Confusion among local governments about the meaning of key terminology produces inconsistent responses to GMA.
4. Clarification of terms should provide for consistency, but not erode the principle of local control of comprehensive planning.

SECTION 4
URBAN vs. RURAL ISSUES

TABLE OF CONTENTS

SECTION 4
URBAN vs. RURAL ISSUES

Introduction

The transportation needs of urban areas are different than rural areas. For example, urban areas have high volumes of relatively short trips during concentrated peak periods while rural areas have lower volumes of relatively longer trips that occur in less concentrated time periods. The state provides transportation facilities to urban and rural settings, and the diversity of transportation needs creates special concerns for growth management and local comprehensive plans. This report examines several issues involving the distinction between urban and rural areas as they relate to state transportation facilities and local comprehensive plans.

The Law

The Growth Management Act (GMA) requires comprehensive plans to designate "urban growth areas" (UGAs) and to distinguish those areas from "rural" areas. GMA requires all cities to be designated as UGAs, and allows other adjacent areas to be designated urban under limited circumstances. UGAs are to receive urban services, and rural areas are not.

Criteria for Urban Growth Areas

Each city shall be included in a UGA. A UGA may include more than one city. A UGA can include territory outside of a city only if such territory already is characterized by urban growth, or adjacent to territory already characterized by urban growth. RCW 36.70A.110 (1).

UGAs shall include areas and densities sufficient to permit the urban portion of growth that is projected by the Office of Financial Management to occur in the next twenty years. Each UGA shall permit urban densities and shall include greenbelt and open space areas. RCW 36.70A.110 (2).

Services to Urban and Rural Areas

Urban growth should be located first in areas already characterized by urban growth that have existing public facility and service capacities to serve such development, and second in areas already characterized by urban growth that will be served by a combination of both existing public facilities and services and any additional needed public facilities and services that are provided by either public or private sources. Further, it is appropriate that urban government services be provided by cities, and urban government services should not be provided in rural areas. RCW 36.70A.110 (3).

Providers of Services

The legislature recognizes that counties are regional governments within their boundaries, and cities are primary providers of urban governmental services within urban growth areas. RCW 36.70A.210.

Concept vs. Reality

The reality of local government comprehensive plans in Washington is markedly different than the concept of the state's growth management law.

Concept

Washington's concept of growth management is to decide where most development should occur, adopt urban growth boundaries to delineate the high growth (urban) and low growth (rural) areas. Urban areas are to be served by urban services, at urban levels of service, and concurrency matches the timing and location of public facilities with development.

- Urban growth areas are the primary tool to manage growth. They establish where the greatest amount of development will be located, and they protect other areas from inappropriate density that squanders a scarce resource: land.

- Level of service standards define the quality of life by setting benchmarks for the performance of public facilities. Urban areas are to have urban services, rural areas are to have only rural and regional services. The standards relate to the location of development only by deferring (or denying) development that is not served by adequate public facilities. The test of adequacy is locally adopted standards for level of service.

- Concurrency affects development within UGAs by matching the availability and adequacy of urban services with the timing and location of development.

Reality

The reality of Washington's growth management law is that concurrency is the primary growth management tool because urban growth areas are not being drawn to direct growth, except in the most general sense.

- Urban growth areas are as large as possible. The public rationale is that the comprehensive plans need to allow for "market factors" in order to promote competition in the real estate marketplace, and to avoid driving up land prices by being too restrictive. This rationale has the side effect of increasing the number of land owners who will be allowed to develop, and reducing the number who will be limited in the uses of their land.

- Level of service standards for transportation are set to allow the maximum acceptable congestion that imposes the fewest restrictions on development.

- Concurrency is the gatekeeper of growth management. The land use tool (urban growth areas) is market-driven, rather than resource-driven (i.e., preservation of scarce land). Level of service standards are development-driven, rather than quality-driven (i.e., LOS is the lowest common denominator, rather than the highest achievable standard). As a result, the principal tool for managing growth is the requirement to match levels of service to proposed development.

Observations

There are several issues that pertain to the distinction between urban and rural areas and their relationship to state transportation facilities and local comprehensive plans.

1. "Urban" or "rural" location does not determine whether or not a state transportation facility is of state significance or regional significance. Some roads in rural areas are of state significance, and some urban area roads are of regional significance. Identification of the state vs. regional significance will be based on other criteria (see Section 2).

2. Local governments use different "market adjustment factors" in determining the size of urban growth areas. As a result, the "urban" character will vary considerably from one jurisdiction to another. This inconsistency is another reason not to use urban/rural distinction as a significant feature in determining the treatment of state transportation facilities in local comprehensive plans.

3. Hearings boards are defining "urban" as city limits (unless counties can prove that cities cannot absorb forecasted growth). If this interpretation is followed or enforced, it will offset the "large UGA" problem described above in the discussion of concept vs. reality. It will also affect the state's review of local comprehensive plans because there will be less area in which urban service objective will apply, and larger area in which rural service objective will apply.

4. The state has established "service objectives" for state transportation facilities. The service objective for roads in rural areas is "C". In urban areas, the objective is to mitigate impacts when the level of service falls below "D".

   These objectives are a step in the right direction, but they use apply a single "standard" to all situations, which may produce results that are not consistent with GMA or local needs. Consider the following situations:

- Level of service C may be too low for some rural areas. When current service levels are at B or A, a standard of C may allow development that has density that is more urban than rural.
- Level of service measures of volume to capacity may not be best measure for some rural needs. In some circumstances, the "standard" should relate to all-weather (farm to market) roads. The standard could be measured in binary terms: existence/absence of such roads, or the measurement could include surface condition (i.e., paved vs. gravel).
- Level of service D may be too high for some urban areas. Many urban areas are striving to reduce the use of single occupancy vehicles (SOV), and increase multimodal solutions that include transit, HOV lanes, and non-motorized transportation. It is well established that current behavior of urban motorists exhibit strong preference for SOV. One of the best inducements to change from SOV to other modes is to provide significantly higher LOS for the alternative modes. Part of the LOS differential comes from "high" LOS for transit, HOV, etc., but part of the differential comes from very low LOS for single occupancy vehicles (i.e., LOS "F"). The state's service objective calls for intervention (mitigation) at LOS "E". If the mitigation succeeds in avoiding LOS F, and even returns LOS to D, it will be difficult to achieve changes in behavior that will accomplish mode split plans.

5. Urban growth boundaries, as provided in Washington's Growth Management Act, are weak tools. The 20-year boundary allows substantial growth. The only statutory provision for concentrating growth in portions of the UGA during the 20-year period is concurrency. The problem is exacerbated by the ability to amend UGA boundaries, thus maintaining large "reserves" of land that is identified as developable on maps, but which is constrained by the 6-year horizon of capital facilities plans, concurrency and impact fees. The large reserves of developable land also reduces the likelihood of achieving the densities necessary to support transit and HOV alternatives to single occupancy vehicles. A fundamental conflict arises: the desire for inexpensive housing in low densities contradicts the need for efficient public facilities and conservation of land as a scarce resource.

6. Current formulas for gasoline taxes contradict the intent of Washington's Growth Management Act. The Act uses UGAs as a method of concentrating development (to preserve land, and make public infrastructure more efficient). The gas tax formulas take some gasoline taxes from urban areas and give them to rural areas. If urban growth areas are to accept the growth directed to them as a result of GMA, they will need to retain the gas taxes they generate in order to achieve even minimal levels of service.

Survey Results

The consulting team conducted a survey of local governments in Washington that conduct planning and review of development pursuant to the provisions of the Growth Management

Act (see Section 1 for the complete survey). Several of the questions pertained to urban/rural issues. The following are highlights of survey results.

1. Transportation facilities were a limited factor in setting UGA boundaries. Only 35% of counties and 47% of cities said they considered *state* transportation facilities when they established their UGA boundaries. The same 35% of counties (but 51% of cities) considered *local and/or regional* transportation facilities when setting UGA boundaries.

2. LOS is different in UGAs than in rural areas (for about 50% of the respondents). The response was the same for LOS on state facilities as it was for local facilities. The response was influenced by the number of cities that have no rural areas.

3. Virtually no local governments have different concurrency requirements in UGA vs. rural area. This means that concurrency will be enforced in both urban and rural areas. This is consistent with the use of different LOS as the principal method of distinguishing the different transportation needs and development potential of urban and rural areas.

4. Programming and prioritization of transportation projects is different in UGAs than in rural areas (for about 50% of the respondents). The response was influenced by the number of cities that have no rural areas.

5. Most local governments (1/2 - 2/3) discovered that UGA designation did not change the need for, or the priority of, any transportation facilities (state or local) inside or outside UGAs.

   Of those who did find that UGAs made a difference, the changes *inside* UGAs were an *increase* in the need for both local and state facilities. This is not surprising, since increased development associated with UGAs generates additional demand for transportation.

   The response to rural needs (outside UGAs) is more complex. There is an *increased* need for local facilities in rural areas, but a *decreased* need for state facilities. If the former is indicative of increased rural development, it may be reasonable growth in rural areas causing strains on local roads, or it may be that the strain is from excessive growth in rural areas. The decrease in need for state facilities in rural areas probably indicates that the total growth anticipated in rural areas is reasonable, and that it puts a strain on local facilities, but not on state facilities.

Suggestions

Since the urban/rural distinction has been determined to have only secondary effects on the treatment of state transportation facilities in local comprehensive plans, this section presents "suggestions" instead of "recommendations".

1. *Level of service standards should be higher in rural areas than in urban areas. Any concurrency requirement for state transportation facilities (i.e., for facilities of regional significance) should be required in both urban and rural areas, based on the different LOS standards for each area.*

2. *State service objectives or LOS need to be more responsive to specific rural and urban circumstances (not "one size fits all").*

3. *Concurrency should be used for short-term concentration of development within long-term UGA boundaries.*

4. *UGA boundaries should be relatively permanent. If concurrency is required, UGA boundaries could be changed once every 5 years. If concurrency is not required, UGA boundaries should not be changed for 15 years.*

5. *UGA boundaries should be coordinated among counties on a multi-county policy basis.*

Rationale for Suggestions

1. Level of service standards should provide the performance level of the facilities, and concurrency should determine the amount and location of development that can be served at the LOS standard.

2. A "one size fits all" approach to state service objectives does not work in circumstances such as those listed above (see Observation #4).

3. Long-term UGAs need a tool to concentrate development within the short-term in order to achieve densities necessary to increase transit and HOV travel. Concurrency can be used to approve development in portions of UGAs that are suitable for short-term development, and to disapprove development in portions of UGAs that are not ready (or appropriate) for short-term development.

4. Stable UGA boundaries cause development to concentrate in ways that conserve natural resource and critical areas, produce densities needed for multimodal solutions, and make public infrastructure investments more efficient. If UGA boundaries are re-designated every year (or even every 5 years), there will always be substantially larger area for long-term development than is required in the immediate future, and there will not be appropriate limits on sprawling development patterns. Stable boundaries also create predictability for land owners, developers, builders, lenders, realtors, the public, and governments (which provide public facilities).

Stability of UGA boundaries is critical if concurrency is not used, but is less essential if concurrency is consistently used to direct growth to specific sub-areas of the larger UGA.

5. Urban growth area boundaries need to be coordinated (and reasonably consistent) among all local governments within a metropolitan area. If development and local governments are all on the proverbial "level playing field" there will not be incentives for poor planning in order to gain a competitive advantage for development, jobs, and economic growth. Multi-county coordination of UGA boundaries will eliminate density as a competitive strategy for economic development.

SECTION 5
EXPERIENCE OF OTHER STATES

TABLE OF CONTENTS

SECTION 5
EXPERIENCE OF OTHER STATES

Introduction

Washington State, like other states, provides a working laboratory for the development of new planning and implementation processes to address critical transportation public policy issues. As Washington State moves forward in the area of determining level of service for state facilities, it can build upon the body of knowledge developed through previous studies as well as learn from the experiences of other states and local jurisdictions. This review and evaluation of "lessons learned from other states" fulfills a basic intention of the current Level of Service Study of not re-inventing the wheel.

This review of lessons learned encompasses four states and three local jurisdictions. States included in the evaluation are California, Florida, Oregon, and Virginia. These four states were selected for examination because they experience many of the same conditions found in Washington State. Examples of such conditions include high growth rates, growth management statutes, limited transportation resources, the need to respond to federal transportation and air quality policies, and concerns about regional coordination and cooperation. In addition to these four states, three local jurisdictions were reviewed to identify how local and state issues are coordinated and implemented. These included Contra Costa County, CA, Montgomery County, MD, and Riverside County, CA. These states and local jurisdictions have developed and experimented with programs that may, upon evaluation, have applicability to Washington State.

This section provides an overview of the results of the evaluation of the experiences of other states and local jurisdictions. The report will briefly review the study questions to be addressed in this element of the larger LOS Study. Having reviewed these questions, the methodology that was used to explore those questions will be outlined. Next, the study questions will be addressed individually, noting the findings of the research and their application to Washington State. Included in the appendix are two products of this work effort: (a) a Resource Bibliography and (b) a Lessons Learned Matrix. These appendices identify the principal information sources for this portion of the study and summarize the findings from other states and localities.

Study Questions Related to Lessons Learned from Other States

The LOS Study identified general questions to highlight policy alternatives that have been implemented in other states. These are listed in Exhibit 5-1. The goal of the lessons learned work element is to identify what works and what does not work within the context of

Washington State's legislative mandate. Identified policy alternatives may have application in Washington within current legislative authority or new legislative initiatives may be required to implement a new policy solution.

Exhibit 5.1
Lessons Learned Policy Questions

(1) How are state facilities addressed in local plans in other states?
(2) Who is responsible for setting LOS for state facilities?
(3) What methodologies do other states use to determine LOS standards for state facilities?
(4) Who is responsible for correcting LOS deficiencies on state facilities?
(5) What role does LOS play in programming and prioritization in other states?
(6) Which states require adequate transportation facilities as a condition of development approval?
(7) Which states use impact fees for state transportation facilities?
(8) What sources of revenue do other states use for financing state transportation facilities and local transportation facilities?
(9) Do other states use urban growth areas (or other comparable land use controls)?

Research Methodology

The comparable states and local jurisdictions were selected for evaluation because they demonstrate conditions similar to those found in Washington State. Additionally, these jurisdictions have implemented, with varying degrees of success, policies and programs in response to the same issues addressed by this study. The inclusion of local jurisdictions in the assessment provided insight into how local and state issues are coordinated and implemented. Consequently, as Washington State considers altering its own response to these issues, the state stands to benefit from a thorough review of others' policies and programs, noting their achievements and failures.

Research materials for this work effort were to be provided by the Office of Urban Mobility (OUM). The OUM library research files proved to be inadequate to address the policy questions. Therefore, the consultants obtained the required materials from their own research databases, as well as other academic and government publications. The lack of information on the policy questions addressed by this study suggests that Washington State is on the cutting edge of research and policy formation in this area (see Research Bibliography, Appendix 5-1).

To supplement the materials provided by the Office of Urban Mobility and other available literature, individual state departments of transportation, public and private research organizations, and local jurisdictions were contacted. This enabled the consultants to confirm and refine information gathered from the literature review and probe deeper into areas of special interest to Washington State. The consultants discussed with key individuals the basic

study questions for this element, and explored related issues such as transportation planning requirements, intergovernmental coordination requirements and techniques, and the role of regional planning organizations.

The information collected through the literature review and interviews provide the basis to construct a matrix summarizing study findings. For each of the major questions addressed by this portion of the study, the matrix identifies significant findings, implementation issues, data sources, and application to Washington State. This data is provided for each of the localities under examination (see Lessons Learned Matrix, Appendix 5-2).

Research Findings by Issue

Issue 1- "How Are State Facilities Addressed in Local Plans in Other States?"

Of the states examined, all require state transportation facilities to be addressed in plans at either the regional or local level. In Oregon, state facilities are included in regional plans, which include modeling for local transportation systems. The regional system plan and Oregon Department of Transportation (ODOT) planning identify corridors and solutions in an integrated fashion, irrespective of mode, service, or proposed jurisdictional solution. In Florida, Virginia, and California, state facilities are addressed not only in regional plans but also in certain local plans. In Florida, all local governments are required to address facilities the Florida Department of Transportation (FDOT) designates as part of the "Intrastate Highway System." Local governments are faced with concurrency requirements for these facilities, but certain exemptions exist. For example, a local government may deviate from the FDOT standard if the deviation promotes state planning goals, such as encouraging compact development in central business districts. In Virginia, where all roadways are controlled by the state except for municipal streets and limited county roads, local governments are required to address state facilities in their local plans, though the state is responsible for planning and programming (PAP) and funding of projects. Finally, in California, the state's Congestion Management Program requires all urbanized counties to address state highways and freeways in their Congestion Management Programs. Congestion management is based on corridor evaluations and cooperative solutions, including local participation.

Of the three local jurisdictions evaluated, certain state facilities are addressed in their plans. In Contra Costa and Riverside Counties in California, freeways and other designated "Routes of Regional Significance" are addressed in plans for the counties and in sub-county regional action plans. Representatives from local municipalities participate in developing these plans. In these locations the use of multi-jurisdictional membership on committees has been successful but time-consuming. In Montgomery County, MD, state facilities other than freeways are addressed in the county's policy area reviews and their site impact studies. Freeways were once included in the county's policy area reviews, but now the freeway system is evaluated separately for the county as a whole.

Prior to application within Washington State, several points should be reviewed. First, other states have required local jurisdictions to address state facilities in their plans with varying degree of success. In the absence of such mandate or requirements, local governments may be prone to ignore these facilities in their planning processes and concurrency management systems. Second, Washington may learn from Florida and the two California counties' practices of categorizing state facilities and requiring variable treatment by local governments. This permits the state to pinpoint those facilities for which local governments should legitimately take more responsibility due to local land use decisions. Third, any treatment of state facilities at the local level should be balanced by treatment at a regional scale. This helps to prevent decision fragmentation and promotes system coordination between jurisdictions. Finally, any state requirement to include all or a portion of state facilities in local plans would have to be monitored and enforcement criteria developed. This would become an integrated part of the growth management planning process. Developing procedures, incentives, or penalties for this monitoring and enforcement process is a vital although, difficult task requiring cooperation by all the jurisdictions impacted. Any new process should be cooperative in nature depending upon the facility or scale of impact.

Issue 2: "Who is responsible for setting LOS for state facilities?"

The states surveyed vary widely in terms of the entity that bears the responsibility of determining LOS standards for state facilities. Florida State was found to have the most control over LOS standards. The FDOT defines the minimum acceptable LOS for various types of state facilities and local governments must accept this LOS for roads in the designated "Intrastate Highway System." Local jurisdictions may deviate from the state's selected LOS if the deviation can be demonstrated to promote state planning goals. In Virginia and Oregon, LOS standards for state facilities are set cooperatively between regional planning organizations and the state. In Virginia, the state is ultimately responsible for defining the LOS standards, while in Oregon the regional entity is responsible. In California, County Congestion Management Agencies (MPOs) set LOS standards for existing and planned state facilities under guidelines provided by the state. They are directed to set the standard at LOS E or the existing LOS, whichever is farther from LOS A.

Of the three counties evaluated, two set LOS standards for state facilities at the county level, while the third looks to a regional entity to define LOS standards. Contra Costa and Riverside Counties, both in California, accept LOS standards for state facilities that are determined by sub-county Regional Committees. Cooperation exists between state, regional, and local governments in defining these standards. In Montgomery County, MD, the county bears principal responsibility for determining LOS standards for state facilities, taking into account the state's Consolidated Transportation Program for the next four years.

The issue of "who sets LOS standards for state facilities?" is inseparable from issues such as "who pays to correct LOS deficiencies?" and "who regulates the development that contributes to LOS deficiencies?" Florida's top-down approach promotes consistency, but does not sufficiently involve local governments. The Florida case demonstrates that there exists a discrepancy between the entity defining LOS standards, the entity implementing concurrency

management systems and controlling land use, and the entity responsible for making transportation improvements. This situation produces conflict between the state and local governments in Florida. Washington may wish to consider implementing the more cooperative approaches found in Oregon and California. This approach allows the state and regional governments to deliberate their differences. This type of cooperation between the state, regions, counties, and municipalities is essential for developing meaningful service objectives for state facilities.

Issue 3: "What methodologies do other states use to determine LOS standards for state facilities?"

States utilize a wide range of methodologies for defining LOS. In Oregon, LOS standards for state transportation facilities are determined through the use of a multimodal regions modeling system. Officials have indicated that this method is in need of improvement. In Florida, interstate facilities are assigned LOS between A and F based on the 1985 *Highway Capacity Manual* (*HCM*). Localities have wide flexibility in selecting LOS methodologies for other parts of the designated "Intrastate Highway System." This flexibility has allowed for innovative approaches to measuring LOS, although the use of different methodologies makes coordination between jurisdictions more difficult. Finally, in California, County Congestion Management Agencies may select from three methods of calculating LOS: Transportation Research Board *Circular 212*, the 1985 *HCM*, or a method consistent with the most recent version of the *HCM*.

The local jurisdictions included in this study vary in their approach to measuring LOS as well. In Contra Costa and Riverside Counties in California, Regional Committees may use intersection LOS, travel time, vehicle occupancy, transit use, or other quantifiable measures as part of their overall approach to calculating LOS. One should note that LOS standards serve as only one of several indicators of attainment of traffic service objectives. In Montgomery County, MD, methodologies are developed at the county level. Different methodologies are used for different types of facilities, and transit capacity is taken into account. The two cities in the county are independent from the county and use their own methodologies.

Washington may learn from the experience of other locations in using various LOS methodologies. First, one may note that there is value in using comparable approaches to measuring LOS within regions. The lack of such comparability has proven to be a difficulty in Florida. The use of similar LOS methodologies within a region promotes consistency and facilitates cooperation between jurisdictions. Consequently, Washington may wish to consider either developing methodologies at the state level for use by local jurisdictions or directing regions to develop methodologies for use by their constituent jurisdictions. Second, in developing LOS measures, it is important to move beyond traditional volume to capacity ratios that overemphasize SOV traffic, to measures that consider transit, perceived LOS, multi-modal trips, and other factors. There is a need to direct attention to facilities' overall ability to move people and goods rather than their ability to move SOVs during peak hour traffic. Finally, it is important for *appropriate* measures to be used. Different methodologies should be used for

different types of facilities and for areas with varying degrees of urbanization. Thus, while it is desirable to use comparable measures, it is not likely that any single measure could adequately evaluate LOS under all circumstances.

Issue 4: "Who is responsible for correcting LOS deficiencies on state facilities?"

In most of the states evaluated, the state bears all or most of the burden of correcting LOS deficiencies on state transportation facilities. In Oregon, deficiencies are addressed as part of a statewide and regional multimodal planning process. Corrections of LOS deficiencies are made depending upon the type of solution selected (e.g. state roads, transit, or local TDM programs.) In Florida and Virginia, FDOT and VDOT, respectively, are responsible for correcting LOS deficiencies on state transportation facilities. However, the burden for these states is lightened by the fact that, in Florida, the state is not subject to concurrency and, in Virginia, the state is not responsible for correcting LOS deficiencies that result from local land use decisions. The issue of correcting LOS deficiencies was not directly addressed in the literature pertaining to California's practices. However, through interviews it was found that there may be more shared responsibility in California than in the other states. Solutions including state and local option revenues were identified at the regional and sub-regional level. Local option revenues have been directed at state facilities.

In each of the local jurisdictions studied, their respective states are ultimately responsible for correcting LOS deficiencies. However, in each case the local governments may choose to invest local funds in state owned transportation facilities. This has been done in Contra Costa County, CA and Montgomery County, MD. In Contra Costa, the county and other local jurisdictions within the county have chosen to make improvements apart from the state. Montgomery County, MD assumed much of the responsibility for state transportation facilities during the 1980s. In some cases the state repaid the county for the improvements made, but in other cases the county was not reimbursed. Today, the county avoids investing local dollars in state transportation facilities. At times, however, intersections involving state facilities are improved with county funds. Riverside County, California is not known to have invested county funds in state-owned transportation facilities, but it is capable of doing so. By choosing to invest in state-owned facilities, local jurisdictions may correct problems and continue to manage growth in an orderly fashion.

The issue of who bears responsibility for correcting LOS deficiencies is a critical one. Since the state owns and operates these facilities, normally the state is responsible for making necessary improvements. However, if state facilities are to be provided concurrent with the demands of new development, then the state may reasonably look to local governments to share in this responsibility under certain circumstances. This study has shown examples of local governments voluntarily contributing local dollars to improvements on state transportation facilities. Washington may wish to explore means of facilitating and encouraging local government investment in certain state facilities by providing tangible incentives. Alternatives to this include developing a state role in the land use decision-making process; permanently turning roads and revenues over to local or regional entities; or excluding state facilities from concurrency altogether.

Issue 5: "What role does LOS play in programming and prioritization in other states?"

LOS plays different roles in programming and prioritization (PAP) in the states under examination. Virginia utilizes traditional methods for programming and prioritization, including geographic distribution, funding limitations, legislative directives, and six year capital programs. Local jurisdictions may move projects to a higher priority by contributing local revenues. In Oregon, the LOS of all modes is evaluated and this information feeds into programming and prioritization along with funding, needs, and safety concerns. Service levels are determined within the context of transportation corridors. It is significant that *all* modes are included in the PAP to correct LOS problems.

The contribution of local governments to programming and prioritization seems to be more significant in Florida and California. Local governments in Florida must develop plans that define adequate LOS and must include a capital improvements element specifying how, where, and when infrastructure will be provided. In California, local governments develop capital improvement programs that define adequate LOS and prioritize projects. These local plans are incorporated into Regional Transportation Improvement Plans. Ultimately, the California Transportation Commission prioritizes and funds projects.

The three local jurisdictions surveyed use LOS measures in their programming and prioritization processes. The two counties in California follow the procedure outlined above. Their local plans are taken into consideration when the Regional Transportation Plans are developed, which in turn influence the California Transportation Commission's decision making process regarding programming and prioritization. In Maryland, where LOS is the primary indicator of concurrency, the Maryland Highway Administration looks to the capital improvement programs in Montgomery County's sub-county regional plans when developing its own capital improvement program. Difficulties have arisen in Montgomery County when development has been approved contingent upon capital improvements identified in the CIP that were never implemented.

Policy makers in Washington State should consider four issues with regard to programming and prioritization. First, and most importantly, funding must be available in order to make prioritization meaningful. Second, in order to implement concurrency, it is important for the capital improvements upon which development approvals are based to be financially feasible. Third, programming and prioritization processes should take all modes into consideration, as Oregon's process does. Finally, the state may encourage local investment in state facilities by allowing local governments to leverage state funds and move local projects higher on state priority lists by contributing locally generated dollars to such projects.

Issue 6: "Which states require adequate public facilities as a condition of development approval?"

The requirement that adequate public facilities be provided concurrent with new development is a key component of growth management strategies in Washington State and elsewhere. Of the four states evaluated, Florida and California require local governments to have adequate public facilities ordinances (APFO)while Oregon and Virginia do not. In Florida, local governments must ensure that the facilities needed to serve new development are available concurrent with the impacts of new development. Developers are assessed a share of the cost of providing necessary facilities; they must commit to paying this share before the preliminary permit is issued. In areas where there are existing deficiencies in facilities, development moratoria have occasionally resulted. California also requires local jurisdictions to adopt adequate public facilities ordinances in conjunction with their congestion management programs. While Oregon does not currently have an adequate public facilities ordinance, a 1991 study by the Oregon Department of Land Conservation and Development recommended the adoption of adequate public facilities ordinances applicable throughout urban growth areas. In Virginia, counties and cities are required to prepare public facility plans covering traditional public facilities and transportation. Funded projects are placed on a six year plan. However, there is not a legal mandate to provide these facilities concurrent with the demands of new development, and development approval is not necessarily contingent upon adequate public facilities.

Of the three local governments included in this analysis, all have adequate public facilities ordinances and tie development approval to the availability of facilities in some fashion. Riverside County, CA participates in the state mandated system in which adequate public facilities are part of their congestion management program. Local governments may request area wide impact studies of development projects to test their compliance with the APFO. In Contra Costa County, CA, adequate public facilities must be provided concurrent with new development and new development must "pay its own way" through mitigation fees, TSM/TDM measures, or phasing development. The county recognizes that it cannot provide SOV capacity concurrent with demand. Therefore, it focuses on providing adequate overall capacity on the transportation system. Montgomery County, MD requires adequate public facilities as a condition of development approval as well. Concurrency determinations are made at the time of subdivision. Impacts can be mitigated through impact fees, TDM, or transit actions. As in the case of certain Florida jurisdictions, development moratoria have occasionally resulted. Additionally, Montgomery County's APFO has been determined to direct growth into adjacent counties with less stringent requirements.

Several conclusions may be drawn from the experiences of these states and local jurisdictions. As was stressed in relation to programming and prioritization, adequate funding is critical for the successful implementation of adequate public facilities ordinances. APFOs that are implemented without adequate funding result in development moratoria rather than growth management. When this occurs, growth is directed toward areas with lower standards or more lenient requirements, causing unintended suburban sprawl. Furthermore, APFOs must give special treatment to areas with existing LOS deficiencies. Maryland calls for existing

deficiencies to be dealt with up-front in the prioritization process. How to deal with existing deficiencies is a complicated issue, symbolic of the gap between current reality and the envisioned world of concurrency. Thus, it is an issue that merits special attention. Finally, as was noted in the discussion of LOS methodologies, "adequate" must be defined as meaning more than "adequate" for SOV traffic. The focus should be on the adequacy of the system as a whole. The Legislature will need to review APFO requirements and update statutes within defined growth management objectives.

Issue 7: "Which states use impact fees for state transportation facilities?"

As a means of paying for transportation and other improvements necessitated by new development, impact fees imposed on developers are commonly used by local governments, and occasionally by states. Of the four states evaluated in this study, only one, Oregon, imposes impact fees at the state level. In Oregon, developments generating over 500 vehicle trips per day are subject to a traffic impact analysis by the state. The state takes a "fair share", as opposed to "last developer in," approach to assessing impact fees. Under this approach, the emphasis is placed on the *cumulative* impact of development. Even using this system, however, Oregon has experienced a lack of funding to keep pace with their multimodal approach to transportation needs.

The other states considered in this study authorize local and regional governments to collect impact fees, but do not collect development impact fees at the state level. Local governments may or may not choose to invest these revenues in state owned transportation facilities in order to move their projects higher on the state's priority list. In Florida, impact fees collected at the local level can be earmarked for use by the state to improve state owned transportation facilities.

A review of the local governments included in the evaluation provides insight into how local governments that collect impact fees treat state facilities. In Contra Costa County, CA, local jurisdictions do collect impact fees for use on state transportation facilities. These locally collected funds are passed up to the state level via the Joint Powers Authority, a coalition of local governments that interfaces with the state. These funds are allocated to projects identified within the Joint Powers Authority planning process. In Montgomery County, MD impact fees have been used for improvements on state facilities as well. This is not a common occurrence, but has happened in the past. In Maryland impact fees must be spent in the same planning area in which they were collected.

In the previous discussions it has been noted that adequate funding is critical to the successful application of concurrency management systems. The collection of impact fees from developers is one way in which state and local governments can supplement public funds for transportation projects but cannot substitute for adequate public funding. Collecting impact fees at the state level or encouraging local governments to apply locally collected fees to state facilities are two ways of accomplishing this end. Oregon has shown that states can use impact fees successfully. It is important that fees collected at the local level that are

earmarked for state transportation projects be tracked to ensure that they are expended in an appropriate manner. Other innovative approaches to funding include the use of Mello Roos and Transportation Uniform Management Fees (TUMF) in California. Mello Roos may not be suitable for Washington. The state may wish to explore TUMF, however.

Issue 8: "What sources of revenue do other states use for financing state transportation facilities and local transportation facilities?"

The states under examination use a range of revenue sources for state transportation facilities. Virginia's sources include a gas tax, registration fees, and other traditional revenue sources. In Oregon, sources include the gas tax, general obligation bonds, and local funding mechanisms. Additionally, Oregon utilizes impact fees for off-site improvements on certain developments. It is believed that local funding mechanisms are underutilized in Oregon and could contribute more to transportation revenues if local governments were better able to respond to these opportunities. In Florida, revenue sources include the Local Option Gas Tax, the State of Florida Gas Tax, Large Development Project Bonding Fees, and road impact fees. In 1993, the Florida legislature permitted local governments to enact local option gas taxes without holding referenda for infrastructure improvement projects. Funding for projects has been a significant problem for Florida in light of its concurrency legislation. Additionally, there has been dispute over whether or not fees collected at the local level have actually been used for the state facilities for which they were earmarked. In California, Proposition 111 was passed in 1990 to permit a nine percent increase in the gas tax over five years. Local governments must meet LOS standards in compliance with CMP legislation in order to qualify for these funds. This has produced some difficulties since land use actions in one jurisdiction frequently impact LOS in a second jurisdiction, affecting the second jurisdiction's eligibility for state funds. This issue has yet to be resolved.

The three counties use varying sources of revenue for improvements on state transportation facilities. As mentioned above, Montgomery County, MD avoids making improvements on state facilities. When the county has made such improvements, however, those improvements have been funded by a combination of development fees and general revenues. In Contra Costa County, certain sales tax revenues may be used for infrastructure improvements as a result of Measure C of 1988. Additionally, that county may use regional traffic mitigation fees on designated Routes of Regional Significance. The county is able to use these locally generated funds to leverage state dollars for local projects. Riverside County in California has also taken innovative approaches to securing funding for state facilities. The county has access to the nine percent tax increase that resulted from Proposition 111. Furthermore, the county uses special financing tools such as Mello Roos and TUMF. Mello Roos is provided as part of the public or private planning process using fees to support infrastructure, including transportation facilities. TUMF is a financing tool developed through a comprehensive interlocal agreement process. Through these interlocal agreements, communities, local governments, and developers agree upon new impact fees for regionally significant transportation projects. The new impact fees do not supplant existing local impact fees.

The importance of the provision of adequate funding for transportation infrastructure cannot be overemphasized in relation to concurrency policies. Without such funding either development moratoria result or concurrency goals must be compromised. The state may wish to explore creative solutions to revenue shortages. Mello Roos and TUMF financing were mentioned in previous discussions as possible alternatives/supplements to traditional sources. The state may also consider implementing an incentive system for local governments to comply with certain aspects of the growth management program, as in California. However, any system of sticks and carrots should adequately take into consideration the inter-jurisdictional nature of transportation facilities.

Issue 9: "Do other states use urban growth areas (or other comparable land use controls)?"

Urban growth boundaries and LOS standards can both have a significant impact on the location of new development. Consequently, it is important to understand the value of each as well as their relationship to one another. The use of urban growth boundaries contributes significantly to growth management efforts in other states. Given Washington's own use of designated urban growth areas, the experience of other states with the use (or lack of use) of this tool should be of special interest. Of the four states included in this evaluation, only one, Oregon, uses urban growth areas. The use of urban growth boundaries has helped Oregon contain low density suburban development, often termed "sprawl." However, this type of development does persist *within* the urban growth boundary. An Oregon proposal for Focused Growth Plans would target growth to certain areas within the urban growth boundary. Since standards for adequate public facilities vary within the boundary, growth is sometimes channeled to the fringe where standards are lower. The relationship between growth boundaries and LOS standards that can be seen here is that, while the urban growth boundary contains growth, the use of high LOS standards at the core pushes growth outwards to areas where excess capacity exists. Thus, while growth boundaries and LOS standards can both serve as growth management tools, it is possible for them to operate at cross-purposes, as in this case. Oregon's proposed Focused Growth Plans would attempt to correct this tendency.

The remaining three states do not use urban growth boundaries. Each of these states continues to experience suburban sprawl. In Virginia, the state requires a comprehensive planning process that designates urban and rural areas, but does not have a coordinated review process for local plans. California and Florida, both of which have adequate public facilities ordinances, have experienced a situation similar to Oregon's. Since land use decisions cannot violate LOS standards in order to conform to concurrency regulations, development is often directed to the fringe of urban areas where excess capacity exists. In urban areas in these states, however, there are not urban growth boundaries to contain that outward pressure. Florida has new legislation that attempts to correct this situation by exempting core areas from concurrency requirements. In the absence of urban growth boundaries, this is one way to focus growth toward the urban center.

The local jurisdictions that were examined mirror these findings. Contra Costa County, CA is the only one of the three that uses urban boundaries, termed "urban limit lines." These lines

represent each jurisdiction's sphere of influence for future growth, and are intended to encompass growth for the next 20 years. Land outside the urban growth limit is designated as agricultural preserve. Contra Costa has found that these urban limit lines are drawn so large that they do not succeed in preventing sprawl. As a result, the county supplements its use of urban limit lines with zoning and LOS standards designed to direct growth to certain areas. Riverside County, CA and Montgomery County, MD do not have any urban growth boundaries, but attempt to use zoning and LOS standards to direct growth. Both jurisdictions have lowered LOS standards in core areas or exempted those areas from concurrency requirements in order to promote more compact, sustainable patterns of development.

In the absence of urban growth areas, LOS standards may be manipulated to direct growth to desired areas. However, urban growth areas may be a more direct means of containing sprawl than adjusting the LOS standards. Possibly urban growth areas and adjusted standards used in combination with each other, as is proposed in Oregon (Focused Growth Plans), would be the best approach for focusing development. This approach combines an incentive to locate at the center with a disincentive (even prohibition) to locate new development further out.

Conclusions

This review of the experience of other states illustrates that Washington is not alone in dealing with issues related to the treatment of state transportation facilities by local governments in their comprehensive plans. Yet while others have wrestled with the same challenges, none have decisively resolved them. The necessary existence of state owned transportation facilities stands in tension with the local authority to control land use and development. This tension is highlighted in growth management environments where the provision of facilities to serve new development is to be provided concurrent with the impacts of new development.

Though none of the locations evaluated in this study have thoroughly resolved the issues, their experiences have yielded failures and successes from which Washington State may learn. The state may wish to explicitly define which facilities should be addressed and how in local plans. The research indicated that the responsibility of setting LOS for state facilities may best be done cooperatively between state and regional organizations. The LOS measures that are used should reflect a multimodal perspective on the transportation system, should be comparable within regions and appropriately used. As in the case of setting LOS standards, the responsibility of correcting LOS deficiencies may be shared, and some local governments have voluntarily invested in state owned facilities. Adequate public facilities ordinances may be used as a tool to produce concurrency, but they must have adequate funding in order to succeed, either from impact fees, traditional sources, local option taxes, or innovative sources such as TUMF. Finally, growth management boundaries have been shown to successfully limit sprawl; used in conjunction with appropriate LOS standards, they may together direct development in a way that fulfills many of Washington's growth management objectives.

Appendix 5-1
Resource Bibliography

Source CODE	DOCUMENTS
1	American Planning Association, Florida Chapter (1991) The Florida Planning and Growth Management Handbook.
2	Audirac, Ivonne, William O'Dell, and Anne Shermyen (1992) Concurrency Management Systems in Florida: A Catalogue and Analysis. Bureau of Economic and Business Research. University of Florida.
3	Auerhahn, Elliot (1988) "Implementing an Impact fee System: Ten Years of Experience in Broward County, Florida." Journal of the American Planning Association. 54:67-70.
4	Blaesser, Brian and Christine Kentopp (1990) "Impact Fees: The Second Generation." Washington University Journal of Urban and Contemporary Law 38: 55-113.
5	Center for Economic and Management Research, University of South Florida (1993) Trends and Forecast of Florida's Transportation Needs. Center for Urban transportation Research.
6	Center for Urban Transportation Research, University of South Florida (1993) The Role of Level of Service Standards in Florida's Growth Management Goals.
7	Center for Urban Transportation Research, University of South Florida (1993) Transportation Costs of Urban Sprawl.
8	Contra Costa County Transportation Authority (1991) 1991 Contra Costa Congestion Management Program.
9	Contra Costa County Transportation Authority (1990) Growth Management Implementation Documents.
10	Degrove, John and Julian Conrad Juergensmeyer (1986) Perspectives on Florida's Growth Management Act of 1985. Lincoln Institute of Land Policy.
11	Denslow, David, William O'Dell, Anne Shermyen, and Ivonne Audirac (1994) The Economic Impact of Local Government Comprehensive Plans. University of Florida Bureau of Economic and Business Research.

12	Dey, Soumya and Jon Fricker (1994) "Traffic Impact Analysis and Impact Fees in State Departments of Transportation." ITE Journal: May, 1994. 39-44.
13	Dowling, Richard (1989) " Controlling Growth with Level of Service Policies." Transportation Research Record 1237: 39-46.
14	Easley, Gail (1992) Staying Inside the Lines: Urban Growth Boundaries. American Planning Association.
15	Ewing, Reid. "Roadway Levels of Service in an Era of Growth Management." Transportation Research Record: 1364.
16	Ewing, Reid. Transportation Service Standards- As if People Matter. Joint Center for Environmental and Urban Problems, Florida Atlantic University/Florida International University.
17	Fisher, Kimberly (1994) Adequate Public Facilities Ordinances: Evolution and Response to Economic Downturns.
18	Florida Center for C ɔmmunity Research and Design (1993) Impact of Community Design on Transportation. Center for Urban Transportation Research.
19	Florida Department of Community Affairs (1991) Technical Memo.
20	Frank, James and Robert Rhodes, eds. (1987) Development Exactions. Planners Press, American Planning Association.
21	Governor's Task Force on Urban Growth Patterns (1989) Final Report.
22	Leif Ourston and Associates (1993) Wide Nodes and Narrow Roads.
23	Los Angeles County Metropolitan Transportation Authority (1993) Congestion Management Program for Los Angeles County.
24	Los Angeles County Metropolitan Transportation Authority (1993) Countywide Deficiency Plan Background Study.
25	Los Angeles County Metropolitan Transportation Authority (1994) Fact Sheet: Congestion Management Program.
26	Nash, Andrew (1992) "California's Congestion Management Program." ITE Journal: February, 1992.

27	Nelson, Arthur, ed. (1988) Development Impact Fees: Policy Rationale, Practice, Theory, and Issues. Planners Press, American Planning Association.
28	Nicholas, James C., Arthur Nelson, and James Juergensmeyer (1991) A Practitioner's Guide to Development Impact Fees. Planners Press, American Planning Association, Chicago.
29	Oregon Department of Land Conservation and Development (1993) Administrative Rules of the Land Conservation and Development Commission. O.A.R. Chapter 660.
30	Oregon Department of Land Conservation and Development (1991) Oregon's Statutes on Land Use and Planning.
31	Oregon Department of Land Conservation and Development (1991) Urban Growth Management Study: Summary Report.
32	Paaswell, Robert E., ed. (1992) Site Impact Traffic Assessment: Problems and Solutions. American Society of Civil Engineers, New York.
33	Pelham, Thomas (1992) "Adequate Public Facilities Requirements: Reflections on Florida's Concurrency System for Managing Growth. Florida State University Law Review: 19.
34	Porter, Doug (1990) "The APF Epidemic. "Urban Land. Nov. 1990.
35	Porter, Doug and Bob Watson (1993) "Rethinking Florida's Growth Management System." Urban Land. February, 1993.
36	Puget Sound Regional Council (1993) Issues, Options, and Examples: Level of Service Standards/Concurrency Management Systems. Final Report.
37	Replogle, Michael. "Computer Transportation Models for Land Use Regulation and Master Planning in Montgomery County, Maryland." Transportation Research Record: 1262:91-100.
38	Rhodes, Robert "Concurrency: Problems, Practicalities and Prospects". Journal of Land Use and Environmental Law 6:241-254.
39	Samdahl, Donald, Laurie Gromala, and Conway Karr. Developer Impact Mitigation: What is Fair?
40	Samdahl, Donald, and Conway Karr. Evolution of an Impact Fee System.

41	Savage, Joseph, Jr. (1993) "LOS Leaders." Planning. January, 1993: 16-19.
42	Statewide CMP/Air Quality Coordination Study Steering Committee (1994) Final Study Report: Statewide Congestion Management Program Air Quality Coordination Study.
43	Statewide CMP/Air Quality Coordination Study Steering Committee (1994) Statewide Congestion Management Program Air Quality Coordination Study: Final Technical Appendix.
44	Stuart, Greg. (1994) "Concurrency Management Practices in Florida: Comparative Assessment." Journal of Urban Planning and Development 120: 59-73.
45	Trepanier, Theodore (1992) A Procedure for Concurrency Management in Washington State.
46	Washington State Department of Community Development (1992) Paying for Growth's Impacts: A Guide to Impact Fees. Department of Community Development, growth Management Division.
47	Zell, Eric (1989) "A Vote Winning Combination: Contra Costa County Links Transportation Tax to Growth Management." Urban Land. June, 1989.
48	Center for Urban Transportation Research (1994) Transportation Planning for State Purposes.
49	State of Florida Office of the Auditor General (1993) Performance Audit of the Transportation Corridor Protection Program.
50	State of Florida Office of the Auditor General (1993) A Review of the Department of Transportation Performance Measures.
51	Center for Urban Transportation Research (1994) Moving People in Florida: Transit, TDM, and Congestion.
52	1000 Friends of Oregon (1992) The LUTRAQ Alternative/Analysis of Alternatives: An Interim Report.
53	1000 Friends of Oregon (1992) Market Research: Volume 3A.
54	1000 Friends of Oregon (1991) Modeling Practices: Volume 1.
55	1000 Friends of Oregon (1992) Model Modifications: Volume 4.

Appendix 5-2
Lessons Learned Matrix

ISSUE 1:	HOW ARE STATE FACILITIES ADDRESSED IN LOCAL PLANS IN OTHER STATES? *STATE AUTHORITY AND ACTION*			
LOCATION	**FINDING**	**IMPLEMENTATION ISSUES**	**SOURCE**	**LESSONS LEARNED FOR WA**
Oregon	State facilities are included in regional plans. Regional plans include modeling for the local transportation system and	Regional modeling establishes a uses a system approach for plan development, that identifies problems and modal or services solutions.	interview	• Regional system plan and ODOT planning identifies corridors and solutions in an integrated fashion, irrespective of mode, service, or jurisdiction solution requirement
Florida	Local governments are required to address state transportation facilities in local plans. FDOT defines the Intrastate Highway System.		6, 36	• A state requirement for local governments to address state facilities in local plans is useful since in the absence of such a requirement local governments may choose to ignore those facilities, as is currently found in Washington. Such a requirement would produce local concurrency strategies. • The state should establish concurrency requirement by statute or rule and provide for a monitoring and enforcement process to guide local development regulations. • The state may wish to establish exemptions within the statute and should list specific items.
Virginia	Local jurisdictions address state transportation facilities in local plans.	All roadways with the exception of municipal streets and very limited county roads are controlled by the state. The state is responsible for PAP and funding of projects. Local jurisdictions can fund state projects with local revenues.	interview	• The state could assume responsibility for all major and minor roadways and the revenue sources to support them. Local jurisdictions could be provided authority to support plan implementation with local revenues.
California	The state's Congestion Management Program requires urbanized counties to address all state highways and freeways in their Congestion Management Programs (CMPs).	Congestion management is based on corridor evaluations and cooperative solutions, including local participation.	26	• Requiring state facilities to be addressed at the county level results in less fragmented treatment of those facilities than if they are addressed at the municipal level alone. However, there is still a need for coordination at the regional scale.

ISSUE 1:	HOW ARE STATE FACILITIES ADDRESSED IN LOCAL PLANS IN OTHER STATES? *(CONTINUED) LOCAL AND REGIONAL JURISDICTIONS*			
LOCATION	**FINDING**	**IMPLEMENTATION ISSUES**	**SOURCE**	**LESSONS LEARNED FOR WA**
Contra Costa County, California	Freeways and other designated Routes of Regional Significance (including state facilities) are addressed in the General Plan for the county and in the regional Action Plans. Regional Committees formed of representatives from local jurisdictions develop these plans.	The use of regional committees with multi-jurisdictional membership has been successful, but has been time consuming.	9, Engelmann	• A multi-jurisdictional approach to addressing state facilities promotes for cooperation and the resolution of conflicts.
Riverside County, California	Same as above	Same as above	interview	Same as above
Montgomery County, Maryland	State facilities other than freeways are addressed in both tiers of the county's system: the policy area review and the site impact study. Freeways used to be included in the policy area review, but now the freeway system is addressed separately for the county as a whole.	Policy area reviews (averaging capacity on state arterials and local roads) and the evaluation of the freeway system affect the county's annual growth policy, which caps the number of jobs and housing units the county can accept in a given year. Capacity on the freeway system is balanced with capacity on other arterials.	Hawthorne	• It is difficult to take the leap from local plans to concurrency requirements. • Washington may wish to explore the possibility of treating the freeway system separately from other state facilities.

ISSUE 2:	WHO IS RESPONSIBLE FOR SETTING LOS STANDARDS FOR STATE FACILITIES? *STATE AUTHORITY AND ACTION*			
LOCATION	**FINDING**	**IMPLEMENTATION ISSUES**	**SOURCE**	**LESSONS LEARNED FOR WA**
Oregon	LOS is established in the regional plan.		interview	• State and local jurisdictions participate in the planning process. Metropolitan Portland has an independent regional government (Metro-Metropolitan Service District) that is give responsibility for the modeling and MPO functions.
Florida	FDOT sets the minimum LOS for various types of state facilities. Locals must accept this LOS for roads in the Intrastate Highway System. Local governments may deviate from these standards if the deviation can be shown to promote state planning goals.	The state defines the LOS standard for state facilities to be used in local concurrency management systems, but the state itself is not legally required to provide state facilities concurrent with development.	6, 33	• The top-down approach provides consistency, but a lack of involvement by local agencies. • The discrepancy between the entity defining LOS standards, the entity implementing concurrency management systems, and the entity responsible for making transportation improvements produces conflict. This is a key issue for Washington to resolve. • When the state sets LOS it may be responsible for paying to achieve LOS standards or is local development stopped until such standards are met.
Virginia	The state in association with the regional planning organization establishes the LOS. The state is ultimately responsible.	Local jurisdictions make land use decisions and provide guidance for correcting any problems. The state controls the roads but have little authority to over ride a local land use decision. Local mitigation fees and revenues are used by local government to resolve what the locals decision is a condition that is beyond congestion tolerances.	interview	• State control of the entire system seems to free local government from concern over how the larger system works and concentrates local solutions to a development or crisis issue.

California	County Congestion Management Agencies set the LOS standards for state facilities. The standards shall be set at LOS E or the current LOS, whichever is farthest from LOS A.	Facilities at LOS F in the first year of the program are exempted from the requirement to prepare a deficiency plan. Therefore, some of the facilities with the worst congestion problems are not addressed through the CMP.	26, CA for B.	• These agencies are the MPO's.

ISSUE 2:	WHO IS RESPONSIBLE FOR SETTING LOS STANDARDS FOR STATE FACILITIES? *(CONTINUED) LOCAL AND REGIONAL JURISDICTIONS*			
LOCATION	**FINDING**	**IMPLEMENTATION ISSUES**	**SOURCE**	**LESSONS LEARNED FOR WA**
Contra Costa County, California	Regional Committees set traffic service objectives for state facilities in cooperation with the Contra Costa Transportation Authority and Caltrans.		9, 47, Engelmann	• Cooperation between the state, the county, and the local governments is essential for developing meaningful service objectives for state facilities.
Riverside County, California	Regional Committees set traffic service objectives for state facilities in cooperation with the Coachella Valley COG (CVAG), Southern California Association of Governments, Riverside County Transportation Commission, and Caltrans.		interview	• Cooperation and planning established at the regional and sub-regional level in order to address transportation issues within a large geographically area. This establishes ability to meet local conditions on state system facilities and identify alternative funding approaches.
Montgomery County, Maryland	The county sets LOS standards for state facilities which cross jurisdictional boundaries, taking into account the state's Consolidated Transportation Program for the next four years.	In the state's transportation program, all funding for projects must be available in the first four years of a project. The state commits to beginning construction in the first two years. Thus, the county has a high degree of certainty that planned facilities will actually be built.	Hawthorne	• Both existing and planned facilities need to be considered when defining LOS standards.

ISSUE 3:	WHAT METHODOLOGIES DO OTHER STATES USE TO DETERMINE LOS STANDARDS FOR STATE FACILITIES? *STATE AUTHORITY AND ACTION*			
LOCATION	**FINDING**	**IMPLEMENTATION ISSUES**	**SOURCE**	**LESSONS LEARNED FOR WA**
Oregon	MPO's through the modeling process and			
Florida	Facilities are assigned an LOS of A-F based on the 1985 Highway Capacity Manual on interstate system. Localities have wide flexibility on the balance of the state system in determining LOS methodology. Innovations include averaging volume/capacity ratios for areas and using the 100th highest volume hour.	Flexibility in determining LOS methodology have yielded some innovative methods, but has made coordination between jurisdictions difficult. Additionally, many methods overemphasize the role of SOV traffic in the transportation system.	6, 16, 33	• There needs to be flexibility in LOS methodology for different types of facilities and for areas with different degrees of urbanization, but. • LOS methodologies should be comparable within and between regions. • LOS measures should incorporate capacity in modes other than SOV.
California	County Congestion Management Agencies (CMAs) may select from 3 methods: Transportation Research Board *Circular 212*, the 1985 HCM, or a method consistent with the most recent version of the HCM.		26	• Washington may wish to establish a unified methodology for the statewide or urban or rural parts of the system and permit local methodologies to address local conditions.

ISSUE 3:	WHAT METHODOLOGIES DO OTHER STATES USE TO DETERMINE LOS STANDARDS FOR STATE FACILITIES? *(CONTINUED) LOCAL AND REGIONAL JURISDICTIONS*			
LOCATION	**FINDING**	**IMPLEMENTATION ISSUES**	**SOURCE**	**LESSONS LEARNED FOR WA**
Contra Costa County, California	Regional Committees may use intersection LOS, travel time, vehicle occupancy, transit use, or other quantifiable measures. LOS is only one of several indicators of attainment of traffic service objectives.	Regional Committees have flexibility to determine which LOS methodology is most appropriate for their situation. Measures in addition to SOV capacity are used to determine the extent to which traffic service objectives are met.	9	• LOS methodologies which consider more than SOV capacity should be explored and utilized.
Riverside County, California	Same as above	Same as above		Same as above
Montgomery County, Maryland	Methodologies are developed at the county level. Four or five different methodologies are used, depending on the type of facility which is being addressed. Transit capacity is taken into account. The two cities in the county are independent from the county and use their own methodologies.		Hawthorne	• Montgomery County appropriately provides for different methodologies for different types of facilities. • The use of a single methodology for a given type of facility facilitates comparison across jurisdictions.

ISSUE 4:	WHO IS RESPONSIBLE FOR CORRECTING LOS DEFICIENCIES? *STATE AUTHORITY AND ACTION*			
LOCATION	**FINDING**	**IMPLEMENTATION ISSUES**	**SOURCE**	**LESSONS LEARNED FOR WA**
Oregon	Deficiencies are addressed as part of a statewide and regional multimodal planning process. Corrections are made depending upon the solution selected, i.e.. state roads, transit, or local TDM programs.	A joint planning and development process is required that involves all levels of jurisdictions.	interview	• The State of Oregon participates in planning and funding the full range of transportation options to correct LOS deficiencies all within the GMA requirements.
Florida	FDOT is responsible for correcting LOS deficiencies of state facilities, though the state is not legally subject to concurrency.	Since the state is not subject to concurrency, it is not obligated to bring facilities up to an adequate level of service. Localities must, at times, reject development because of the state's failure to correct LOS deficiencies.	33, 35, 38	• There exists a need for a mandatory conflict resolution process between local governments and the state (Rhodes). • Other options include, 1) state role in land use decisions, 2) give road and revenues to local or regional jurisdictions, or 3) exclude state facilities from concurrency.
Virginia	VDOT is responsible for correcting LOS deficiencies, although they are not required to correct problems related to local land use decisions.	Local jurisdictions can use local revenues for infrastructure or services to correct problem.	interview	• Minimum LOS standards are set for state facilities and any deficiencies related to local decisions are local responsibility. • Let all LOS problems become responsibility of local jurisdictions as they relate to land use decisions.
California	The issue is not directly addressed in the literature.	Solutions including state and local option revenues are identified at the regional level and sub regional level	interview	• Local option revenues may need to be directed to state facilities, but also include local/regional services should be included.

ISSUE 4:	WHO IS RESPONSIBLE FOR CORRECTING LOS DEFICIENCIES? *(CONTINUED)* *LOCAL AND REGIONAL JURISDICTIONS*			
LOCATION	**FINDING**	**IMPLEMENTATION ISSUES**	**SOURCE**	**LESSONS LEARNED FOR WA**
Contra Costa County, California	The state is ultimately responsible for correcting capacity deficiencies. In some cases the county or local jurisdictions have made improvements apart from the state.		Engelmann	• At times it is to the advantage of local governments to invest in improvements on state owned transportation facilities.
Riverside County, California	State is responsible for correcting problems, but state statutes give local/regional jurisdiction special authority to address problems.			• Local jurisdictions by investing in state facilities can correct problems and continue to manage growth in an orderly fashion.
Montgomery County, Maryland	The state is ultimately responsible for correcting deficiencies. Montgomery County assumed some of that responsibility in the 1980s. In some cases the state repaid the county for those improvements. Today the county avoids making capital improvements on state facilities, though sometimes intersections involving state facilities are improved with county funds.	The ability of the state to fund needed improvements runs in cycles. At times the state is able to fund projects, at other times it is unable to make investments.	27, Hawthorne, Matthias	• The state may encourage local governments to invest in state facilities by providing tangible incentives.

ISSUE 5:	WHAT ROLE DOES LOS PLAY IN PROGRAMMING AND PRIORITIZATION IN OTHER STATES? *STATE AUTHORITY AND ACTION*			
LOCATION	**FINDING**	**IMPLEMENTATION ISSUES**	**SOURCE**	**LESSONS LEARNED FOR WA**
Oregon	Service levels are determined within the context of transportation corridors.	All modes are reviewed to address LOS issues and PAPs is determined by the funding, needs, and safety concerns.	interview	• Washington PAPs should include all modes and services for correcting LOS problems.
Florida	Local plans must have a capital improvements planning and programming element which defines adequate LOS and states how, where, and when infrastructure will be provided. The element includes a 10 year plan and a 5 year implementation plan.	Capital improvement plans vary in distinguishing between existing infrastructure deficiencies and added deficiencies which result from new development. Although, most plans do distinguish those that do not still show the total need.	33, 44	• Capital improvement plans could treat improvements correcting existing deficiencies and improvements addressing future deficiencies separately by including state LOS in capital improvement or public facility requirements.
Virginia	PAPS is determined by traditional methods, including geographic distribution, funding limitations, legislative directive, and six year capital programs.	Local jurisdictions can move projects from the bottom of the PAPs list to the top with local revenues.	interview	• TIB has helped refine local jurisdiction influence on PAPs, although all modes and services are not available for implementation.
California	Local governments develop capital improvement programs which define adequate LOS and prioritize projects. These are incorporated into Regional Transportation Improvement Plans. The California Transportation Commission prioritizes and funds projects.		26	• State guidelines could direct regional PAPs and help define projects and services.

ISSUE 5:	WHAT ROLE DOES LOS PLAY IN PROGRAMMING AND PRIORITIZATION IN OTHER STATES? *(CONTINUED) LOCAL AND REGIONAL JURISDICTIONS*			
LOCATION	**FINDING**	**IMPLEMENTATION ISSUES**	**SOURCE**	**LESSONS LEARNED FOR WA**
Contra Costa County, California	The Metropolitan Transportation Commission takes traffic service objectives and LOS into consideration when analyzing project effectiveness.	While there are provisions for taking objectives into consideration when prioritizing projects, there is little funding currently available for projects. Thus, this is more a fiscal issue than a policy issue.	Engelmann	• Funding for projects must be available in order to make project prioritization meaningful.
Riverside County, California	Local governments develop capital improvement programs which define adequate LOS and prioritize projects. These are incorporated into Regional Transportation Improvement Plans. The California Transportation Commission prioritizes and funds projects.	Local jurisdictions work in cooperation with the state to fund and implement projects.	interview	• Local jurisdictions by investing in state facilities can correct problems and continue to manage growth in an orderly fashion.
Montgomery County, Maryland	LOS for transportation facilities is the primary indicator of concurrency. The Maryland Highway Administration uses CIPs in Montgomery County's regional Master Plans when developing its own CIP.	CIPs in sectional Master Plans have not always proven financially feasible. Therefore, development which has been approved contingent on improvements identified in those CIPs has resulted in congestion.	45	• It is important for the capital improvements upon which development approvals are based to be financially feasible.

ISSUE 6:	WHICH STATES REQUIRE ADEQUATE PUBLIC FACILITIES AS A CONDITION OF DEVELOPMENT APPROVAL? *STATE AUTHORITY AND ACTION*			
LOCATION	**FINDING**	**IMPLEMENTATION ISSUES**	**SOURCE**	**LESSONS LEARNED FOR WA**
Oregon	The state did not have an adequate public facilities requirement as of 1991.	A 1991 study by the Oregon Department of Land Conservation and Development recommended the adoption of an adequate public facilities ordinance applicable throughout urban growth areas.	31	• The legislature needs to review public facility ordinance requirements and update statutes within GMA objectives.
Florida	Local governments must ensure that facilities need to serve new development are available concurrent with the impacts of new development. Developers are assessed a share of the cost of providing facilities. They must commit to paying before the preliminary permit issued.	In areas with existing capacity deficiencies development moratoria have occurred. In other areas LOS standards have been lowered to avoid development moratoria.	2, 6, 33, 34, 35	• Adequate public facilities ordinances which are implemented without adequate funding result in development moratoria rather than growth management. Growth then occurs in areas not as well managed (i.e. sprawl).
Virginia	Counties and cities are required to prepare public facility plans. Plans cover traditional public utilities and transportation.	Transportation plans cover planned, programmed, and funded projects. Funded projects are those placed on the six year plan.	interview	• Concurrency is met when transportation projects are placed on the six year plan. Local funds can move a project to the implementation list.
California	California requires Adequate Public Facilities Ordinances, including congestion management programs.	Local jurisdictions have the authority to establish jurisdiction wide LOS standards for cities and counties.		• Washington jurisdictions may establish compatible standards indicting local vs. state differences.

ISSUE 6:	WHICH STATES REQUIRE ADEQUATE PUBLIC FACILITIES AS A CONDITION OF DEVELOPMENT APPROVAL? *(CONTINUED) LOCAL AND REGIONAL JURISDICTIONS*			
LOCATION	**FINDING**	**IMPLEMENTATION ISSUES**	**SOURCE**	**LESSONS LEARNED FOR WA**
Contra Costa County, California	New development must "pay its own way" through mitigation fees, TSM/TDM measures, or phasing development.	The Contra Costa Transportation Authority recognizes that it cannot provide SOV capacity concurrent with demand. Thus, it is committed to providing adequate overall capacity, but total capacity includes other modes such as bus, HOV, and rail.	9	• Adequate public facilities" does not imply that specific types of transportation facilities will be fee from congestion, but that the transportation *system* as a whole will meet certain standards. There will never be roadway capacity sufficient to accommodate SOV demand.
Riverside County, California	State has mandated a congestion management Program for local jurisdictions that includes LOS	Local jurisdiction can request a area wide impact of development projects to evaluate impact on APFO	17	• Washington could require that local development to be tested against regionwide transportation model for impacts.
Montgomery County, Maryland	Public facilities must be available concurrent with the impact of new development. Concurrency determinations are made at the time of subdivision. Impacts on roadway LOS can be mitigated through impact fees, TDM or transit actions.	The county's APFO has caused moratoria to occur in some parts of the county where there were capacity deficiencies. Additionally, Montgomery County's APFO has directed growth into adjacent counties.	17, 27, Hawthorne	• An adequate public facilities ordinance will be most effective if all parts of a metropolitan region have such ordinances. • Concurrency programs must be defined with a realistic set of growth policies and funding commitments. • Existing deficiencies must be addressed up front in the priority process.

ISSUE 7:	WHICH STATES USE IMPACT FEES FOR STATE TRANSPORTATION FACILITIES? *STATE AUTHORITY AND ACTION*			
LOCATION	**FINDING**	**IMPLEMENTATION ISSUES**	**SOURCE**	**LESSONS LEARNED FOR WA**
Oregon	The state uses impact fees for state facilities. Developments generating over 500 vehicle trips per day are subject to a traffic impact analysis. The state has a fair share (as opposed to "last developer in") means of assessing impact fees.	Under a "fair share" policy, the emphasis is placed on the cumulative impact of development.	12, 31	• capacity deficiencies result from the cumulative effect of development, not the action of the individual developer who causes the system to fall below the threshold LOS. Fee systems should reflect this reality. • States can use impact fees successfully. The state may become a full player in the mitigation process.
Florida	The state does not collect impact fees for state transportation facilities, though some impact fees collected at the local level are earmarked for use by the state for state facilities.	There has been dispute regarding whether or not impact fees collected at the local level are actually utilized to make necessary improvements on state facilities.	6, 44, 45	• Fees collected at the local level for use by the state on state transportation system should be clearly tracked to ensure that they are expended in an appropriate fashion.
Virginia	The state does not collect impact fees, but authorize local jurisdiction to collect impact fees for transportation and other facilities.	Locals determine how impact fee is levied and how implementation is structured. The system is a traditional proffer approach where fees are determined through comprehensive plan changes and rezoning process.	interview	• Proffers can be used for adjacent, off site, and off-off site transportation improvements because they are negotiated and not imposed as a condition of the plan or zone. Washington currently uses a similar system but it is not as flexible.
California	State authorizes local and regional jurisdictions to impose impact fees.	State authorized local option sales tax on gas and other financing assistance for local government and regions to address priority and programming issues.		• Washington should evaluate the Mello Roos and TUMF financing approach for state or regionally significant facilities.

ISSUE 7:	WHICH STATES USE IMPACT FEES FOR STATE TRANSPORTATION FACILITIES? *(CONTINUED) LOCAL AND REGIONAL JURISDICTIONS*			
LOCATION	**FINDING**	**IMPLEMENTATION ISSUES**	**SOURCE**	**LESSONS LEARNED FOR WA**
Contra Costa County, California	Local jurisdictions collect impact fees for state transportation facilities. These locally collected funds are passed up to the state level via the Joint Powers Authority, a coalition of local governments which interfaces with the state.	The literature was unclear regarding how the state expends these funds.	9, Engelmann	• It is possible that an entity such as the Joint Powers Authority could expend transportation funds on state facilities in addition to collecting them.
Riverside County, California	State is responsible for correcting problems, but state statutes give local/regional jurisdiction special authority to address problems.	State authorized local option sales tax on gas, Mello Roos, and Transportation Uniform Management Fee financing assists local government and regions to address priority and programming issues.		• Local jurisdictions working through the regional and sub-regional councils have the authority to develop other revenues to support regional/state transportation projects related to development and GMA. • Washington should evaluate Mello Roos and TUMF for authorization related to state facilities and deficiencies.
Montgomery County, Maryland	Impact fees were implemented in some policy areas in response to development moratoria resulting from the APFO. They are primarily used for local roads, but have been used for state facilities in some cases. They must be spent in the same planning area in which they are collected.	In some cases developers have voluntarily formed "road clubs" to increase capacity on certain facilities in order to develop.	27, Hawthorne, Matthias	• Impact fees can be blended into a mitigation program that includes concurrency. • The state should explore ways of facilitating the development of voluntary alliances amongst developers to perform transportation improvements.

ISSUE 8:	WHAT SOURCES OF REVENUE DO OTHER STATES USE FOR FINANCING STATE TRANSPORTATION FACILITIES AND LOCAL TRANSPORTATION FACILITIES? *STATE AUTHORITY AND ACTION*			
LOCATION	**FINDING**	**IMPLEMENTATION ISSUES**	**SOURCE**	**LESSONS LEARNED FOR WA**
Oregon	Revenue sources include the gas tax, general obligation bonds, and local funding mechanisms. Additionally, the state conducts traffic impact analysis and requires impact fees or off-site improvements.	Local funding mechanisms are under used. It is possible that a state agency will be formed to assist local governments in generating funds.	12, 31	• Revenue sources must be reasonable and implementable by local jurisdictions.
Florida	Sources include the Local Option Gas Tax, the State of Florida Gas Tax, and road impact fees. 1993 legislation allows local governments to enact local option gas taxes without holding referenda for infrastructure improvement projects.	Funding has been a significant problem for concurrency legislation. Additionally, there has been dispute concerning whether or not fees collected at the local level have actually been used to improve state facilities.	6, 33, 34, 35, 44	• Adequate funding is critical to successful concurrency legislation. Without sufficient funding concurrency legislation eventually leads to development moratoria.
Virginia	Sources include gas tax, registration fees, and traditional revenue sources.	State is responsible for the vast majority of the states infrastructure. For example, within Fairfax County (suburban D.C.) the county controls only 11 miles of roads. All others are city streets or state facilities.	interview	Washington could determine to take control of all roads/ferries and the revenues to support them, or determine what roads represent the state system and interest and turn the rest over to the counties along with supporting revenue, or turn portions of the system over to regional governments or authorities along with supporting revenue.
California	Proposition 111 passed in 1990 approved a 9% increase in the gas tax over 5 years. Local governments must comply with CMP legislation in order to receive funds from this tax increase.	A difficulty with this system is that local governments lose their funding if the LOS falls below an established standard; however, LOS in a particular jurisdiction may fall below the standard because of *another* jurisdiction's actions. This difficulty will have to be resolved in future legislation.	8, 26	• Legislation must adequately take into consideration the cross-jurisdictional nature of transportation facilities when creating a system of sticks and carrots.

ISSUE 8:	WHAT SOURCES OF REVENUE DO OTHER STATES USE FOR FINANCING STATE TRANSPORTATION FACILITIES AND LOCAL TRANSPORTATION FACILITIES? *(CONTINUED)* *LOCAL AND REGIONAL JURISDICTIONS*			
LOCATION	**FINDING**	**IMPLEMENTATION ISSUES**	**SOURCE**	**LESSONS LEARNED FOR WA**
Contra Costa County, California	In 1988 Measure C increased the local sales tax for use on specific infrastructure projects. Regional traffic mitigation fees may be used on designated Routes of Regional Significance. State-local partnerships are also forged.	By generating their own sources of revenue for projects on state owned facilities, local governments leverage state funds for state-local partnerships.	8, 9, 47	• Allowing local governments to leverage state funds by contributing to projects provides an incentive for local governments to invest in improvements on state facilities.
Riverside County, California	Proposition 111 passed in 1990 approved a 9% increase in the gas tax over 5 years. Local governments must comply with CMP legislation in order to receive funds from this tax increase. Local governments are provided special financing tools including Mello Roos and TUMF.	The CMP is completed through the MPO process. Mello Roos is provided as part of the public or private plan process using fees to support infrastructure, including transportation. TUMF is developed through a comprehensive interlocal agreements process including the development community to support new impact fees for regionally significant transportation projects. The new impact fees do not replace established local impact fees.	interview	• Local jurisdictions working through the regional transportation plan or congestion management plans should be permitted additional local and regional revenue sources to support specific types of transportation projects of interest to the state. • Current local impact fees should e reviewed to determine if they already support some portion of state facilities.
Montgomery County, Maryland	The county avoids making improvements on state owned facilities. When this has been done in the past, it has been funded by development fees and general revenues.		Matthias, Hawthorne	

ISSUE 9:	DO OTHER STATES USE URBAN GROWTH AREAS OR COMPARABLE LAND USE CONTROLS? *STATE AUTHORITY AND ACTION*			
LOCATION	**FINDING**	**IMPLEMENTATION ISSUES**	**SOURCE**	**LESSONS LEARNED FOR WA**
Oregon	The State uses urban growth boundaries. Standards for adequate public facilities vary within the urban growth area (?).	Urban growth boundaries have helped contain low density urban development, often termed "sprawl", but this type of development continues within the urban growth boundary. A proposal for Focused Growth Plans would target growth to certain areas. Since standards vary within the urban growth area (?), growth is channeled to the fringe.	14,31	• Urban growth boundaries can effectively limit sprawl. • Standards for adequate public facilities within the urban growth area should target growth to desired areas.
Florida	Urban growth boundaries are not used. New legislation seeks to direct development to core areas by exempting those areas from concurrency requirements.	Concurrency requirements have been shown to promote urban sprawl in some cases. When core areas have capacity deficiencies and fringe areas have capacity surpluses, development is directed to the fringe.	6, 16, 17, 19, 33	• In the absence of urban growth areas, exempting certain areas from concurrency requirements is a way to direct growth to areas which meet planning goals.
Virginia	The state mandates a comprehensive plan process that includes identifying urban and rural growth areas. The state does not have a coordinated review process for local plans. Plans are coordinated at the MPO level.	No growth boundary line is required, but an APFO is established to help guide growth. Transportation and other facilities must meet a three step measure to be defined as adequate: 1) Policy Approval, 2) On the Plan, and 3) On the Six Year Plan.	interview	• The three step process represent on possible measure of concurrency that for the state plan review process. • Without urban/suburban growth boundaries sprawl continues in most Virginia communities.
California	Urban growth boundaries are not used.	The experience of California is likely to be similar to that of Maryland, Florida, and Oregon. Since land use decisions cannot violate LOS standards, development may be directed to fringe areas where excess capacity exists.	26	• Fringe areas continue to gain new growth. APFO have tried to direct this growth, but without great success. The economic times and need for job retention has tended to lessen this tools impact.

ISSUE 9:	DO OTHER STATES USE URBAN GROWTH AREAS OR COMPARABLE LAND USE CONTROLS? *(CONTINUED)* *LOCAL AND REGIONAL JURISDICTIONS*			
LOCATION	**FINDING**	**IMPLEMENTATION ISSUES**	**SOURCE**	**LESSONS LEARNED FOR WA**
Contra Costa County, California	The county uses "urban limit lines" for unincorporated areas of the county. These lines take into account each jurisdiction's sphere of influence for future growth. The lines encompass projected urban growth for the next 20 years. Land outside the urban limit lines is designated agricultural preserve.	The areas within urban limit lines are large and can accommodate 20 years of growth. As a result, the lines are not preventing sprawl to occur within those lines. To discourage sprawl the county uses zoning and LOS standards.	Engelmann	• Sprawl can continue within urban growth boundaries if they are drawn too large.
Riverside County, California	State does not require urban growth boundaries. State does permit counties and regional to address problems on a regional, subregional, and local jurisdiction basis.	Coordination for planning takes place within the context of the Regional or Metropolitan Transportation Plan and any sub plans (corridor plans).		• Subregional approaches to problem solving may permit another tool for urbanized areas. • Urbanized areas are permitted to have exemptions for LOS conditions, such as the central business district, industrial districts, or specialized conditions.
Montgomery County, Maryland	Urban growth boundaries are not used. Through zoning development is discouraged in some parts of the county. To discourage sprawl, LOS standards have been lowered in some areas and raised in others to direct growth to desirable locations.	Low density development continues in the county, but this is the will of the community based on an extensive public process. While low density development continues, the county has attempted to control development so that growth is *planned* growth.	17, Hawthorne	• LOS standards may be lowered or raised in appropriate areas in order to meet planning objectives. • Urban growth areas may be a more direct method of controlling sprawl than merely adjusting LOS standards.

SECTION 6
DEVELOPERS' IMPACTS AND PERSPECTIVES

TABLE OF CONTENTS

SECTION 6
DEVELOPERS' IMPACTS AND PERSPECTIVES

Introduction

As Washington State reviews its growth management program and the issues related to concurrency it would greatly benefit from input from the development community. Developers and related professionals have a unique perspective on the effects of these state policies. As individuals and firms who monitor market conditions and observe alterations in the urban form, they are sensitive to the impacts of state and local policies that guide or restrict the type and location of new development. In addition to having an interest in legislation that affects the type and location of development, the development community has a special interest in the use of impact fees. It has become increasingly difficult for local governments to provide full cost and range of public facilities necessitated by new development. state and local governments, across the country, have looked to the private sector to fund these needed improvements through development impact fees. Developers' past and present experiences in Washington State may provide insights into evaluating existing policies and proposing improvements to the current system.

This element of the LOS Study is intended to identify the developers' perception regarding the impacts of growth management legislation on the development process. These perceived impacts are significant given the extent to which the development industry is linked to the health of the economy as a whole. This section will review the general study questions and research methodology. Finally, the findings and conclusions of this work effort will be summarized.

Research Questions

The research questions to be addressed by this portion of the LOS Study are listed in Exhibit 6-1. The questions address several broad areas of interest: the costs of GMA, the collection and use of impact fees for transportation improvements, and the relationship between development potential and transportation infrastructure. Developers are not always be able to offer definitive answers to these complex matters; however, their perspective on the issues is unique, and the *perceived* impact of growth management policies is worth illustrating, since it is these perceptions that form the basis for many developers' land use decisions.

Exhibit 6-1

Research Questions Related to Developers' Impacts and Perspectives

(1) How much does GMA increase the cost of development? Does designation of UGAs impact land costs?

(2) How much of the cost of GMA is absorbed by developers and how much is passed on to consumers?

(3) Are there incentives for developers that offset any or all of the costs of GMA?

(4) Are mitigation payments administered to assure that they are used for transportation improvements?

(5) What is the value to developers of public expenditures for transportation systems that provide access to appropriate areas for private development?

(6) What are the economic effects of congestion on the movement of freight and goods? How do such effects influence development?

(7) What is the net financial effect of GMA on the development industry (i.e., developers, builders, realtors, lenders, architects, engineers attorneys, consultants, and allied trades and professions)?

(8) Does GMA limit the location, type and/or amount of development? If so, do these limits help or hurt developers?

Methodology

The methodology used to address the research questions contains two major components: (1) a roundtable focus group involving developers and local government officials, and (2) a survey administered to a group of developers. The developer focus group and survey include large and small companies as well as the full range of development activities from residential to commercial. The focus group was held prior to the administration of the survey in order to aid in drafting the questionnaire. These two components of the methodology allowed the consultants to obtain developers' perspectives on a number of specific matters, while permitting the flexibility for developers to introduce their particular areas of concern.

The first component of this work element was a focus group involving developers and local government officials. The purpose of this roundtable discussion was to address the issues associated with this work element and identify GMA problems experienced by the development community. Strategies for eliminating or reducing any negative transportation and financial impacts of GMA on the development industry were highlighted, as well as potential benefits of the GMA legislation. Twenty-one individuals were invited by letter to attend the roundtable meeting. These were developers and others in related fields such as builders, realtors, lenders, etc. The list of potential participants was developed in consultation with professional and trade associations, associations of cities and counties, regional councils, and the Urban Land Institute's local District Council. Those invited were informed of the nature of the LTC's LOS Study, the topics to be addressed in the focus group, and that the findings and conclusions from the focus group would be incorporated into a report to the Legislature.

A focus group was also convened for representatives of local governments. The result of that meeting is summarized in the report on Impact Fees (see the section on "Local Government Opinions").

The focus group took place on September 19, 1994 at the Seattle Chamber of Commerce. Of the twenty-one members of the development community who had been invited to attend, only four chose to participate. Private sector participants were Greg Baarson of Continental, Inc., Fred Burnstead of Burnstead Construction Company, Bob Filley of North Coast Mortgage, and Mike Massoth of Weyerhaeuser Real Estate. Similarly, of the 12 local government officials who had been invited, only 2 chose to do so. Public sector participants were Eric Shields of the City of Kirkland and Art Maronek from the City of Burien. The public and private sector groups met separately for two hours from 8:30 to 10:30, at which time the two groups met for a joint discussion. Detailed minutes were produced from both the joint and separate sessions. These are Attached as Appendix 6-1. The results of the focus group will be discussed in the section pertaining to research findings below.

The turnout for the focus groups was disappointing since additional participants would have enhanced the quality and depth of the discussion. The lack of interest in the focus group was somewhat surprising, as well, for one would expect the development community to have an interest in public policy which may significantly impact their industry. However, the lack of interest in discussing growth management legislation *may* reflect developers' general satisfaction with the *status quo*. Since there is little interest in offering guidance or influencing public policy in this area, concerns about growth management legislation may not be high on developers' priority list.

The second component of the methodology for this evaluation was a survey administered to the developers and others in related fields (builders, realtors, lenders, etc.)who had been invited to the focus group but had not attended as well as to a larger geographic distribution. Those receiving the survey were again informed of the nature of the LTC's LOS Study, the issues addressed in this component of the work effort, and the intention to include their responses in

future presentations to the Legislature. The survey included fifteen restricted response questions. After each question respondents had the opportunity to explain their responses and offer additional comments. A copy of the survey instrument is included as Appendix 6-2.

The brief questionnaire was sent to 33 members of the development community. Approximately two weeks after the original survey was distributed, individuals who had not yet responded were sent a memorandum reminding them of the importance of the survey and requesting their response. A second copy of the questionnaire was enclosed with that memorandum. Eventually nine individuals returned completed surveys. Again, the response rate was quite disappointing. Furthermore, given the limited number of responses received, any conclusions drawn from the responses about the attitudes of the development community as a whole may or may not be representative of that larger group. Consequently, the survey results have been evaluated with a high degree of caution. The survey results are found in Appendix 6-3.

Findings

Despite the low level of participation in both the focus group and the survey, these two components of the research methodology did successfully address the principal issues of interest in this portion of the LOS Study. Furthermore, there was a high degree of consistency between the findings from the focus group and the findings from the survey. Direct products of this work effort include a set of minutes from the focus group and a chart summarizing the results of the written survey. These items are included as Appendices 6-2 and 6-3. The discussion is organized by major subject areas. These subject areas include the overall impact of growth management on the development process, the use of incentives in GMA, the effects of concurrency legislation, the collection and use of impact fees, and the effect of GMA on the cost of development.

Impact of Growth Management on the Development Process

Both the focus group and the written survey addressed the impact of GMA on the development process. In both components of the study it was found that GMA is really too new to have had an identifiable impact. This was the consensus at the focus group, and a majority of the survey respondents took this position. Other survey respondents were divided on whether GMA had hindered or improved local government planning and permitting processes. One individual noted that while GMA has improved the planning process, it has not aided permitting processes.

To the extent that the impact of GMA can be identified, the focus group discussed several related areas of concern. These include: the type of development encouraged by GMA, the effect of GMA on the political dynamic in the permitting process, and the need for coordination between affected agencies within jurisdictions.

With regard to the mix and type of development advocated by GMA, the developers felt it was too early to judge. However, some noted that the type of development promoted under GMA plans was not marketable within the developers' own market or business experience. A group of development and market professionals have evaluated the City of Seattle's recent planning recommendations for urban mixed use centers as part of the new comprehensive plan and found that the recommendations were very much "out of line" with what a successful retail development requires. The recommendations were described as reflecting the visionary thinking of urban designers, not real-world conditions. The developers felt that those making such recommendations should examine retail trends over the last thirty years in order to identify usable requirements.

The focus group was also concerned with the political dynamics of the permitting process. They noted that GMA has shifted the focus of development away from fringe areas toward infill areas, changing the political dynamic associated with development. Developers expressed frustration with uninformed community opposition to infill development projects. It was found that at times preliminary meetings with community leaders prior to hearings can diffuse opposition and make the community part of the planning process and project success.

A third area of concern to the development community was the need for coordination between affected agencies within jurisdictions in the permitting process. Lacey was cited as a positive example of coordination. In Lacey, developers meet with the entire staff for all preliminary plats. Everyone has the opportunity to voice their concerns. This may be difficult to do in larger jurisdictions, but it is quite useful in smaller ones. The group concurred that having an "affected agencies meeting" before developers came forward with a final report on a proposed project would facilitate compliance with regulations and provide a better understanding of mutual goals. The final report would address the concerns expressed at that meeting. Another alternative would be to have a manager-in-charge who would be responsible for establishing permit review dates, making decisions, coordinating affected agencies, and addressing inter-jurisdictional issues.

The Use of Incentives in Growth Management

Another area of interest is the potential of GMA to offer incentives to developers to improve land use development practices. Those surveyed were at a loss to identify significant incentives. Very few respondents indicated that GMA had improved local and state coordination, improved design and density, improved permitting time and review period, or improved the SEPA process. The majority of those surveyed felt that no incentives were offered. Large development companies seem to address the incentive issue differently from smaller firms. Larger firms identifies GMA as policy support for larger and more focused development. This increase in development scale provides potential for improved design, while supporting infrastructure costs by a larger number of units or square footage. Most developers, large and small, felt that it was too early to determine what incentives would emerge from GMA as local jurisdictions were only now finishing their comprehensive plans and zoning ordinances have yet to be developed. Smaller developers felt that GMA had only made the process more complicated.

The results from the focus group were similar. Few direct incentives were identified. Snohomish County was noted as improving their system under GMA. That county is in the process of adopting timelines which will be helpful to developers. The Benison Glenn project of the Affordable Housing Council was mentioned as a good explanation of problems with the permitting process. That report is not specifically transportation oriented, but focuses the local jurisdiction permitting process in general.

The Effects of Concurrency Legislation

Concurrency legislation is of special interest to developers, since it requires the provision of public facilities concurrent with the impacts of new development. In this way concurrency legislation ties development approval to the public's ability to fund and build these facilities. A danger of this type of system is local and state governments cannot fund projects and development moratoria will result. Developers have expressed concern that if GMA is implemented without clear rules, any time that LOS standards are not achieved and concurrency is not met, approved development or planned development will be stopped even if developers have met all the rules and paid appropriate impact fees. With regard to concurrency, several concerns of developers surfaced: the use of LOS standards, the need for fairness in determining concurrency, and the time frame for which concurrency is determined.

Key to the enforcement of concurrency through adequate public facilities ordinances is the way in which LOS is measured for transportation facilities. The focus group discussed the issue of establishing LOS standards for state transportation facilities. What LOS standard is appropriate, and should standards vary by the type of area in which facilities are located? The focus group did not offer any clear solution to these difficult issues. They noted that lowering LOS standards in CBDs would encourage development there. However, it was acknowledged that there is not excess roadway capacity anywhere. It was noted of those local governments that address state facilities in their plans, only twenty per cent use the state's suggested LOS standard, while the remainder use their own standard. For most facilities this is LOS E or F. A lack of funding for new facilities drives the transportation system, making it necessary to accept an LOS of F in many situations. It was also noted that local jurisdictions and the state do not seem to be able to meet the LOS or planning standards they have established for their own transportation facilities.

The private sector participants in the focus group stressed the need for fairness in enforcing concurrency legislation. The group felt it was inappropriate for the responsibility of correcting capacity deficiencies to fall on the last developer that causes a facility to fall below its established LOS standard. They suggested that this was both unfair and unreasonable. One developer noted that in Snohomish County the cost of providing new facilities is spread out over a number of developers within a region, making the distribution of costs more equitable. The need for fairness became a theme in the focus group's discussion of significant issues.

The third major area of concern related to concurrency legislation was the time frame for which concurrency was to be determined. Plans are for six years, but budgets are only for

two years. Developers indicated that this creates a great deal of uncertainty for developers whose projects depend on concurrency. Possibly there should be six year authorizations and two year appropriations. In addition, if impact fees are assessed, developers suggested that they have met the state or local requirement and should be allowed to process. Therefore, concurrency becomes a public sector issue of funding deficient improvements.

The Collection and Use of Impact Fees

As a preface to its discussion of impact fees, the focus group engaged in a lengthy discussion of the funding sources for transportation and their inadequacy in meeting transportation needs. The group discussed the current distribution of the gas tax and MVET. At one point in time these sources were sufficient. Today, however, they do not provide sufficient revenues. Additionally, maintenance on existing infrastructure exhausts approximately sixty per cent of local governments' transportation funds from state and local sources combined. Thus, there is little funding available to make significant improvements and develop the facilities needed to support new development.
As local governments are faced with the need to provide facilities concurrent with the demands of new development, they are looking to developers to accept an increasing share in the cost of those new facilities through the use of impact fees. In Central Puget Sound local governments collect an estimated $4.0 million in impact fees.

In Washington, local governments suggested that they are "tip-toeing" into the impact fee business. Less than 50 per cent of governments under GMA are planning to use SEPA mitigation fees or impact fees to fund transportation projects. In markets where the use of such fees is not prevalent governments are reluctant to impose them. When the GMA was enacted the state economy was strong and communities could afford to curb development. Today, the economy is much slower and localities do not wish to lower their competitive advantage by imposing impact fees.

The focus group's discussion of impact fees highlighted several areas of interest. These include the extent to which the payment of impact fees guarantees that development may proceed, the way in which impact fees that are collected are used, the administration of impact fees, and alternative structures for collecting and using fees. These are briefly addressed below.

Developers suggested that there is much room for improvement in regard to the extent to which payment of impact fees provides assurance that development may proceed. Payment of impact fees often does not guarantee that approved development may take place or that LOS standards will be achieved. This additional uncertainty in the development process makes development very difficult and financing uncertain.

A second concern expressed in the focus group was the way in which impact fees are used. Impact fees are not usually coordinated between jurisdictions nor are they targeted to critical transportation projects. Furthermore, other types of contributions from developers, such as the value of off-site improvements, are not tracked. Often these contributions are not

considered impact fees, but in reality they are. Sometimes these off-site improvements are not adjacent to the developer's property; they may, in fact, be much farther away. The concerns of the focus group were echoed in the survey results. Respondents were divided as to whether impact fees were administered to ensure that the funds support transportation projects. Snohomish County was cited as having a good system. There, developers' fees are targeted for specific projects, though there is often a delay before those projects are actually built. The developers indicated that the funds should be used for the projects for which they were intended, but no assurance is provided.

A third area of interest to this study is the administration of impact fees. The focus group and the survey revealed that local governments vary substantially in the way they administer impact fees. The focus group indicated that Snohomish County has a much more straightforward system than King County. King County utilizes many districts that have different requirements, while this is not the case in Snohomish County. The survey respondents were divided on the extent to which the management of impact fees and mitigation was clear and direct. Several noted that it depends upon the specific jurisdiction one is working with. Others indicated that the formulas used to determine fees are confusing and nebulous. Developers in the focus group complained that they are hit with fees incrementally. There is a need for coordination between the different players in the process. Both the focus group and the survey participants felt that fee administration was an area for improvement. Procedural changes that make the development process simpler, shorter, and more predictable will help offset the cost of the impact fees to developers and future property owners.

The final major area of interest related to impact fees was the existence of alternative mechanisms for collecting and using such fees. The focus group discussed two alternative arrangements, Mello Roos and Transportation Uniform Management Fees (TUMF). Under TUMF regional fees are paid to a designated trust fund for a specific use of projects. Payment of the regional fee indicated that a developer has met plan requirements and is in concurrency. The group felt that Mello Roos financing might be appropriate for large scale developments, if safeguards were in place to assure that the burden of paying for improvements would not fall upon one developer.

The Effect of GMA on the Cost of Development

Another issue related to concurrency regulation and impact fees is the extent to which GMA drives up the cost of development. Behind this question are underlying concerns that regulations may undermine Washington's competitiveness for development or increase costs for local consumers. This research seems to indicate that the GMA can drive up development costs, though the extent to which these costs are passed on to consumers varies by type of development.

Both the focus group and those surveyed indicated that GMA does increase the cost of development. One developer at the focus group cited a case in Olympia where a proposed 180 lot residential plat was in conflict with the concurrency requirement. The developers were required to conduct a transportation study of how an off-site intersection would be affected by

the new development. They found that they would have to pay $18 million for I-5 ramp improvements for the 180 lot development. This was not feasible. They are now trying to organize an local improvement district that would lower the cost, but the cost would still run from $7000-$20,000 per lot. The survey respondents clearly felt that GMA does drive up development costs. Eight of the nine respondents (89 per cent) indicated that this was the case. When rating the magnitude of the increase from 1 (little or no increase) to 5 (substantial or great increase) most rated the increase between 3 and 5.

The focus group and survey respondents were also asked how much of the increased costs resulting from GMA are passed on to consumers. From the two groups it was found that costs are passed on to consumers at the rate of 100-200 per cent in certain markets. The mark-up is due to the costs of delays, interest costs, and carrying costs. For some types of development, however, the costs are not passed on to consumers. In retail development, for example, competition and price sensitivity will not allow increased costs to be passed on in that way. Increased costs are only passed on within what the market will tolerate.

Conclusion

Developers offer to policy makers a valuable perspective on the various components of Washington's growth management system. As individuals who are directly impacted by growth management policies, they are in a position to assist the state in making these policies more effective and less burdensome. Their professional goals are not at odds with those of growth management, for the development industry stands to benefit from an efficient transportation system. While developers may express some resistance to impact fees and other regulations that increase the cost of development, this study has shown that, for the most part, they view those fees and regulations as reasonable; most of the developers' criticisms were related to the way in which such fees and regulations are administered and the lack of coordination between agencies and jurisdictions, not to the fees or regulations themselves.

This part of the LOS Study has sought to uncover developers' perspectives on growth management issues. The research effort has involved a roundtable focus group and a written survey of members of the development community. Though the level of participation was less than ideal, the research has provided insight into the viewpoint of developers. The very lack of participation by the development community may be meaningful, in that it seems to indicate that growth management policy is not a critical or negative issue to the development industry at this time, possibly reflecting general satisfaction with the current system.

The research has shown that developers feel that, in some ways, it is too early to evaluate the full impact of GMA. The developers were, however, willing to offer preliminary evaluations of the effect of the legislation. In terms of incentives to improve land development practices, few incentives could be identified. With regard to concurrency, developers stressed the need for fairness and coordination between affected agencies and jurisdictions. They also expressed concern over the timeframe, and predictable review periods, for which concurrency is determined. Pertaining to impact fees, the developers focused on the extent to which the

payment of impact fees ensures compliance with concurrency, the way in which impact fees are expended, the administration of impact fees, and alternative structures for collecting and using impact fees. It was shown that GMA does increase the cost of current development practices to the developer. The developers contacted focused on increased fees as the reason for the increase; they did not contend that the use of urban growth boundaries contributed to increased land costs. Most of the increased costs are passed on to consumers at the rate of 100-200 per cent, though this is less the case for retail development than for other types of development.

Appendix 6-1
Focus Group Meeting

THE IMPACT OF GMA ON DEVELOPERS

SEPTEMBER 19, 1994
SEATTLE CHAMBER OF COMMERCE
8:00 A.M. TO 12:00 P.M.

Private Sector Participants: Greg Baarson, Continental, Inc.; Fred Burnstead, Burnstead Construction Company; Bob Filley, North Coast Mortgage; Mike Massoth, Weyerhaeuser Real Estate.
Public Sector Participants: Eric Shields, City of Kirkland; Art Maronek, City of Burien.
Consultants: Molyneaux, Porter, Young, Joffrion.

The focus group opened its discussion at 8:30 a.m., after participants had an opportunity to introduce themselves to one another. The public and private sector participants met separately for the first two hours before meeting together in the final hour of the morning's session.

The private sector participants began with a discussion of fairness in enforcing concurrency. Mr. Filley asked why the responsibility of correcting capacity deficiencies should fall on the last developer that causes a facility to fall below its established LOS standard. He suggested that this was both unfair and unreasonable. The importance of fairness became a theme in the morning's discussion of significant issues.

Attention was given to the concept of fiscal reality and the sources of funding which are available for transportation infrastructure. Mr. Molyneaux presented a conceptual diagram of service capacity needs, fiscally unconstrained needs, fiscally constrained needs, needs addressed in six year plans, and needs addressed in two year budgets. He also displayed graphs representing the way in which the gas tax and the MVET are distributed.

Mr. Porter stressed the fact that counties' and cities' ability to fund facilities is critical to their ability to continue to have growth. Their ability to fund infrastructure improvements is largely tied to the gas tax. At one point in time this source was sufficient. Today, however, that source does not provide sufficient revenues. Gas prices have remained constant or fallen, and fuel economy has improved. Consequently, revenue generated from gas taxes has not kept pace with increases in vehicle miles traveled. This is true both at the state and federal levels.

In addition to the gas tax and MVET funds, local governments have a number of local option fundraising mechanisms for their use. Examples include parking taxes and driver's license fees. However, maintenance on existing infrastructure exhausts approximately 60% of local governments' transportation funds from state and local sources combined. Thus, there is little funding available to make significant improvements and develop the facilities needed to

support new development. Other then I-90, there has not been a major infrastructure investment since the late 1960s.

Mr. Molyneaux raised the issue of establishing LOS standards for state transportation facilities. What LOS standard is appropriate, and should standards vary by the type of area in which facilities are located? Mr. Filley noted that by lowering the LOS standards in CBDs transit ridership would be encouraged. Mr. Burnstead added that, in reality, there is not excess roadway capacity anywhere.

Mr. Molyneaux noted that there is a need to plan for higher density residential development which can better support high capacity transportation. The proper design can make higher density residential development appealing. Mr. Burnstead felt that the public was not ready for that type of development. Mr. Molyneaux, however, cited several cases in which higher density, single family developments, such as zero lot developments, were very successful.

The discussion turned to impact fees. As development occurs, local governments with limited resources for transportation improvements will look to developers for assistance. In some locations development exactions are very high, such as in Valencia, California. In the central Puget Sound area, local governments collect around $4 million in impact fees. However, other types of contributions from developers, such as the value of off-site improvements, are not tracked.

Mr. Porter asked participants about their experience with impact fees in Washington. He asked about differences they have observed between jurisdictions in the magnitude of fees and the way in which fees are administered. Mr. Burnstead commented that Snohomish County had a much more straightforward system than King County. King County utilizes many districts which have different requirements. This is not the case in Snohomish County. Mr. Burnstead also noted that while off-site improvements are not usually considered impact fees, they really are. Sometimes these off-site improvements are not adjacent to the developer's property; they may, in fact, be much farther away.

Mr. Burnstead indicated that it is difficult to tell at this point if the Growth Management Act (GMA) is driving up development costs. Mr. Massoth disagreed, stating that Weyerhaeuser Co. is affected in the Olympia area. A proposed 180 lot plat was in conflict with the concurrency requirement. They were required to conduct a transportation study of how an off-site intersection would be affected by the new development. They found that they would have to pay $18 million for I-5 ramp improvements for the 180 lot development. This is not feasible. They are now trying to organize an LID which would lower the cost, but the cost would still run from $7000-$20,000 per lot.

Mr. Massoth agreed with Mr. Burnstead that Snohomish County has a more reasonable system. There, transportation impact fees average about $2500 per lot. Mr. Porter asked what was better about Snohomish County's system. In response, Mr. Massoth stated that the county calculates the transportation costs attributable to new development across the southern part of

the county. In this way the marginal cost of providing transportation improvements is spread out amongst many developers. This system is reasonable and fairly equitable.

Mr. Molyneaux asked if the cost of impact fees and other improvements are passed on to consumers. Mr. Burnstead indicated that the costs are passed to the consumer at the rate of two dollars for every dollar in fees or other costs.

Mr. Molyneaux inquired if any local governments had provided incentives which make the development process easier. Mr. Burnstead indicated that Snohomish County is in the process of adopting timelines which will be helpful. He mentioned the Benison Glenn (?) project, which provides a good explanation of problems with the permitting process. That report is not specifically transportation oriented, but deals with the permitting process in general. Participants indicated that it was published by the Affordable Housing Council.

Mr. Molyneaux asked participants if GMA was changing the development mix or type. Mr. Burnstead felt it was to early to judge. Mr. Filley commented that from the commercial perspective, the effect of GMA could be harmful. A group studied the Seattle area GMA recommendations for urban centers with respect to retail and found that they were very much out of line with what a successful retail development requires. The recommendations reflect the visionary thinking of urban designers, not real-world conditions. Those making such recommendations should examine retail trends over the last thirty years.

Mr. Molyneaux turned to the issue of financing transportation improvements necessitated by new development. Washington gives local governments limited tools for financing infrastructure. Tax increment financing is not permitted. Mr. Molyneaux mentioned the possibility of implementing Mello Roos financing in Washington as in California. This method is similar to establishing an LID; however, fees can be used for bonding for transportation or other infrastructure improvements. Mr. Filley asked if under Mello Roos all the responsibility could be heaped on a single developer. Mr. Molyneaux conceded that that was possible and had happened in Colorado. However, the enabling legislation could protect developers and future property owners from that threat.

Mr. Molyneaux also mentioned the Uniform Transportation Management Fee utilized in the eastern half of Riverside County in California. Within defined areas, fees are paid to a designated trust fund targeted for a specific set of projects. Local impact fees are still in force, but developers pay an additional regional impact fee. Payment of the regional fee indicates that a developer has met plan requirements and is in concurrency. Mr. Molyneaux asked if this type of system appealed to participants. Mr. Massoth and Mr. Burnstead stated that this seemed to be similar to Snohomish County's system. However, it is unclear how fees are actually spent. In Snohomish County developers know that their current fees are intended for specific improvements, but the construction of those improvements is often delayed until sufficient funds are available.

Mr. Massoth noted that Mello Roos financing would only be effective for very large scale developments. Mr. Molyneaux indicated that this was true. However, the management fee approach has the advantage of including all developments regardless of size.

Mr. Porter asked participants what they considered to be reasonable in terms of the amount of impact fees, their predictability, and their timing. He asked what level of payment was acceptable and how procedural changes might help to offset the cost. Mr. Burnstead indicated that currently developers are hit with fees incrementally. What is needed is coordination between all the players involved in the process. A uniform process across the state would not necessarily solve the problem. Currently the state requires that permits be processed in four months; however, this does not occur. The existence of regulations does not ensure compliance.

Mr. Molyneaux mentioned the possibility of turning some state facilities over to local governments. He noted SR 520, which begins and ends in King County. Mr. Porter stated that there were many other state roads which actually functioned like local roads, but there was no impact fee mechanism to pay for the impact of development on those roads. He cited SR 410 in Pierce County and SR 510 in Thurston County as examples. The issue is which facilities should be part of the state road system.

Mr. Molyneaux reviewed the main points of the discussion thus far. These included a need for fair treatment of developments of varying sizes; the avoidance of policies which place the burden of improvements on the "last developer in"; a need for coordination between various players in the permitting process; and a desire to shorten the length of the permitting process in order to offset the cost of impact fees. The focus group proceeded to discuss some deficiencies of the permitting process. Developers often view it as a "mystery process", for there is no clear explanation of what will be required of them, and no clear timeline in which projects will be processed.

The public sector participants then joined the private sector group for a joint discussion. After Mr. Molyneaux summarized the private sector group's discussion, Mr. Young, Henderson & Young, provided a brief overview of the issues the public sector group had addressed. They had compared the impact of GMA on local governments to its impact on the state. From the state perspective, the state provides local governments with funding and, therefore, the local governments should use that funding to take care of their own problems. They should not make land use decisions that will exacerbate transportation problems. From the local government perspective, the state has preempted the major revenue sources. The sources left to local government are very limited and do not meet infrastructure needs. Mr. Young suggested it was possible that a GMA tax should be implemented to fund improvements on state transportation facilities.

With regard to impact fees, local governments are "tip-toeing" into the impact fee business. Less than 50% of governments under GMA are planning to use SEPA mitigation fees or impact fees. In markets where the use of such fees is not prevalent governments are reluctant to impose them. When the GMA passed the economy was strong and communities

could afford to curb development. Today, the economy is much slower and localities do not wish to lower their competitive advantage by imposing high fees. The focus group briefly discussed SEPA and GMA regulatory reform, about which several major studies have been conducted.

Concluding his summary of the private sector group's dialogue, Mr. Young stated that they had entered into a philosophical discussion of the current "mean-spiritedness" of the country and the trend toward funding through user fees as opposed to community based funding. The public sector should recognize that this is a major shift in philosophy.

Mr. Shields, City of Kirkland, stated that he had attended a conference of planning directors. It was evident that there is a significant difference in the level of sophistication of GMA planning between jurisdictions in the Puget Sound region and jurisdictions in other parts of the state. He stressed the need to be mindful of that reality as the GMA is evaluated.

Mr. Maronek, City of Burien, noted that GMA has shifted the focus of development away from fringe areas toward infill areas. This changes the political dynamic associated with development. It is important that developers understand that in situations where conflict exists between developers and the community, the public officials will always side with the community. Mr. Filley expressed frustration that often the community is very uninformed about the nature of a project, but is adamant in its opposition to that project. Mr. Burnstead indicated that he has dealt with the community by having informational meetings prior to hearings in order to diffuse anger and promote understanding.

Mr. Massoth stated that in Lacey for all preliminary plats the developers meet with the entire staff. Everyone has the opportunity to voice their concerns. This would be difficult to do in larger jurisdictions, but it is quite useful. Mr. Molyneaux concurred that having an affected agencies meeting before developers came forward with a final report on a proposed project would facilitate compliance with regulations. The final report would address the concerns expressed at that meeting. The focus group proceeded to discuss adherence to adopted plans, the staff's legal responsibility to adopted plans, and the need for plans to shift their focus away from changing circumstances to the matter of neighborhood stability.

Mr. Molyneaux asked the participants what changes were needed in the GMA in terms of the relationship between the public and private sectors and the collection and use of impact fees. Mr. Shields stated that GMA provides the mechanism for providing capital facilities in an expeditious manner. However, it is essential for capital facilities elements to be fundable and realistic. Mr. Molyneaux asked how they coordinate with the state with regard to state owned transportation facilities. Mr. Shields indicated that they treat state facilities as they treat any other arterial. However, they would not want to submit to a state mandated LOS standard for state facilities. They would hold that such a designation is both arbitrary and financially unrealistic.

Mr. Young stated that he had surveyed 250 jurisdictions under GMA with a 50% rate of response. Two thirds included state routes but not limited access facilities in their plans.

Only one third addressed freeways. Of those that addressed state facilities, 20% use the state's suggested LOS standard, while the remainder use their own standard. For most facilities this is LOS E or F. Mr. Shields stressed that a lack of funding for new facilities drives the transportation system, making it necessary to accept an LOS of F in many situations. The public does not wish to widen roads further.

The group proceeded to discuss local government's sources of funding for transportation infrastructure. Mr. Maronek argued that the cities do not have the ability to absorb transportation needs and they cannot effectively compete for funds. Mr. Molyneaux disagreed with local government's effectiveness in lobbying the Legislature. Mr. Young, however, felt that they were significantly under funded. Mr. Porter asserted that this study needs a strong statement of the need for funding for cities. Part of the reason this region only gets back an estimated $0.70 for each dollar is the state formula which is used to distribute funds to cities and counties.

Mr. Young raised the issue of the time frame within which concurrency is determined. Plans are for six years but budgets are only for two years. Mr. Shields noted that this creates a great deal of uncertainty for developers whose projects depend on concurrency. Mr. Molyneaux indicated that they may look to having 6 year authorizations and two year appropriations.

Mr. Molyneaux thanked all the participants for attending the focus group session. The group adjourned at 12:00 p.m.

Appendix 6-2
Developer Questionnaire

STATE TRANSPORTATION FACILITIES, GROWTH MANAGEMENT, AND DEVELOPER IMPACTS

A Study For the Legislative Transportation Committee
Washington State Legislature

Name: _____ Company Name: _____

Your Position: _____Telephone Number: _____

1. What type of land development is your company involved with? (Mark your top two development products)

_____Single Family Housing (1a) _____Multi-Family Housing (1b)
_____Retail (2)
_____Office (3)
_____Industrial (4)
_____Mixed Use (5)

2. Where does your company conduct most of it's business?

_____Urban (6)
_____Suburban (7)
_____Rural (8)

3. How has the Growth Management Act affected the development process?

_____Improved Local Planning and Permitting (9)
_____Hindered Local Planning and Permitting (10)
_____No Change (11)
_____GMA is too new to have an impact (12)

4. Which of the following incentives are provided through GMA to developers to improve land use development practices?

_____Improved Local and State Coordination (13)
_____Improved Design and Density (14)
_____Improved Permitting and Time Certain Review Period (15)
_____Improved SEPA Process (16)
_____Please explain any disincentives(17)

5. Which of the following incentives are provided through GMA to developers to reduce transportation impacts on state facilities?

_____Cost Reductions for Permitting (18)
_____Joint Cost Sharing for EIS Work (19)
_____Provision of New Transportation Facilities to Support Development (20)
_____Improved SEPA Process (21)
_____Other, please explain (22)

6. Has your company participated in a mitigation and impact fee process in Washington State?

_____Yes (23)
_____No (24)

Please list locations and jurisdictions and indicate whether it is a good or bad system:

_____ -- good/bad (25/26)
_____ -- good/bad (27/28)
_____ -- good/bad (29/30)
_____ -- good/bad (31/32

7. In your opinion, does GMA increase the cost of development?

_____Yes (33)
_____No (34)

8. **If the answer to Question 7 is Yes**, please rate the increase where: Number One represents little or no increase and Number Five represents a substantial or great increase.

1 2 3 4 5 (35)

Please explain:

9. What percentage of mitigation costs and impact fees are passed along to the consumers?

_____less than 25% (36)
_____25%, but less than 50% (37)
_____50%, but less than 100% (38)
_____100%, but less than 150% (39)
_____150%, but less than 200% (40)
_____200% or more (41)

10. Are impact fees and mitigation costs administered in a business like fashion to assure that private funds support state or local transportation improvements in a timely manner?

_____Yes (42)
_____No (43)

If **yes**, please explain:

If **no**, please explain:

11. Is the management of the impact fee and mitigation cost process by the local jurisdiction clear and direct?

_____Yes (44)
_____No (45)

If **yes**, please explain:

If **no**, please explain:

12. Do local jurisdictions or the state provide a lead project manager or single point of contact to oversee and coordinate the impact fee and mitigation cost process?

_____Yes (46)
_____No (47)

If **yes**, please explain:

If **no**, please explain:

13. How are <u>developer provided</u> transportation infrastructure, transportation related in-kind services, or cash payments credited to projects and tracked by the local jurisdictions or by the state to meet GMA or SEPA requirements?

Transportation Infrastructure (48):

In-Kind Services (49):

Cash Payments (50):

14. Once development impact fees and mitigation costs have been paid is the development permitted to proceed regardless of the current Level of Service on the transportation system? In other words does the payment of impact fulfill the concurrency requirement?

_____Yes (51)
_____No (52)

If **yes**, please explain:

If **no**, please explain:

15. Has traffic congestion or the lack of transportation facilities affected the development process?

_____Delays in Development Permitting (53)
_____Development Moratoriums (54)
_____Changes in the Type, Density, or Organization of Proposed Development (55)
_____Changes in Development Location or Access (56)
_____Other, please explain (57)

Please provide any other information that would help the Legislature understand the impact of the Growth Management Act and the provision of transportation facilities on the development community.

PLEASE RETURN TO: MOLYNEAUX ASSOCIATES, INC.
5609 S.W. MANNING
SEATTLE, WA 98116-3149

Appendix 6-3
Summary of Survey Results

SURVEY RESULTS	Raw Number of Responses	Percentage of Respondents
Question 1: Mark your top two types of development projects.		
Single-Family	6	67%
Multi-family	4	44%
Retail	0	0%
Office	2	22%
Industrial	3	33%
Mixed-Use	4	44%
Question 2: Where does your company conduct most of its business?		
Urban	6	67%
Suburban	6	67%
Rural	1	11%
Question 3: How has the GMA affected the development process?		
Improved local planning and permitting	1	11%
Hindered local planning and permitting	2	22%
No change	1	11%
GMA is too new to have an impact	5	56%
Question 4: Which incentives improve land use development practices?		
Improved local and state coordination	1	11%
Improved design and density	2	22%
Improved permitting time and certain review period	1	11%
Improved SEPA process	1	11%
Other, explain:	7	78%
Question 5: Which incentives reduce transportation impacts on state facilities?		
Cost reductions for permitting	0	0%
Joint cost sharing for EIS work	1	11%
Provision of new transportation facilities to support development	0	0%
Improved SEPA process	0	0%
Other, explain:	6	67%

Question 6(a): Has your company participated in a mitigation and impact fee process in WA?		
yes	8	89%
no	1	11%
Question 6(b)List Locations and indicate if it is a good or bad system:		
Location 1	6 responses	NA
Location 2	3 responses	NA
Location 3	1 response	NA
Location 4	0 responses	NA
Question 7: Does GMA increase the cost of development?		
Yes	8	89%
No	0	0%
Question 8: If the answer to #7 is Yes, rate the increase:		
1-little or no increase	0	0%
2	1	11%
3	3	33%
4	0	0%
5-substantial or great increase	2	22%
Comments	2 comments	
Question 9: What % of mitigation costs and impact fees are passed to consumers?		
less than 25%	0	0%
25%, but less than 50%	0	0%
50%, but less than 100%	1	11%
100%, but less than 150%	5	56%
150%, but less than 200%	0	0%
200% or more	0	0%
Comments	3 comments	NA
Question 10: Are impact fees administered to assure that private funds go to support state/local trans. improvements?		
Yes	3	33%
Yes explanation	4 comments	NA
No	2	22%
No explanation	2 comments	NA

Question 11: Is the management process of impact fees and mitigation clear and direct?		
Yes	2	22%
Yes explanation	3 comments	NA
No	3	33%
No explanation	2 comments	NA
Question 12: Do local jurisdictions or the state provide a lead project manager or single point of contact to coordinate the impact fee and mitigation cost process?		
Yes	1	11%
Yes explanation	4 comments	NA
No	2	22%
No explanation	1 comment	NA
Question 13: How are developer contributions tracked?		
Transportation Infrastructure	7 responses	NA
In-Kind Services	5 responses	NA
Cash Payments	6 responses	NA
Question 14: Once fees and mitigation has been paid is development permitted regardless of current LOS?		
Yes	4	44%
Yes explanation	3 comments	NA
No	2	22%
No explanation	2 comments	NA
Question 15: What are the impacts of congestion on the development process?		
Delays in development permitting	5	56%
Delays in transportation infrastructure development	3	33%
Changes in the type or amount of proposed development	3	33%
Changes in development location	2	22%
Other, please explain	2	22%
Other Information:		
	2 comments	NA

SECTION 7
IMPACT FEES

TABLE OF CONTENTS

Exhibits

SECTION 7
IMPACT FEES AND STATE TRANSPORTATION FACILITIES

Introduction

One of the issues concerning the role of state transportation facilities in local comprehensive plans is financing: how should state facilities be paid for if they are required for local plans, and (perhaps) concurrency.

The growth management act provided two new sources of revenue for local governments for capital facilities: (1) impact fees, and (2) the second 1/4% real estate excise tax. This report examines the relationship of impact fees to state transportation facilities.

The Law

Impact fees are authorized for local governments that plan under the provisions of the growth management act (GMA). The portion of GMA that authorized impact fees (RCW 82.02) contains many requirements that must be met as part of a valid impact fee. Several of these statutory provisions pertain to the use of impact fees for state transportation facilities.

Types of Facilities

GMA authorizes impact fees for only four types of facilities: (1) streets and roads, (2) schools, (3) parks and (4) fire protection.

The authority to charge impact fees for streets and roads has been interpreted by some local governments as authorizing impact fees for state routes, highways and/or freeways. Other local governments have concluded that state facilities are not "streets and roads" because they are called "arterials" and "highways." The current law is not clear about the use of impact fees for state roads, however it is clear that "streets and roads" excludes transit, the state ferry system, and other transportation facilities.

Types of Improvements

GMA authorizes impact fees to be charged for "system improvements" but not for "project improvements." In general, project improvements are directly related to a development project (i.e., on-site) while system improvements are typically part of the larger transportation system (i.e., off-site). State transportation facilities are "system improvements", thus they fulfill this requirement for impact fees.

Proportionate Share

GMA requires that the impact fees be reasonably related to the development that creates the impact. The amount of the fee cannot exceed the development's proportionate share of the total cost of the transportation project. In other words, new development cannot be charged impact fees that pay for existing deficiencies, nor for the growth requirements of other developments.

The cost of state transportation facility projects can be allocated among existing deficiencies and new development using data about current and projected traffic volume, and the capacity of each facility. State transportation facilities, therefore, can meet this requirement.

Impact fees that fulfill the "proportionate share" requirement will likely meet the US Supreme Court requirement (in *Dolan*) that exactions from development be "roughly proportional" to the impacts of the development.

Specific Capital Projects

GMA requires that impact fees be based on lists of specific capital improvement projects that appear in the Capital Facilities Plan (CFP) of local comprehensive plans. In order to charge impact fees for state transportation facilities, a local governments must list improvements to state facilities in its CFP.

GMA does not specify the source of the capital improvements listed in local comprehensive plans. Local governments that use state transportation planning documents can point to the source for authority. Local governments that list capital improvement projects for state facilities that are *not* in state plans have a greater challenge documenting the validity of the project. In either event, state transportation facilities can meet this requirement.

GMA also requires local governments that charge impact fees to identify in their CFPs:

1. Projects needed to eliminate existing deficiencies (in order to demonstrate that those costs are funded by sources other than impact fees).
2. Reserve capacity of existing facilities that are available to serve new growth (in order to show that such facilities are either (a) excluded from impact fees, or (b) charged as "reimbursement" impact fees (as allowed by GMA).
3. New projects for new growth (in order to clearly document the costs of projects that are the basis of impact fees).

GMA does not prohibit local governments from allocating the cost of a project among the categories listed above. In other words, specific capital projects that will eliminate deficiencies and provide capacity for new development can be apportioned between categories, and the portion that serves new development can be included in impact fees.

As observed above (Proportionate Share) it is feasible to allocate the cost of state transportation facility projects between existing deficiencies and new development, thus state transportation facilities can meet this requirement.

Impact Fees Rates

GMA requires that impact fee rates be reduced to account for other payments made by new development that are earmarked for or pro ratable to the same capital projects that are the basis of the impact fees. Local governments must identify any payments that meet the conditions listed above, including revenues for state facilities if such facilities are included in local impact fees. Substantial portions of revenue for state facilities is "traceable" to specific sources (i.e., gas taxes) that can be attributed to some new development. As a result, it is feasible to comply with this requirement for state transportation facilities.

Another GMA requirement is that development be given a credit against impact fee liabilities for donations that offset the cost of the impact fee capital improvements. The most common form of credit is for land or right-of-way donated by new development.

Exemptions

GMA gives local governments the option to exempt certain classes of development from impact fees. The two authorized exemptions are low-income housing and development that serves other broad public purposes. Examples of the "broad public purpose" exemption might include buildings by governments and special districts.

GMA requires that exemptions be paid by the exempting local government on behalf of the development that is exempt, and that the payments must be from sources of revenue other than impact fees. As a result, local governments that charge impact fees for state transportation facilities and offer exemptions from impact fees will be required to pay those fees on behalf of the development they exempt.

Collection and Expenditure of Fee Revenue

GMA requires that impact fees be expended within 6 years of payment of the fees, or else they must be refunded. Local governments that collect impact fees for state transportation facilities must be able to obtain assurances from the state that the money will be expended on the proper projects within the 6-year limit.

Limitations of Impact Fees

As a result of the statutory requirements described above, there are many limitations on impact fees. The following cannot be paid by impact fees:

Existing deficiencies

Substantial portions of the cost of needed improvements for transportation are for existing deficiencies. WSDOT has classified mobility projects as existing deficiency or new growth. The total cost of all mobility projects is estimated to be $15.5 billion. The cost of projects for existing deficiencies is $11.2 billion, and the remaining $4.3 billion is for new growth. These costs split 72% for deficiencies v. 28% for growth. It should be noted that the "existing deficiency" category includes projects that are partially for such deficiencies, but which also provide some capacity for new growth, thus it is possible that the growth portion is larger than 28%.

Whatever the true split between deficiency and growth, impact fees are limited to the portion of project costs that serve new growth, therefore the maximum potential contribution of impact fees is far less than the total cost of all mobility projects.

Another reminder of the relative limitation of impact fees is that WSDOT has another $12 billion of capital projects that are for purposes other than mobility (i.e., safety, system preservation, etc.). Impact fees cannot pay for any of these costs.

Costs paid by other revenues

Another limitation on impact fees is the requirement to reduce impact fee rates to account for other revenues paid by the development that pay for the same capital improvements as the impact fee. The net effect of this requirement is to "buy down" the impact fee by the taxes, grants, user fees, etc., that are available for mobility projects. Considering the substantial size of unfunded mobility projects for state facilities, this may be a relatively small reduction of impact fees for state facilities.

Non-road costs

The wording of RCW 82.02 authorizes impact fees for "public streets and roads". This language precludes the use of impact fees for other transportation facilities, such as transit, park and ride, off-street pedestrian and bicycle, ferries, rail, and airports. Impact fees are also unavailable for programmatic costs, such as TDM.

On-site improvements

Impact fees cannot be used for "project improvements." These are improvements at the development site that are designed to serve the development and are necessary for the "use and convenience of the occupants or users of the project" (RCW 82.02.090). This limitation is not particularly relevant to impact fees for state facilities because such facilities are "system improvements" that are fully eligible for impact fees.

Impact fees pay for a relatively small portion of needed transportation system capacity. However, the size of the problem is so great ($15.5 billion in mobility projects, according to

WSDOT) that impact fees have the potential to raise significant amounts of money: the growth portion is estimated to be $4.3 billion, and there are virtually no other revenues that would "buy down" the impact fees.

There are two other limitations of impact fees. One is fundamental, the other is procedural. The fundamental limitation may arise from the wording "streets and roads" in RCW 82.02. As noted earlier, there is some disagreement about whether or not state highways and arterials qualify as "streets and roads" for the purpose of impact fees.

At the procedural level, it may be difficult for WSDOT to commit to expend impact fees within the 6-year period allowed by law. If the money is not expended, it must be refunded.

Current Use of Impact Fees and SEPA Payments

In August 1994 we surveyed local governments to determine their use of payments by developers for transportation facilities. The survey asked local governments to make three distinctions:

- impact fees (GMA) v. mitigation payments (SEPA)
- local roads v. state roads
- current usage v. planned usage of such payments

The following tables show the percent of 104 local governments that responded to the survey. Exhibit 7-1 shows those who currently use the mitigation tools.

Exhibit 7-1
Currently Used Specific Mitigation Tools for Transportation Facilities

Tool	Local Facilities	State Facilities
Impact Fees	9%	4%
SEPA	27%	14%

Source: Survey by Henderson, Young & Company, 1994

Exhibit 7-2 shows the percentages of local governments that intend to use impact fees and/or SEPA mitigation payments for transportation facilities at some future time.

Exhibit 7-2

Intend to Use Specific Mitigation Tools for Transportation Facilities

Tool	Local Facilities	State Facilities
Impact Fees	35%	14%
SEPA	20%	8%

Source: Survey by Henderson, Young & Company, 1994

Exhibit 7-3 shows the combined percentages of local governments that currently use or intend to use impact fees and/or SEPA mitigation payments for transportation facilities.

Exhibit 7-3

Combined (Current + Intend) Specific Mitigation Tools for Transportation Facilities

Tool	Local Facilities	State Facilities
Impact Fees	44%	18%
SEPA	47%	22%

Source: Survey by Henderson, Young & Company, 1994

The percentages listed above include cities and counties that use (or intend to use) both SEPA and impact fees, therefore one cannot add the impact fee percentages to the SEPA percentages in order to determine total usage. A detailed analysis of the survey shows that 63% of local governments use or are interested in imposing one or more forms of mitigation payment on new development.

Current usage is more SEPA than GMA, but anticipated usage is more GMA impact fees than SEPA mitigation payments. There are a significant number of future new users of SEPA despite the availability of GMA impact fees. It is likely that SEPA is/will be used for on-site and near-site mitigations, while GMA impact fees are for off-site ("system") improvements.

All forms of usage for local facilities is approximately double the usage for state facilities. This applies to impact fees and to SEPA, and to current use and to intended use.

Impact fee usage is concentrated in the larger cities and counties in the Central Puget Sound, and most of those large governments have adopted impact fees. This tool is being used by the governments with the biggest transportation problems, and also the largest amount of anticipated growth.

Developer/Lender Opinions

The study team conducted a focus group meeting with representatives of the developers and lenders, and a follow-up survey. The results of that input was added to the team's experience with the subject to produce the following principal findings:

1. Impact fees are not "absorbed" by developers, therefore they add to the cost of the development. Furthermore, developers "surcharge" impact fees to cover their administrative costs and profit margin. Impact fees are typically passed along to consumers at 100-200% of cost.

2. Developer contributions are not tracked by current system as part of total cost/resources. State financial management tools do not show the value of developer contributions of facility improvements. Only cash payments by developers are reported, thus understating the value of contributions by developers to the transportation system.

3. Developers believe that impact fees are not targeted to critical facilities, nor are they coordinated among governments. The development industry is not confident that impact fees are being used on the most important facilities.

4. Developers/lenders want the following:

    - Predictability: impact fees are preferable to SEPA because impact fees are based on formulas and standards that are known in advance, while SEPA is based on criteria that can vary from one project to another.

    - Concurrency as a planning coordination process that includes environmental issues (not a development review process than can cause denials).

    - Streamlined (faster) processing of applications for development permits.

    - Involvement in review of impact fee rate studies, level of service methodologies, and other technical work that influences approval/denial of development and the cost of development.

    - A system to assure achievement of level of service for existing as well as new development. The development industry is not confident that governments can and will achieve the same level of service for existing population that is being imposed on new development in the form concurrency and impact fees.

Local Government Opinions

The study team conducted a focus group meeting with representatives of local governments. The results of that meeting was added to the team's experience with the subject to produce the following principal findings:

1. Impact fees are a change of public policy. After 200 years of using general revenues (i.e., taxes and grants) to pay for public facilities and services that serve growth, taxpayers are asking "users" to pay for some or all of the costs that they "cause".

2. Impact fees and SEPA mitigations are used primarily in Western Washington. (The survey summarized above indicates that 94% of such charges are imposed in Western Washington, and only 6% are charged in Eastern Washington.)

3. Impact fees and SEPA mitigations are used by most of the largest counties and cities.

4. Impact fees are often *perceived* as making a jurisdiction less competitive for attracting development within a region. Such a result, if true, would potentially contradict economic development strategies. However, research at the University of Florida indicates that impact fees do *not* change the amount of development in a community.

5. Local governments are aware of developers' skepticism of the government's ability to produce the same level of service for existing population as is being charged in mitigation (and used for concurrency). Local governments feel they must communicate more effectively that they are using level of service standards equitably for existing and future population, and that they have financing plans to achieve the level of service standards for everyone.

6. Local governments and districts are to be treated like developers when they construct new facilities. Either they must pay any applicable impact fees, or else the local government that exempts them from such fees must pay the impact fees on behalf of the exempt government or district.

Lessons Learned From Other States

California	Mello Roos and Transportation Uniform Management Fee.
Florida	A few local governments voluntarily impose fees for impacts on state facilities and enter into agreement with state to regulate expenditure.
	Many local government formulas are based on total trip length (which includes travel on state facilities) but do not share impact fee revenue with state.

Oregon	Developments generating more than 500 trips per day must pay. Deficiencies are apportioned by "fair share", not "last developer in pays whole cost".
Virginia	Proffer system. Fees need to be tracked and developer agreements fulfilled.

Conclusions

1. Impact fees can finance only the new growth portion of needed facilities. Most facility needs are due to existing deficiencies. The $15.5 billion estimated cost of mobility projects is primarily for existing deficiencies:

Reason for Mobility Project	Percent	$ Billion
Existing Deficiency*	72%	11.2
New Growth	28%	4.3

*May include projects that are part deficiency and part new growth.

It is important to remember that significant portions of these costs are for rural roads where the principal solution is to double capacity by widening from 2 lanes to 4. Alternatives include revising the level of service standards, or directing development to urban areas.

2. Impact fees cannot pay for all of new growth's portion because of adjustments for payments of other taxes, fees, etc.

3. Contrary to popular opinion, impact fees do not stop development.
   - A 1990 study at the University of Florida examined 5 different markets in the state for an extended period before and after the imposition of impact fees. This multi-variate study examined construction activity, population growth, mortgage interest rates, and other variables. The study demonstrated that there is no correlation between impact fees and construction.
   - The October 1994 issue of Florida Trend magazine contains a short article under the headline "Leading the Nation for the Third Year."

     > "Florida leads the nation in construction of new housing for the third consecutive year, reports Lomas Mortgage USA. The Dallas-based financing firm expects approval of 130,000 new dwellings in 1994, a 15% gain from 1993 which was lifted by rebuilding after Hurricane Andrew."

     Since Florida has widespread use of impact fees, it would appear that recent data ("third consecutive year") confirms the findings of the 1990 study: no correlation between impact fees and new construction.

Recommendations

1. *Clarify that local governments have the authority to collect impact fees for impacts on state facilities. Change "streets and roads" to language that specifies local option to include state transportation facilities. [RCW 82.02.090(7)].*

2. *Create state "matching fund" to leverage local impact fees for state facilities (and require adjustment of local fees for state facilities to account for the state matching money).*

3. *Authorize use of the same matching fund for local governments that use SEPA to collect mitigations of impacts on state facilities.*

4. *Require WSDOT to contract with local governments that collect impact fees or SEPA mitigations for state facilities: ensure expenditure within 6 years on facilities in State TIP that meet impact fees or SEPA laws.*

5. *Expand the list of allowable expenditures to include ferry, transit, park & ride, and TDM [RCW 82.02.090(7)]. Authorize for physical improvements, but not for programmatic costs.*

6. *Allow fees to constitute full mitigation of all impacts (i.e., "pay and go"), but specify that such payments are not refundable.*

7. *Clarify the requirement regarding "not rely solely on impact fees." Allow impact fees to finance all costs remaining after*
   - *funding deficiencies with non-impact fee sources, and*
   - *subtracting other financial commitments (i.e., grants, dedicated taxes, etc.) for the projects that serve new development*

8. *Clarify that local government capital facilities plans that are longer than the minimum 6-years can be used as the basis for impact fees (provided that there is a financing plan for deficiencies and local shares).*

Rationale For Recommendations

1. Impact fees will not provide a large percentage of needed financing, but the dollar amount of potential revenue from impact fees is significant enough to warrant clarifying GMA provisions about impact fees.

2. The state should not be able to require impact fees for state facilities, but local governments should have the option of charging such fees (provided that the state will

enter into agreements to expend the money consistent with statutory requirements pertaining to impact fees).

3. Creation of state matching funds will encourage local governments to use impact fees without forcing them to do so.

4. The current restriction of impact fees for roads, but not other transportation facilities, is not consistent with the state's promotion of a multi-modal transportation system.

5. Developers who fully mitigate their impacts should not be subject to additional "undiscovered" or "unanticipated" charges at a later date. Local governments that accept developer's full mitigations (i.e., "pay and go") and expend the money in good faith to serve new development, should not be required to refund the money if the developer later decides to terminate the development.

   The developer's right to a refund if they cancel their development contradicts the requirement for the government to spend the money in six years. The law should require either (a) expenditure within 6-years, and no refunds after expenditure, or (b) refunds are required if development is canceled, but governments can hold the money until development is complete (with no time limit).

SECTION 8
ACCESS MANAGEMENT

TABLE OF CONTENTS

SECTION 8
ACCESS MANAGEMENT

Introduction and Purpose

The purpose of this section is to review recent state legislation and the resulting administrative code regarding access management and to see if the code meets the legislative intent. This section also includes recommendations to improve the administrative code and to make sure that legislative intent is satisfied.

Access management is part of the LTC planning study for many reasons. It is currently one of the strongest mechanisms the state has for planning and preserving the functional capacity of facilities within its jurisdiction. The state is currently brought into local planning and land use decisions as a reviewer of comprehensive plans under growth management. However, local land use decisions, particularly at the development review stage, can affect the functional integrity and capacity of state-maintained facilities. The most direct impact to state facilities is through local land use connections at driveways. The state is permitted to review land use decisions through the SEPA process; however, the local jurisdictions are the permitting authority. Through development and enforcement of an access management system on state routes, the state can assure that functional integrity is being planned for. This is particularly true in the ISTEA era, when system components are judged on their efficiency in moving the maximum amount of people and goods.

Background

Access management is a set of strategies to improve safety and preserve the flow of traffic in terms of speed and capacity, while providing for local and adjacent land access.

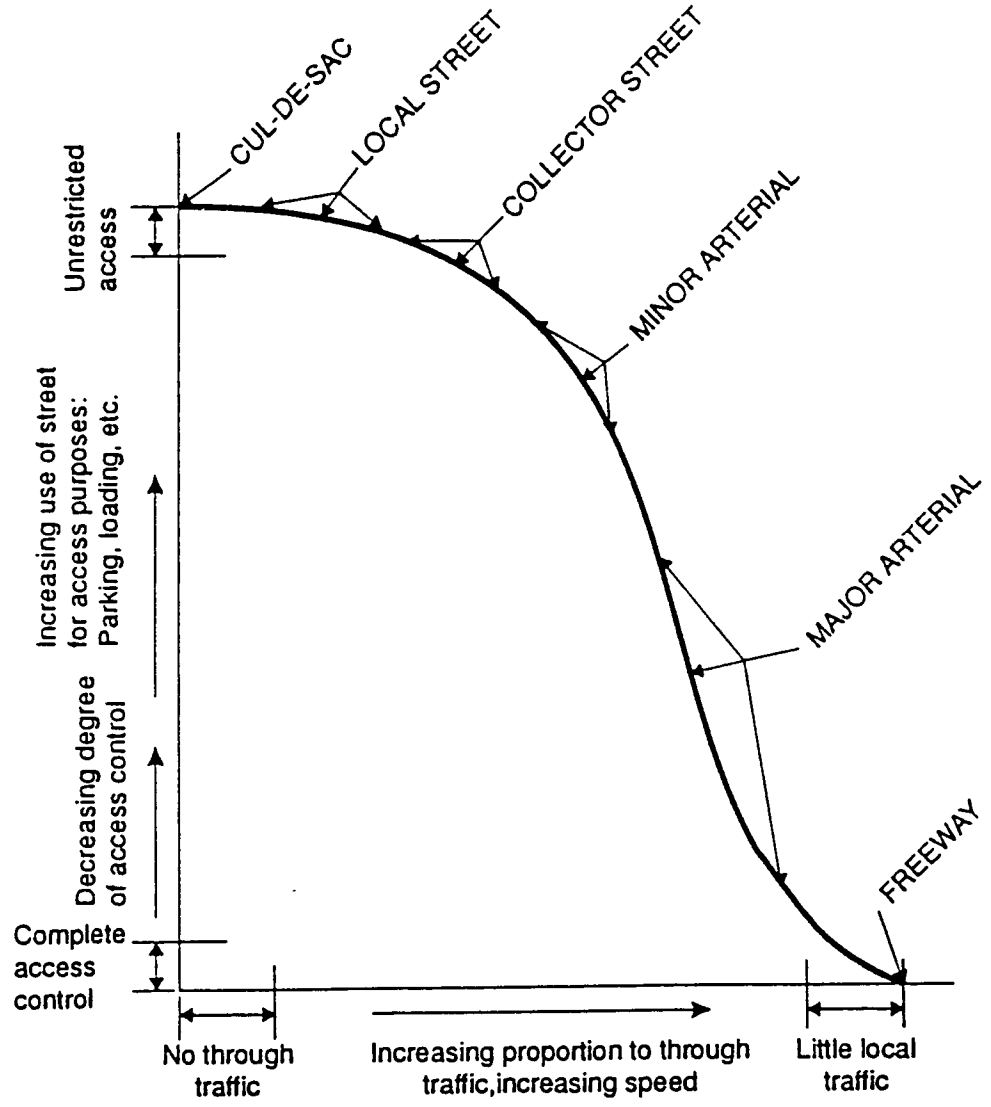
Typically, the term "access management" includes the control and regulation of:

- driveway spacing
- medians
- median openings
- traffic signals
- freeway interchanges

The basis of roadway classification systems (or hierarchies) is a tradeoff between mobility and access. Functional classification systems (including the FHWA's) have always been a function of movement and access. As shown in **Exhibit 8-1**, higher speeds and proportions of through traffic are conversely related to the amount of access.

Exhibit 8-1

Movement and Access Functions of Roadway Types

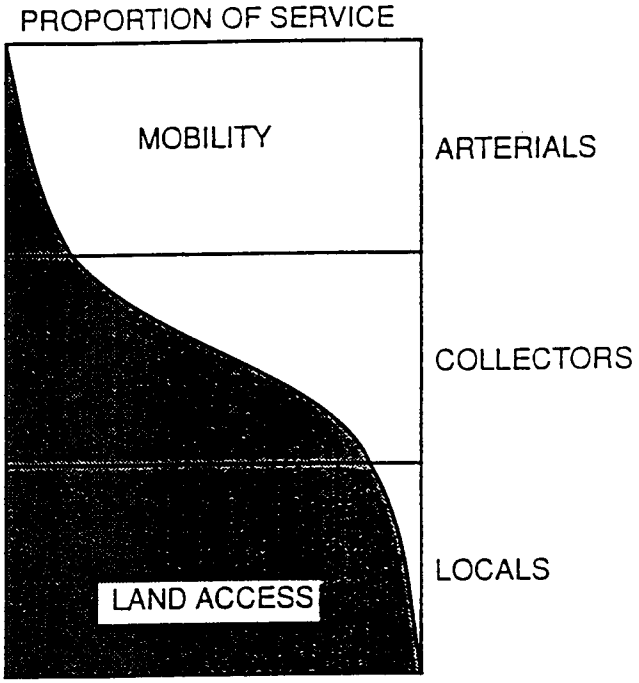


Source: Fundamentals of Traffic Engineering , 11th Edition

This relationship is also portrayed in **Exhibit 8-2** as the balance between land access and mobility.

Exhibit 8-2

Functionally Classified Systems Traffic Mobility and Land Access



Source: Highway Functional Classification, March 1989, USDOT, FHWA

Access management is intended for higher order roadways, typically minor or major arterial streets, where function of the street for local (driveway) access is less important than moving traffic efficiently - typically the bottom half of the curve shown in **Exhibit 8-1**.

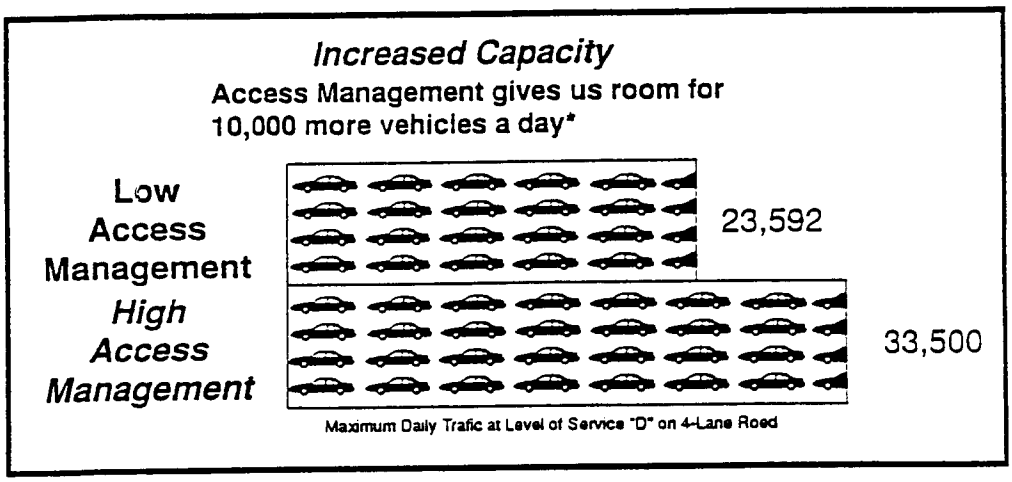
Successful access management programs at state levels include:

- enabling legislation
- administration
- access classification systems and standards
- enforcement and monitoring
- coordination among agencies

The numerous benefits of managing access include reductions in accidents, preservation of capacity, and reduced overall travel time. Studies in Florida and Colorado indicate that capacity of arterials can be increased by 10,000 vehicles per day through efficient access management (See **Exhibit 8-3**). This improved efficiency reduces the need for additional pavement and subsequent impacts.

Exhibit 8-3

Capacity Increase Due to Access Management



Source: Florida Department of Transportation

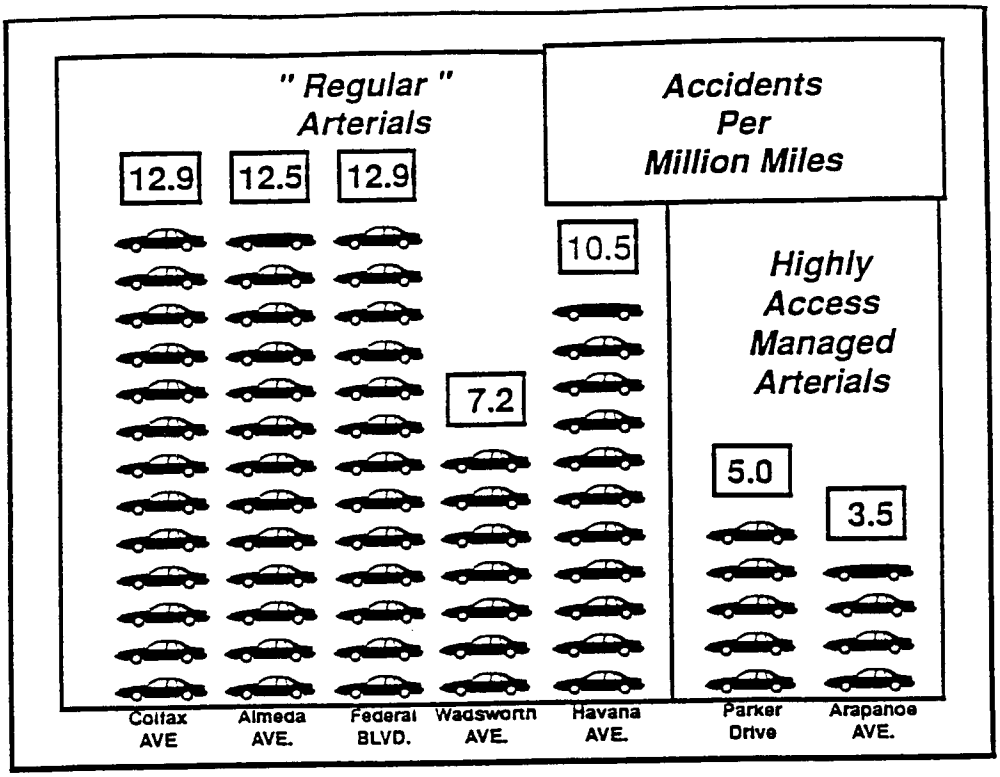
Studies also indicate that accidents could be significantly reduced (See **Exhibit 8-4**) through various access management techniques such as installation of traffic signals. In Florida, reductions in accidents were achieved through the grade separation of intersections.

The accident reduction benefits of access management are clear when considering that the installation of traffic signals can reduce the number of conflict points from 36 to 22 at the

intersection of a four lane and a two lane road. (See **Exhibit 8-5**). Right turn restrictions further reduce potential conflicts. (See **Exhibit 8-6**).

Exhibit 8-4

Accident Reduction Due To Access Management



Source: Florida Department of Transportation

Exhibit 8-5

Potential Intersection Conflicts

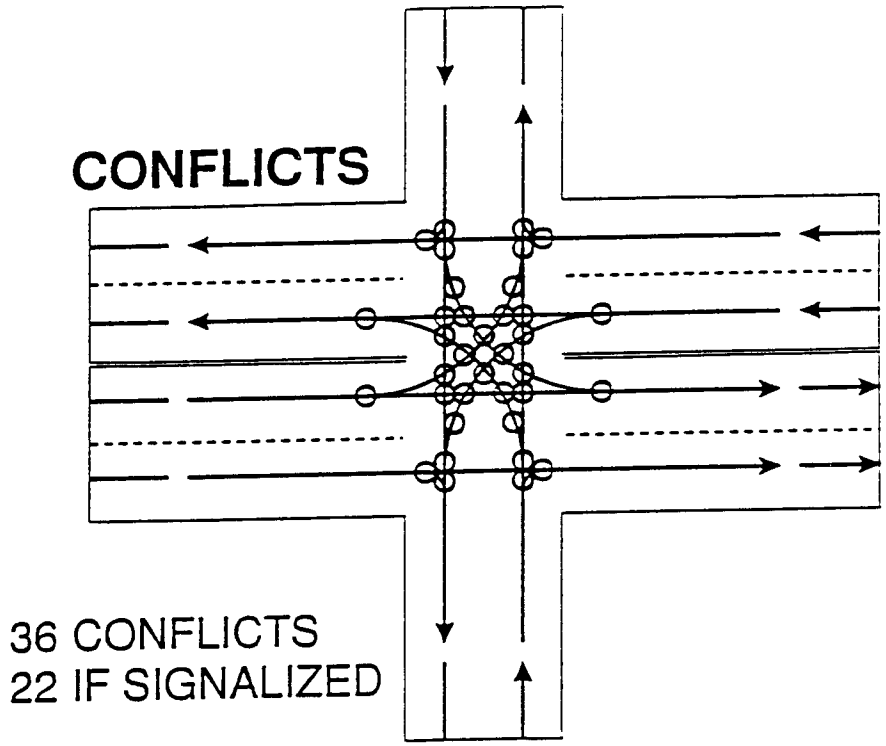
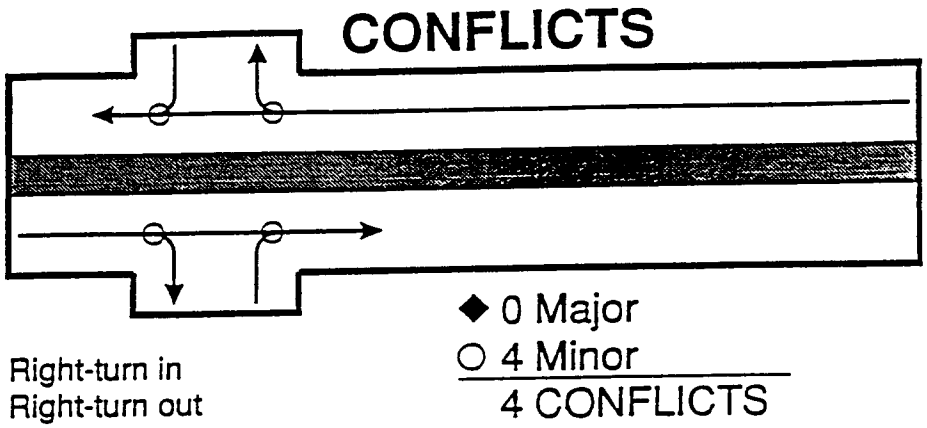


Exhibit 8-6

Conflicts with Medians



An example of these benefits could be applied to SR 99 between SR 518 and SR 599 in Tukwila and SeaTac. This facility has five lanes (two lanes per direction with a 2-way left turn lane for most of its length) with daily volumes around 25,000 to 30,000 vehicles. Driveways onto SR 99 are almost continuous and sidewalks do not exist. A profile of this facility is shown in **Exhibit 8-7**.

Exhibit 8-7

Access Management Example: SR 99 SR 518 to SR 599

Current Condition

- Existing Daily Traffic Volume 25-30,000 vehicles
- Three Year History of Accidents = 464 Reported Vehicle Accidents
  Of these, 80 % Occurred at or near intersections or driveways.
- The *rate* of accident occurrence on SR 99 was 4.5 accidents/million vehicle miles, while the statewide average for Urban Principals was 2.8 accidents/million vehicle miles.
- The estimate of property damage for these three years was $1.28 Million, which excludes fatalities and injuries.
- Projecting the accident occurrence for the next 10 years, this stretch of SR 99 could have over 1,500 accidents with over $4 Million in property damage, over one thousand injuries, and ten fatalities.

Benefits of Access Management

- Increases the capacity of the facility or reduce delays providing additional savings and environmental benefit
- The SR 99 route development plan indicates that seven lanes would be needed in the future, however successful access management could delay or eliminate that need.

Source: WSDOT

The City of Tukwila has identified this corridor as a high priority for improvement and is considering access management techniques as part of the city's project. The City of SeaTac has also proposed improvements on SR 99 (International Boulevard) that include restricting left-turns. The project in SeaTac has significant opposition, particularly airport services such as shuttle parking and hotels that require easy access onto SR 99.

Access Control In Washington

In Washington, control and management of access is provided by two systems:

- Master Plan for Limited Access Highways (RCW 47.05) - typically interstates and freeways
- Access Management System (RCW 47.50)

These two systems provide guidance to the state in planning access control and preserving the functional integrity of state facilities. These systems are described below.

Limited Access

Limited access facilities are documented on the Master Plan for Limited Access Highways and fall into three categories:

- Full control
- Partial control
- Modified control

The state purchases access rights for limited access facilities. Authority and responsibility for these facilities falls completely to the state. Access by means of interchanges along limited access facilities is controlled by the state and, in the case of the Interstate System, the Federal Highway Administration (FHWA). The FHWA has established guidelines or policies that assist in the evaluation of new interchange locations. These policies, known as the six-point process, have been adopted by the WSDOT Northwest Region to be used for the state freeway system. Responses to each of the following policies provide a framework for assessing proposed locations consistently and methodically.

- Policy 1

  Need for the Access--demonstration that existing interchanges and/or local roads and streets cannot accommodate design year traffic demands.

- Policy 2

  Reasonable Alternatives--design, location, and transportation system management improvements have been assessed.

- Policy 3

  Operational Analysis--operations and safety analysis of the freeway and nearest/first adjacent interchange on either side has been performed.

- Policy 4

  Access Connections and Design--the access must connect to a public road only and must provide for all traffic movements.

- Policy 5

  Transportation and Land Use Plans--coordination and consistency with adopted land use and transportation plans.

- Policy 6

  New Development Request--if proposed access is generated by new or expanded development, coordination between the development and required transportation systems improvements must be demonstrated.

These policies have been designed to plan for adequate interchange placement and to maintain the functional integrity of interstates for serving through travel. The FHWA is also implementing a requirement, as part of the NEPA documents, that requires major investments to be analyzed with a wide range of alternatives prior to approving additional capacity. The Major Investments Analysis requires investigation of Transportation Systems Management and Transportation Demand Management alternatives. These policies and measures are relatively new and success or issues with these policies have not been determined.

Controlled Access - (RCW 47.50)

Recent legislation resulted in the development of a new section of the Revised Code of Washington 47.50 (RCW 47.50), which detailed access management procedures for controlled access on state routes. The RCW was intended by the legislature to provide a coordinated planning process for permitting of access. This section outlines the requirements of the RCW. The resulting actions (Washington Administrative Codes, or WACs) by the state are provided in the RCW implementation section.

The RCW found that:

- Regulation of access is necessary to preserve the functional integrity of the state highway system and to promote the safe and efficient movement of people and goods within the state.
- Coordinating land use planning decisions by local governments and investments in the state highway system will control proliferation of access approaches.
- The development of an Access Management Program will enhance the development of an effective transportation system and increase the traffic carrying capacity of the state system. It will also reduce the incidence of traffic accidents, personal injuries and property damage.

The RCW identified an abutting property owner's access rights to a state facility as subordinate to the public's right to have a safe and efficient highway system; however, the RCW also stated that every owner of property has the right of reasonable access either to that highway or to another public road. An abutter denied all reasonable access by regulation may be entitled to just compensation. If necessary, full compensation must be provided to property owners, if access is not permitted to either an adjacent road or another public road.

The RCW had three requirements:

- Development of Administrative Procedures for Access Management
- Development of an Access Management Classification System
- Coordination of System and Adoption by Cities with State-Controlled Access Facilities

I. Administrative Code

The RCW directed the WSDOT to develop administrative procedures for:

- Issuance and Modifications of Access Permits
- Revocation of Permits
- Closing of Unpermitted Connections
- Waiver Conditions

RCW Implementation

WSDOT staff implemented the RCW through new administrative codes (WACs) described in the following sections.

Administrative Code (WAC 468.51)

As a result of the RCW, WSDOT adopted WAC 468.51 (permit rules and standards) in July, 1992. The administrative process is summarized in **Exhibit 8-8** and provides for planning of access management on state facilities through a permitting process. The WAC also identified mechanisms to "fix" corridors where grandfathered or non-conforming access exists through construction projects.

II. Access Classification System

The RCW outlines the WSDOT's responsibility to develop an access classification system for all state highways to develop access management standards. The RCW also directed the WSDOT to adopt rules governing the implementation of the access control classification system by January 1, 1993. The RCW identified the criteria for developing the access control system and required that the access control classification system be developed in cooperation with counties, cities and towns, the State Department of Community Development, regional transportation planning organizations and other local governmental entities. The RCW

Exhibit 8-8
Highway Access Management Access Permits
Administrative Process Chapter 468-51 WAC-Highlights

SECTION	COMMENTS
Purpose	This chapter applies to transportation facilities under WSDOT jurisdiction. There has been no change in the level of permitting authority. Except on limited access facilities, cities are still the permitting authority on city streets designated as state highways.
General Provisions	Permits to be issued only after issuance of development approval by local governmental authorities when required, unless other arrangements have been made with the local agency. Changes in land use or intensity of use may require new access permits.
Connection Categories	Identifies the categories for connections: Minimum, Minor, Major, Temporary, and Nonconforming. These are used to determine fees and other requirements.
Conceptual Review	Not mandatory, but desirable in order to identify the connection category and other issues up front. Conceptual review findings can also be used by the developer in the development approval process to show local authorities that coordination with the WSDOT is under way.
Fees	Purpose of fees is a means of recovering costs, as authorized by the legislature. • Flat fee for farm, residential. • Graduated fees for medium and high traffic generators, based on volume. • Includes provision for recovery of actual cost when developer agreements used.
Application Review, Processing, and Approval	Department provides written notice of concurrence to applicant and to local governmental entity, but does not issue permit until after development approval by the local authority.
Nonconforming Permits	Applies where location and spacing requirements cannot be met, but where denial would leave property without access. Permit will specify maximum volume on approach and removal when alternate access becomes available.
Changes in Property Site Use	Significant change in land use or traffic on the connection may require new permit. Permittee is responsible for notification.
Permit Modification and Revocation, and Closure of Permitted Sections	Specifies when and how WSDOT may close permitted connections, for nonconformance with permit conditions or when safety or operational problems result.
Closure of Unpermitted Connections	"Grandfathers" approaches in existence prior to July 1, 1990, unless they do not meet minimum acceptable standards of highway safety. Permits may be required if there is a significant change in traffic flow on the connection or on the state highway.
Department Construction Projects	• Existing approved connections will be replaced in kind. • Nonconforming connections will be reevaluated to determine if the project will require action to make them conforming. • The number and location of connections shall be modified to the maximum extent possible to meet current standards. • New connections or modifications will be allowed upon permit approval. Additional work to be done at owners expense.
Adjudicative Proceedings	• May be requested by permit applicants, property owners. • Provides for administrative review of WSDOT decisions. • Conducted by Deputy Secretary or designee.

Source: WSDOT

required that an access control category was to be assigned to all segments of the state highway system by July 1, 1993.

Criteria for the development of the access classification system included:

- Local land use plans and zoning
- Current and potential future functional class
- Existing and projected traffic volumes
- Existing and potential state, local, and Metropolitan Transportation Planning Organizations (RTPOs) transportation needs
- Drainage requirements
- Type and volume of traffic requiring access
- Operational aspects of access
- Availability of other reasonable access
- Cumulative effect of existing and projected access connections
- Character of adjacent land

The RCW also provided that access management standards were required to include:

- Standards for location of connections
- Desired level of service
- Safety factors
- Traffic control devices
- Design and construction standards
- Effective maintenance of the roads

Access Classification System (468.52)

Exhibit 8-9 shows a breakdown of state facilities by access classification. The following breakdown shows how controlled facilities were assigned to access classifications. WSDOT adopted the WAC (468.52) for the access classification system in January 1993. The classification of state facilities was completed in July, 1993 and resulted in the access classification system shown in **Exhibit 8-10**.

Exhibit 8-9

Breakdown of State Facilities by Access Classification

Class 1 (highest access control)	14% of Controlled Access Facilities
Class 2	31%
Class 3	22%
Class 4	13%
Class 5 (lowest access control)	20%

Source: WSDOT

Exhibit 8-10
Access Control Classification System Chapter 468-52 WAC = (7-14-94)

CLASS	FUNCTIONAL CHARACTERISTICS	POSTED SPEED (MPH)	TYPICAL PLANNED MEDIAN TREATMENT	PLANNED INTERSECTION SPACING*	MINIMUM PRIVATE CONNECTION SPACING*
1	High speed , high volume, long trips serving interstate, interregional, and intercity travel. Service to abutting land subordinate to service of major traffic movements.	50 to 55	Restrictive, where multi-lane is warranted.	1.0 mi.	1320 ft. One per parcel.
2	Medium to high speeds, medium to high volumes, medium to long trips serving interregional, intercity, and intracity travel. Service to abutting land subordinate to service of traffic movement	Urban: 35 to 50 Rural: 45 to 55	Restrictive, where multi-lane is warranted.	0.5 mi.	660 ft. One per parcel.
3	Moderate speeds, moderate volumes, short trips serving intercity, intracity, intercommunity travel. Balance between land access and mobility. Used where land use is less than maximum buildout, but development potential is high.	Urban: 30 to 40 Rural: 45 to 55	Restrictive, where multi-lane is warranted. Two-way left-turn lane may be utilized as conditions warrant.	Rural: 0.5 mi. Urban: 0.5 mi./less with signal progression analysis.	330 ft.
4	Moderate speeds, moderate volumes, short trips serving intercity, intracity, intercommunity travel. Balance between land access and mobility. Used where level of development is more intensive and major land use changes less likely than on class 3.	Urban: 30 to 35 Rural: 35 to 45	Non-restrictive.	Rural: 0.5 mi. Urban: 0.5 mi./less with signal progression analysis.	250 ft.
5	Low to moderate speeds, moderate to high volumes, primarily short trips serving intracity and intracommunity travel. Service of land access dominant function.	25 to 35	Non-restrictive.	0.25 mi./less with signal progression analysis.	125 ft.

= *Note:* This table is for summary purposes only and is not included in the WAC.

* **See text of the WAC for exceptions.**

Source (WSDOT)

III. Coordination and Adoption by the Cities

The RCW also directed the WSDOT to consult with the Association of Washington Cities and obtain concurrence of the City Design Standards Committee on the adoption of rules for access standards for controlled access state highways within incorporated cities. The state obtained general concurrence by the cities on the classification system. *The RCW provided a deadline of July 1, 1993 for the cities to adopt standards for access permitting on access controlled state routes in incorporated cities that meet or exceed the state's standards.*

While the RCW, set a deadline of July 1, 1993 for the cities to adopt standards for access permitting on non limited access state routes in incorporated cities that meet or exceed the state's standards, many have not done so. Some cities have commented on the standards and requested revisions (either lowering or raising classifications) and some have adopted the standards. Not all cities have responded. *There are no mechanisms to insure that the cities will put an Access Management Program in place or permit access consistent with the state classification system.*

Because it is the lowest classification that encourages median treatments, Class 3 access control is a pivotal classification in urban areas on multi-lane facilities with multiple driveways. The WAC provides an access regulatory process which can be used by the state for all limited controlled- access facilities. For all other state facilities the WAC provides a process which can be used equally by the state in unincorporated areas and the cities in incorporated areas for effectively managing access.

Is Access Management Working As The Legislature Intended?

The WSDOT staff has reviewed numerous access permits. The few that have resulted in denials typically were due to locations where alternative access was provided. Some non-conforming access has been permitted; however, these permits can be revoked when alternative access becomes available, or if the state purchases the access rights.

State Permit Reviewer Perspectives

Conversations with WSDOT permit and development reviewers in the WSDOT Regional Offices indicate that there are many benefits to the Access Management Program, including:

- Access management now has legal backing
- Resulting designs are better planned and preserve the state highway system
- Local agencies are also looking to preserve their own access
- Potential benefits include reduced accidents and more capacity

According to staff, some areas for improvement were identified as follows:

- Administration--clarify the flow of access management permit fees to better identify what the actual permitting labor costs are by WSDOT

- Training--provide access management training to maintenance personnel and other department personnel for access management
- Public Involvement--increase public awareness of the benefits of access management and educate development community and cities of the state's access management program and process
- Enforcement--support the enforcement of access management procedures. Make sure access permits are adhered to and make sure cities implement access classifications.
- Consequences--show cities those conditions that do not comply with access management classifications on state facilities
- Corner driveways--implement minimum spacings for driveways on non-state arterials away from the intersections of state facilities
- Inform the regions that the Access Management Classification System and Access Management Program does not supplant the Master Plan for Limited Access Highways. The current State Multimodal Plan identifies $100 million over the next twenty years for the purchase of access rights to support the Master Plan for Limited Access Highways. Access management should not be used to put off eventual purchase of needed access rights.
- Educate design offices of what is legal and what is not legal in negotiating access modifications and removals from state routes during corridor designs.
- Increase importance incorporating of access management into Route Development Planning

Lessons Learned from Other States

Most states that have access management programs (Colorado, Florida, New Jersey and Oregon) have access permitting authority over state routes, regardless of whether or not they are in incorporated cities. Other states around the nation have been managing access for several years. Comments and suggestions from two state agencies are provided below.

Oregon (permitting access since 1949)

- Recommends a strong public involvement program and training
- Focus on safety to justify access management (e.g., one third of all accidents occur at driveways or intersections in rural areas, **in urban areas the amount is double**).
- Recommends permit or uniform system of access permit review (e.g., a template to be used uniformly by cities, counties and state regions)
- Recommends enforcement measures
- Corridor studies currently in progress will address access management, however success will depend on how well the issue is presented to the public and support from administrators.

Colorado (14 years of Access Management)

- Focus on benefits of reducing accidents

- Colorado has more strict regulatory measures and found plans, policies and guidelines may be too flexible and not legally defensible
- Access by license at all locations (public and private streets)
- Strongly encourage enforcement of standards by agencies
- Insure public understanding of benefits of access management safety and reduced need for parallel routes, to gain law maker support and priority
- Standards must be documented in a uniform manner
- Provide adequate budgets for staff time to maintain, enforce and administer access management
- Incorporate access management into highway projects

Questions And Answers

Does the WAC meet the intent of the Legislature?

1. *Are cities and the state consistent in their access planning to preserve capacity?*

NO! The RCW provided a deadline for cities to adopt an access management standards on state routes. However, no consequences were identified if the cities did not comply and to date, all cities have not responded. Also, there are no enforcement proceedings to insure that cities are complying with the access classifications in development review. The state can monitor from development review and make requests but administratively the authority is with the City.

2. *Are cities and the state consistent in their handling of access?*

Maybe. The state is not actively enforcing access management in the cities and therefore there is no guarantee that the cities are managing access consistent with the state's classification system. The cities are subject to development pressures to allow additional access and not restrict access.

3. *Do locals have an "out"-- Using the state WAC as a way of avoiding development pressures to allow access regardless of state facility function?*

Somewhat. The locals/cities have the same authority to permit access as the state; however, the cities may be under development pressure to allow less than adequate access.

4. *Is the access classification system adequate?*

Maybe. Some planners for the state lowered the classification on some facilities based on the existing fronting property widths, however this lower classification may not address combining parcels and accesses. Classifications that were lowered should address functional classification and the eventuality that properties can redevelop and non-conforming accesses removed. A nexus to level of service has not been provided. Application of classification systems was done subjectively by individual WSDOT Regions; therefore the assignment of classifications

may not be consistent across the state. This is perhaps significant where class 3 (which suggests restrictive medians) is assigned which, in cities, could result in restrictive medians.

5. *Can the WAC fix existing poorly managed, access controlled facilities?*

Not Really. The WAC provides that access management be addressed in the design process for state construction projects. If non-conforming access points exist they can be addressed if other reasonable access is available. "Grandfathered" access can also be addressed; however, there is no authority by the state to combine or close grandfathered access points unless the use changes. The Route Development plans developed for in Washington touched upon access management but did not specifically develop an access management plan for routes. Conversely, the state of Oregon is currently in the process of developing corridor plans and will incorporate access management into those corridor plans. A recent example in Washington State of a construction project that is intended to fix access is SR 532 where 12 driveways were reviewed and recommendations were made to combine driveways. Some driveways were combined, although negotiations to remove driveways were difficult and required significant assistance from the Attorney Generals.

6. *Can the WAC fix existing closely spaced interchanges on limited access facilities?*

Not Really. Access rights on limited access facilities are purchased by the state. Therefore, it would be the state's responsibility to identify if an existing interchange was not adequately spaced and should be moved. Typically and for planning purposes, interchange spacing is a strong criteria in planning and design of new facilities.

7. *Should the state incorporate access management into the planning process?*

Definitely. Oregon attempted to incorporate access management as a criterion in all levels of planning. The proposed administrative rule was lengthy and was never pursued. However, Oregon is still investigating their current access management planning and are in the process of developing amendments to their current codes to clean-up their current regulations. Washington could incorporate access management into its prioritization and programming process and also make it a requirement for comprehensive planning to insure cities are upholding the state's Access Management Classification System.

Issues

Issues that have come up in this review of the access management legislation and administrative codes are as follows:

- **Cities may not be consistent with the state in permitting access or in adopting access classifications.** The cities have the authority over access to state routes and the state carries much of the liability and responsibility. There is a potential liability to the state if the cities permit unsafe access or access that deteriorates capacity and function of state facilities. The cities carry significant liability if they do not follow access management.

However, there is currently no way to make cities comply with the state's Access Management Program or make them adopt the state's classification system.

- **There is an immediate need for additional education at the Region level to increase consistency of how the permit process and classification system is implemented.** There is also an immediate need to increase awareness within cities of their responsibilities in permitting access, and also their liabilities which can occur if they approve access that is not consistent with the state Access Classification system. There are needs to educate the public, particularly the real estate and development community, of the benefits of well planned and managed access.

- **State staff reviewing permits may not be enforcing access management, particularly in the cities.** State staff may have not applied the classification system uniformly over the state. Some locations where medians would be appropriate such as arterials within urban growth areas may have been ignored.

- **Access management are not be a part of local land use decisions, particularly for subdivisions.** Therefore, cities may approve subdivisions which necessitate more driveways than are called for in the access classification system.

- **All driveways on state routes prior to 1992 do not have to apply for permits and cannot be legally removed, unless the use of the property changes, there is a safety issue, or the access can be acquired or purchased from the property owners.** There is no way to make these property owners apply for a permit, and it is unlikely that they would because of the expense involved and the potential of having access moved or modified.

- **Benefits of access management, particularly implications of what happens if access is not managed, are not widely understood or accepted.**

Findings

Planning

The success of any access management system depends on the understanding and training of the individuals that are required to implement and uphold that system. The WSDOT region staff who review permits could substantially benefit from regular training and the exchange of ideas to insure consistency.

Increased public awareness, particularly with the development community, may serve to garner support for access management techniques, particularly where restrictive medians could reduce accidents and increase capacity. Studies of conditions before and after restrictive medians are installed would assist in the determination of economic impacts to businesses.

The WSDOT, through the WAC, has developed a classification system and administrative code to insure adequate planning for access along state facilities to protect the functional

integrity of state facilities. The state, however, is not the permitting authority over facilities in incorporated cities, resulting in an inconsistent process in the permitting of access across the state. This particularly occurs because some cities have not acknowledged their responsibility in permitting access. The result is that, while the cities have authority to grant access, the state has a shared burden of responsibility with the cities if the access is not safe, or if excessive granting of access results in the need for additional capacity.

The Access Classification System was developed while the state was in the midst of multimodal planning and the cities were developing comprehensive plans. As a result, the WSDOT staff applied engineering judgment to the development of the Access Classification System. Now that GMA planning is complete, the regions may want to review the classification system and it's consistency with land use planning.

The access classification that encourages restrictive medians (class 3) may be the most successful classification to significantly improve safety, increase capacity, delay the need to widen roads, or eliminate the need for by-passes. There may have been some hesitancy to assign this classification within cities, due to development pressures to not restrict access.

A significant element leading to the success of an Access Management Program is the inclusion of enforcement procedures. While there are enforcement procedures in place, staff have not been able to monitor state facilities and insure that access is being adhered to where permitted. This is particularly an issue in rural/agricultural areas where farm machinery will cross state routes if access is not permitted.

Driveway access permitted on non-state roadways which intersect a state route should be reviewed as to their potential impacts to that state route. Minimum distances should be established away from the state route to the driveway on the local roadway to insure that traffic at the driveway will not increase congestion or affect safety on the state route.

Fixing Existing Facilities

The administrative code identifies procedures for negotiating access as part of state improvement projects. Negotiations are limited and typically depend on the property owner. Access that was in place prior to the code does not have to be "permitted" and cannot be removed unless the land use changes or that driveway is unsafe. It would assist in negotiations if property owners were required to apply for a permit, when a state improvement occurs. The state should consider waiving the access permit fee in these cases to encourage compliance.

Access management as a criterion for project programming and prioritization would advance projects that increase the efficiency of the current infrastructure. While purchasing access for limited access facilities will increase costs, an improved quantification of benefits of managing access and subsequently improving facility efficiency will make access management more attractive within a benefit-cost analysis.

Administrative Issues

The Access Management Program instituted fees to cover the administrative costs of the program. The fees that are collected are not directly connected to the staff time used to process permits. For this reason, it is not known if the fees are adequate to cover time spent on reviewing permits. It is also not known if the fee structure is fair between residential and commercial use permits. The fees are consistent or lower than fees in other states. It is perceived that residential and farm permits require significantly more effort than the fees collected, while the higher commercial fees generally cover the review efforts.

Potential Solutions

To insure consistency in access management in both incorporated and unincorporated areas the state should either:

- Take over authority of access permits in cities and
- Revise the authority of the state in incorporated areas

-or-

- Grant the cities permitting authority as long as they follow Washington Administrative Code
- Enforce existing requirement of cities to comply through penalties such as threatening TIB and other state funding.
- Support overall enforcement of access management.

If the state should take over permitting access to state routes within incorporated cities, there would need to be additional coordination between the cities and state. For example, the state would need to review comprehensive plans, designated land uses and zoning plans to insure that potential development is being planned that can be consistent with adjacent access classifications. The state would also need to review land use decisions for land adjacent to state facilities within incorporated cities including subdivisions, rezones and plan amendments.

- Within one year, WSDOT should enforce, using mechanisms including loss of state funds, the issuance of permits for access to all state-owned facilities inside municipal boundaries.
- WSDOT should work cooperatively with cities in land use subdivision and permitting issues on property adjacent to state routes to insure subdivisions will not require access in excess of the classification standards.
- WSDOT should work cooperatively with the Association of Washington Cities and Washington Association of Counties to develop minimum corner clearance for accesses and driveways on non-state owned facilities that may impact state routes.
- WSDOT should review and modify, if appropriate, access classifications in light of completed comprehensive plans.

To improve education and understanding of access management the state can:

- Develop access management training of city and state access permit reviewers.
- Develop public information program focusing on **safety** and capacity benefits and target the development community, cities, and chambers of commerce. Emphasize the implications of not managing access including the liability aspects on state routes.
- WSDOT should provide access management training for local governments.

To make access management a higher priority the state can:

- Incorporate access management into the planning processes by including Comprehensive Plan Updates as criteria. Encourage use of access management in transit supportive land use guidelines. Encourage access management be incorporated into auto-dependent sub-area planning.
- Make access management a criterion in programming and prioritization processes for TIB funds. Include as a criterion for STP and other competitive project funds.
- Require access management to be coordinated with Levels of Service within GMA planning. Develop capacities that indicate the benefits of well managed access over poorly managed access. Incorporate these capacities when calculating LOS for concurrency. This may assist in gaining support from development community.
- Incorporate access management into route development planning.
- Identify and program high priority corridors to develop with access management.
- Encourage local cities to develop incentives for developers that promote access management (e.g., similar to Snohomish County's encouragement of developers to include transit supportive land use features as mitigation).
- Study and further quantify the economic impacts of restricting left-turns. There is an opportunity for this as part of the International Boulevard project in SeaTac where a restrictive median is being proposed.
- Access management should be a criterion for review of local comprehensive plans.
- Access management (on limited access and controlled access routes) should be weighed as a benefit and included as a criterion for programming and prioritization processes for TIB, STP, CMAQ and other competitive project funds and grants. The benefits of limited access should be quantified and balanced against the cost to purchase that access.
- Access management should be integrated with Levels of Service in GMA planning. Develop measures of benefits of well managed access versus poorly managed access. Incorporate these measures when calculating LOS for concurrency (this may assist in gaining support from the development community).
- Access management should be a high priority in route development planning especially in light of ISTEA.
- Identify and program high priority limited access and controlled access corridors to develop with access management.
- Modify the WAC to allow waiving of access permit fees where, as part of a road improvement project, a "grandfathered" property owner wishes to apply for an access permit.

- Encourage cities to develop incentives for developers that promote access management (similar to Snohomish County's encouragement of transit supportive land use features by developers in lieu of other mitigation fees).
- Study and quantify the economic impacts of restricting left-turns.

There has been significant progress with this recent legislation. The benefits of access management have become appealing to cities that are trying to preserve roadway capacity, particularly in the current funding horizon. There is little anticipated in the way of additional capacity that the cities can count on. Bypasses will not likely be constructed to relieve arterials which are congested because of excessive property access and intersections. Two examples where cities are looking to access management as a way of relieving congestion and providing mobility include SeaTac's and Tukwila's projects on SR 99. The state is also working cooperatively with Cowlitz-Wahkiakum Council of Governments in developing an access management plan for SR 503 in Woodland as part of a Comprehensive Plan.

SECTION 9
FUNDING MITIGATION ALTERNATIVES

TABLE OF CONTENTS

Exhibits

SECTION 9
FUNDING MITIGATION ALTERNATIVES

Introduction

Washington State has traditionally financed highway improvements from taxes and fees levied on highway users statewide. These taxes and fees are established by the State Legislature, based on consideration of highway needs statewide and the amount of public support for new transportation investment.

Like many states experiencing high rates of growth, Washington state is falling behind on its ability to fund transportation improvements. This situation is a product of both declining revenue, relative to use, and increasing costs. For example, on the basis of vehicle miles traveled, the state motor fuels tax has declined by 50% in real terms since 1975. A more complex operating environment, more extensive environmental regulations, and correction of "past sins" have combined to increase the cost of construction projects - particularly in dense urban areas where most congestion occurs today. This constrained financial environment naturally invites the consideration of new strategies to mitigate the impacts on state highways associated with new development.

For these reasons, there is growing interest in exploring ways to develop a closer connection between the financing of transportation facilities and decisions which give rise to the need for these facilities. This concept is fundamental to the state's Growth Management Act, which requires many local jurisdictions to ensure that transportation facilities are adequate to serve the demands of new development. Various forms of development-related financing - such as impact fees, exactions, and special assessments - are also perceived to be of value in meeting this need.

The applicability of these concepts to state highway financing was investigated to determine where opportunities exist to more effectively mitigate the impacts of new development. This review found the potential application of development-based financing to be limited to a rather small portion of the state highway system, and that a potentially more effective strategy would be to include selected portions of the state highway system in the concurrency requirements of local comprehensive plans. The key findings from this review are as follows:

- WSDOT's current approach to mitigating development impacts via SEPA works reasonably well for large projects, but is ineffective for addressing the cumulative impact of new development on state highways, particularly in rapidly urbanizing areas.

- Development-based financing is applicable to approximately 6% of the state highway system - broader applicability is limited by the class of highway facilities for which this form of financing is appropriate, and by the extent of current deficiencies on those highways.

- Due to other practical constraints on the application of development-based financing techniques, it would be more effective for the state to balance available capacity with demand via the application of concurrency requirements to selected state highways.

These findings are closely linked to a definition of state highways presented in Section 13, which distinguishes between highways of *state significance* versus those of *regional significance*. The latter category, which serve intra-regional trips, should be subject to concurrency. Along with this requirement, authority should be delegated to local governments for programming state tax revenues for the improvement of these facilities. This recommendation is more fully described in the main body of this report.

Additional findings with respect to current practice for mitigation of highway impacts, the maximum potential for development-based financing, and opportunities for improvement to current practice are presented in the remainder of this section.

Current Practice

The Washington State Department of Transportation (WSDOT) currently relies on provisions of the State Environmental Policy Act (SEPA) to mitigate the impact of new development on state highways. Under SEPA, WSDOT may receive mitigation payments or in-lieu contributions from developers for the pro rata share of the impacts produced by their development. Regulatory authority for compliance with SEPA is exercised by local jurisdictions, which grant the development permits. Accordingly, local jurisdictions represent WSDOT interests during negotiations with developers regarding the extent and mitigation of adverse impacts.

To gauge the effectiveness of current practice, a survey was conducted of WSDOT representatives and their counterparts in local jurisdictions who are engaged in mitigation of development impacts. The survey included three WSDOT regions: Northwest, Olympic, and Southwest. Local representatives from Bellevue, King County, and Pierce County also participated in the survey, as did representatives from the Washington Association of Counties and the Association of Washington Cities. Each participant was questioned about classes of roadway most affected by new development, types of development projects causing the greatest impact, the process used to identify local projects that impact state highways, the process used to negotiate mitigation payments or in-lieu contributions, and the types of highway improvements funded with SEPA mitigation.

The current system appears to work reasonably well for mitigating the impacts of large developments, but has two fundamental shortcomings. First, the process is ineffective for mitigating the cumulative impact of small developments. This type of development was acknowledged by all parties to be more problematic than large developments. Because these developments introduce multiple access points, typically along two-lane highways, the increase

in turning movements quickly degrades the capacity to carry through traffic. Second, the state is dependent on local jurisdictions to both identify projects and to negotiate with developers on WSDOT's behalf. In cases where the local jurisdiction is under political pressure to approve a development or has a philosophical difference with WSDOT as to the role of state highways and state funding, effective mitigation can be difficult to obtain.

Although mitigation payments and in-lieu developer contributions are barely visible when viewed in the context of WSDOT's overall construction program, they are significant in the context of relevant program costs. Mitigation cash payments are modest, between 2% and 9% of WSDOT outlays, but developer in-lieu contributions provide another 12% of improvements. These percentages are based on outlays for minor arterials and selected principal arterials in urban areas, which total $83.4 million. These programs constitute about 11% of WSDOT's total construction outlays.

Additional findings from the survey are presented below.

Classes of Roadway Most Affected by New Development

Development impacts are experienced most directly on two-lane state highways that serve the developing urban fringe. Historically, these roads served as connectors between rural areas and developed areas. Infill of development rapidly reduces the capacity of these roads. The types of problems cited most often included: (1) multiple access points for developments fronting the highway; (2) developments placed at or near intersections; and (3) developments at intersections of a state highway and a local arterial. State highways which typify these problems include SR 99 and SR 527 in King and Snohomish counties, SR 161 in King and Pierce counties, SR 410 and SR 162 in Pierce County, and SR 510 in Thurston County.

Types of Development Projects Causing the Greatest Impact

There is general agreement among the survey participants that the cumulative effect of small projects is a bigger problem than the fewer number of large developments. The situation was characterized as "dying of a thousand small cuts." This is because larger developments are more easily identified and the developers are more accustomed to expediting the mitigation of traffic impacts than is the case with small developments. Smaller developments typically get through the permitting process with little or no mitigation because the incremental impact of each is slight, or the incremental capacity required to mitigate is impractical.

Process for Identifying Local Projects that Impact State Highways

Development fronting a state highway, that seeks a change in land use, must acquire an access permit from WSDOT if the development is in an unincorporated area, or from the city if within city limits. If a development is near, but not abutting a state highway, WSDOT must rely on notification from local jurisdictions. The quality and timeliness of this notification process varies widely among WSDOT regions and among counties within a region. Counties and cities that have implemented impact fee systems have effective communications with

WSDOT. A good example is the interlocal agreement between the City of Bellevue and WSDOT, that spells out the conditions under which the city will notify WSDOT of developments that meet threshold conditions for project review. Counties and cities which have an aggressive pro-development stance are less likely to inform WSDOT of projects that do not require access permits.

Process for Negotiating Mitigation Payments or Contributions via SEPA

SEPA mitigation is negotiated by the local jurisdiction with input from WSDOT, since the local jurisdiction is the permitting authority. The state may request that the developer conduct a traffic analysis if the development generates more than 10 peak-hour trips. The analysis is intended to determine how many of the trips would use a state highway, and the resulting effect on LOS. WSDOT typically seeks to maintain current LOS (i.e., prevent a worsening of conditions), if the current LOS is less than level C. In reality, the traffic analysis involves judgment and WSDOT is dependent on the local jurisdictions to represent the state's interest in negotiating the mitigation of traffic impacts. The WSDOT representatives contacted in the survey observed wide variation in the local jurisdictions' representation of WSDOT interests. Some local officials noted that WSDOT could be more effective if its procedures for mitigation of traffic impacts were more consistent.

Types of Highway Improvements Funded with SEPA Mitigation

The types of highway improvements funded via mitigation varies with the size of the project. Typical improvements include traffic channeling and signalization, and frontage improvements. Larger developments may contribute or pay for lane widenings, additional right-of-way, or ramps. Some examples of high-value improvements funded via mitigation include $5 million for ramps to Bellisfair Blvd. from Bellisfair Mall, and $2 million in R-O-W donation and road construction from a commercial development on SR 161. In-lieu contributions by developers are more common than mitigation payments. Unless WSDOT has a project underway or programmed, to which the mitigation improvements can be added, it is more expedient for the developer to undertake the construction and then donate the facilities to WSDOT. Otherwise, the programming of the project by WSDOT is uncertain. In fact, one of WSDOT representatives contacted in the survey said that mitigation is often not pursued unless the developer pays 100% of the cost.

Value of Mitigation Payments and In-Lieu Contributions

In the 93-95 biennium, WSDOT construction outlays are projected to be $778 million. The portion of this program that is most applicable to the types of roadways affected by new development is approximately $83.4 million. This figure is based on a classification of the 93-95 construction budget according to a highway classification system defined as a part of this study (see Section 13 for a complete description of the classification system). The $83.4 million represents construction outlays on *regionally significant* highways in urban areas. These are comprised of minor arterials and collectors on the state system, plus selected

principal arterials. Outlays for minor arterials and collectors are estimated to be $16.8 million, and outlays for the urban principal arterials are estimated to be $66.6 million.

The value of mitigation payments and in-lieu contributions is difficult to determine precisely because the mitigation payment data made available during the study are for a different timeframe, and there is no central tracking system for in-lieu contributions. Mitigation payments from developers totaled approximately $1.5 million for the 24-month period between March, 1992 and February, 1994. This represents roughly 2% the regional-urban outlays, and about 9% of the portion for minor collector outlays. Developer in-lieu contributions during this period were estimated to be approximately $10 million, based on observations by WSDOT regional staff. These contributions thus provide another 12% of improvements in addition to the budgeted outlays (i.e., $10 million compared to the total $83.4 program). While these amounts are barely visible in the context of WSDOT's overall construction program, they are fairly significant when viewed in relation to construction outlays for the affected facilities.

Maximum Potential for Development-Based Financing

The maximum potential for development-based financing depends on the class of highways for which new development is an appropriate financing source, and the cost of deficiencies on those highways that are attributable to new development. By implication, not all highway improvements that are needed to serve future population growth are candidates for development-related financing.

Between 1980 and 1990, the state's population grew by approximately 735,000, or 18%. While this is clearly a substantial increase, it is not attributed solely to migrants from other states. Roughly half of this growth came from natural increase (i.e., births minus deaths) and half from net migration (i.e., in-migration less out-migration). Although the magnitude of growth during the last decade seems extreme, consider that the state added 624,000 residents between 1900 and 1910. The question for highway financing, then, is how to distinguish cost responsibility between facilities needed to accommodate population growth, versus those needed to serve new development alone.

Additional transportation facility needs that are associated with new development can be identified by considering the function of different classes of highway facilities, and how new capacity for those facilities is implemented. Facilities that serve a variety of users destined to and originating from many different points typically are *expanded to serve population growth*. For these high-capacity facilities, consisting of interstates and principal arterials, additional capacity is built in large increments or not at all. In contrast, facilities that serve a small group of users - either exclusively or primarily - are the kind most often *required by new development*. These facilities can be expanded incrementally to serve the needs of new development. Traffic channelization, minor widenings, and signal improvements are examples of incremental facility expansion. Minor arterials, collectors, and some principal arterials comprise this category.

This distinction between facilities needed to serve population growth versus those required by new development leads directly to how these facilities should be financed. Development-related improvements are appropriate for financing via exaction, impact fees, or special assessments, because these improvements are provided to the exclusive or primary benefit of a small group of users. Growth-related improvements, on the other hand, should be financed from general sources of transportation revenue because the benefits of these improvements accrue to a broad cross-section of travelers.[1]

Using this framework as a point of departure, it can be seen that the maximum potential value of development-based financing is about 6% of known capacity needs through the year 2015:

- Regionally significant highways in urban areas are the state facilities most directly affected by new development. These highways comprise about 6% of statewide highway mileage and account for about 13% of total vehicle miles traveled on state highways *(refer to Section 13 for a complete description of state significant and regionally significant highways)*.

- Based on mobility improvements included in the state Multimodal Plan, capacity improvements to regionally significant highways in urban areas account for approximately $2.6 billion, or 18% of the total mobility program.

- About one-third of projected improvements ($867 million) on regionally significant highways can be attributed to deficiencies introduced by new development, and thus are candidates for development-based financing. This is about 6% of the total mobility program.

While it is clear that development-based financing would not solve the state's funding dilemma, its potential value substantially exceeds that of mitigation payments and contributions currently collected by the state. The maximum value of development-based financing per biennium would be $87 million, on average. This compares to approximately $12 million now obtained by WSDOT via SEPA mitigation. A logical policy question for the state is whether the magnitude of this difference warrants an investment in the new policies and procedures that would be needed to implement a more effective form of development-based financing for state highways. The answer to this question depends in part on the options available to the state, which are addressed later in this section.

Additional findings regarding the maximum potential of development-based financing are presented below.

[1] These distinctions between private and public financing are drawn from a landmark study conducted on behalf of the Urban Land Institute in 1984 – *Paying for Growth: Using Development Fees to Finance Infrastructure.*

Highways Most Affected by New Development

This study developed a classification system for state highways (see Section 13) which is useful in identifying the types of facilities most directly affected by new development. In this system, state highways belong to one of two categories: (1) state significant facilities, which serve inter-regional trips; or (2) regionally significant facilities, which serve intra-regional trips. The selection of facilities belonging to each category also takes into account the different characteristics of urban growth areas and rural areas. The resulting definition of the system is summarized in Exhibit 9-1 below. A more complete description of the classification system is presented in Section 13 of this report.

Exhibit 9-1
Characteristics of State Significant and Regionally Significant Highways

Component	Urban Growth Areas C/L Miles	Urban Growth Areas % of VMT	Rural Areas C/L Miles	Rural Areas % of VMT	State Total C/L Miles	State Total % of VMT
State System						
Interstates	247	33.1%	515	14.8%	762	47.9%
Principal Arterials	240	12.1%	1,661	12.6%	1,901	24.7%
Minor Art. & Collectors	30	0.5%	586	2.4%	616	2.9%
total	517	45.7%	2,762	29.8%	3,279	75.5%
Regional System						
Principal Arterials	211	8.2%	128	1.1%	339	9.3%
Minor Art. & Collectors	213	4.6%	2,889	10.6%	3,102	15.2%
total	424	12.8%	3,017	11.7%	3,441	24.5%
TOTAL	941	58.5%	5,779	41.5%	6,720	100.0%

Source: Based on route classifications developed by JHK & Associates, and highway segment data supplied by WSDOT. Data compiled by Porter & Associates, Inc.

Regionally significant highways in urban areas are the state highway facilities most affected by new development. They lie wholly within urban growth areas, where the state's future growth will be channeled. They are comprised of principal arterials having a high proportion of short trips, and minor arterials and collectors which by nature serve relatively short trips. Also, the physical characteristics of these facilities indicate that they are very sensitive to additional traffic. Approximately 41% of the centerline mileage of these facilities is comprised of two-lane highways. Another 37% is comprised of signalized highways. These two types of

facilities require a wide range of incremental improvements in connection with new development – signalization improvements, turning lanes, are traffic channelization are most common.

These highways represent a relatively small share of the state system. They account for approximately 6.3% of state highway centerline mileage (7.8% of lane miles), and about 12.8% of total vehicle miles traveled (VMT) on state highways.

Scope of Deficiencies on Regionally Significant Highways in Urban Areas

Deficiencies on regionally significant urban highways provide a broad measure of the potential scope of development-based financing. Deficiencies, as used here, refers to segments of the state highway system in urban areas that perform below LOS D. This performance measure was used by WSDOT in its preparation of the state Multimodal Plan.

In establishing the potential for development-based financing of improvements to offset these deficiencies, a distinction must be drawn between existing deficiencies versus those deficiencies attributed to new growth. Only the latter is a candidate for development-based financing. In its database of mobility (i.e., capacity expansion) projects included in the state Multimodal Plan, WSDOT distinguished between projects needed to address backlog deficiencies versus those needed to address future deficiencies. These projects were sorted according to the state-regional highway classification system to determine the value of mobility projects associated with the regional-urban portion of the system, with a breakdown between backlog and future deficiencies. The results are presented in Exhibit 9-2 on the following page.

A maximum of 34% of total projected deficiencies for regionally significant urban highways can be attributed to new development. Most of these deficiencies are associated with two-lane highways and signalized highways. As noted above, these are the types of capacity expansion projects that can be implemented incrementally, and thus are well suited to development-based financing.

Another way of looking at this picture is that most of the cost of improving the regional-urban system to LOS D is due to already existing deficiencies. This fact may complicate efforts to expand the use of development-based financing and may reduce the overall potential of this financing strategy.

Exhibit 9-2
Projected Costs to Satisfy Backlog & Future Deficiencies on Regionally Significant Urban Highways
millions of 1993$

Facility Type	Type of Deficiency: Backlog Deficiencies	Type of Deficiency: Future Deficiencies	Total Program	Future Deficiency % of total
Multi-lane highways	$150M	$110M	$260M	42%
Two-lane highways	490M	356M	846M	42%
Signalized highways	1,081M	401M	$1,482M	27%
total	$1,721M	$867M	$2,588M	34%

Source: Compiled by Porter & Associates, Inc. from WSDOT Mobility Program data.

A breakdown of the backlog and future deficiencies by region indicates where the opportunities have been foregone or could still be realized. Exhibit 9-3 below summarizes mobility project cost and centerline miles of roadway affected for backlog and future deficiencies. Although the deficient highway miles are about equally divided between backlog and future deficiencies, two-thirds of the cost is associated with backlog deficiencies. This may simply reflect that solutions in anticipation of a problem are less expensive than reactive solutions.

Exhibit 9-3
Comparison of Backlog and Future Deficiencies by Region

Region	Backlog Deficiencies: Cost	Backlog Deficiencies: C/L Miles	Future Deficiencies: Cost	Future Deficiencies: C/L Miles
Central	$7.0M	2	$139.5M	30
East	7.5M	2	105.7M	19
Puget Sound	1,373.0M	178	374.6M	112
West	333.8M	31	247.4M	44
total	$1,721.3M	213	$867.2M	205

Source: Compiled by Porter & Associates, Inc. from WSDOT Mobility Program data.

Although most of the cost for mobility projects on regional-urban highways is associated with current deficiencies, future deficiencies affect a relatively large portion of the regional-urban network and their cost could grow if the solutions are deferred.

Options for Improving the Current Practice

Four options were explored that could respond to the shortcomings of existing mitigation practices, and to the remaining opportunities for development-based financing described above. These options included: (1) broader permit review by WSDOT of development projects, so that all relevant projects are brought to WSDOT's attention; (2) use of impact fees; (3) use of special assessments; and (4) changes in governance.

This analysis found that current practice could be marginally improved at little effort by requiring notification to WSDOT by local jurisdictions of all development that meets certain threshold conditions. Today, WSDOT must negotiate this type of agreement with local governments.

More importantly, the analysis found that changes in governance, specifically *including regionally significant highways in local concurrency requirements* and delegating programming authority to regions would be more effective in balancing transportation supply and demand than attempting to finance more facilities through development-based financing.

These findings are presented in more detail in the remainder of this section.

Broader Permit Review

WSDOT's ability to attain mitigation payments and contributions via SEPA is limited by the notification it receives of new development. At a minimum, WSDOT is notified of development activity if a development abuts a state highway, introduces a change in land use, and is located in an unincorporated area. Under these conditions, the developer must receive an access permit from WSDOT. If a development is remote (i.e., near but not abutting a highway), WSDOT depends on the local government issuing land use permits for notification of potential impacts on a state highway. This notification comes routinely from some jurisdictions, and infrequently from others.

The effectiveness of WSDOT's mitigation efforts could definitely be improved by requiring local jurisdictions to inform WSDOT of a broader range of new development. The interlocal agreement between WSDOT and the City of Bellevue, for example, states that WSDOT would be notified of all new remote development that generates 50 peak hour trips or more to a state highway.

Most participants in the survey of WSDOT's current mitigation practice agreed that broader notification to WSDOT of new development would be effective, and could be implemented with marginal effort. This notification would in no way grant WSDOT authority for permit

approval, but would allow WSDOT the option of requesting an analysis of state highway impacts as part of the environmental impact statement for the development.

Use of Impact Fees

Impact fees are a regulatory device authorized pursuant to a jurisdiction's police powers. Impact fees provide a means to spread the cost of development-related facility improvements among all new development, based on each development's pro rata share of relevant facility costs. This approach could potentially be effective in addressing the cumulative impact of development, large and small, on state highways. Impact fees are generally preferable to mitigation, by both public agencies and developers, because administrative effort is reduced and costs are known.

In Washington, cities and counties are authorized to use impact fees to finance transportation improvements. Two sources of enabling legislation are available: RCW 82.02, which enables impact fees in connection with local comprehensive plans, originating from the GMA (1990); and RCW 39.92, which enables transportation impact fees, originating from the Local Transportation Act (1988). Most local jurisdictions now implementing impact fees do so under RCW 82.02. In a survey conducted for this study, nine local jurisdictions responded that they had implemented the GMA impact fees. These included Clark County and the Cities of Anacortes, Bellevue, Bellingham, Camas, Duvall, LaCenter, Mount Vernon, and Tumwater. In addition, King County implemented an impact fee system under the Local Transportation Act.

Establishment of an impact fee system involves several steps: (1) adopting a transportation plan; (2) adopting standards governing the performance of facilities in that plan; (3) developing a model to determine the facility improvements needed to sustain the LOS standards as new development occurs; (4) defining a system for apportioning the cost of these facilities among new development (i.e., different types of development create different impacts); and (5) making available matching revenues to carry out the construction program.

In the survey undertaken to document current WSDOT practices, most participants (state and local) responded favorably to the concept of WSDOT using impact fees to finance development-related improvements. All these respondents indicated that if the state were to use an impact fee system, it should be incorporated in an existing system (e.g., those imposed by counties).

A number of practical difficulties exist, however, with the use of impact fees to finance state highway improvements:

- State law is ambiguous regarding the inclusion of state highway facilities in impact fee systems. Under RCW 82.20, all transportation facilities included in the comprehensive plan can be included in the impact fee system, but it is unclear whether *state* transportation facilities are eligible.

- Little opportunity exists for WSDOT to participate in local impact fee systems. Only nine jurisdictions now use impact fees, two of which are counties, and accordingly the coverage is thin relative to the geography of the regional-urban highway system.

- Local jurisdictions are concerned about the incremental financial impact on developers that would be associated with state highways being included in a local impact fee system. This is perceived to affect a city's or county's competitive position in attracting new development. Though impact fees when applied broadly have been shown to have little effect on the pace of development (see Sections 6 and 7), the spotty coverage of existing impact fee systems gives more credence to this concern.

- The zones used by local jurisdictions to define transportation impacts and costs may not be appropriate for state facilities.

- The state would have to guarantee the availability of matching funds for these facilities, to ensure that a developer's payment would actually be applied to a project of benefit to that development. This could require a change in procedures for the adoption of a transportation budget, and would require a change in the way that the priority programming system is applied for project selection.

The governing constraint in the above list is the relative lack of use of impact fee systems by local governments. It is conceivable that a statewide impact fee system could be devised, but such a strategy would be at odds with regulatory reform and would constitute a major change in practice. Until and if there is more widespread use of impact fees, WSDOT would need to consider the value of impact fees relative to the value of SEPA payments and contributions. Such a case-by-case application of impact fees was not addressed in this study.

Use of Improvement Districts

Improvement districts present a means to allocate the cost of beneficial improvements to property owners within a geographic area benefited by the improvement. This form of financing is often referred to as special assessment financing, because the property owners receive a special assessment on their property distinct from regular property taxes. A special assessment, like property taxes, is a lien on property.

The formation of improvement districts differs considerably from the implementation of impact fees. The benefit of the improvement must be demonstrable, and exceed the assessment. Also, some forms of improvement districts afford property owners the option to either agree to the assessment or to petition for a repeal of the assessment. Because of this elective component, the use of improvement districts for state highway facilities would be limited to cases where property owners may achieve some benefit by accelerating a highway

improvement which is at risk of deferral or non-completion (e.g., those excluded from the financially-constrained list of mobility projects as presented in Section 10).

Washington State law authorizes local governments to implement a variety of improvement districts. These include: (1) road improvement districts or RIDs (RCW 36.88), which can be implemented by counties for improvements to county roads and, with the permission of WSDOT, improvements to state highways; (2) local improvement districts or LIDs (RCW 35.43), which can be implemented by resolution by cities for a variety of local improvements, including city streets; (3) road service districts or RSDs (RCW 36.83), which can be implemented by counties for county road construction or maintenance, or construction of state highways, and may include cities if authorized by resolution of the city; and (4) transportation benefit districts or TBDs (RCW 36.73), a special district which can be implemented by counties for transportation improvements serving multiple jurisdictions within a county, including state highways.

RIDs and LIDs are the most common form of improvement districts within the state. Typically, these are used to finance low-cost public projects that serve specific neighborhoods, although improvements ranging in value from $10 million (e.g., NE 10th Street in Bellevue) to $20 million (downtown LID for the Metro transit tunnel) have also been implemented. RIDs have included funding for state highway improvements, though county road improvements are a far more common use. RIDs require more direct participation by property owners than LIDs, in that property owners can defeat an effort to establish an RID if initiated by resolution of the county governing board. In contrast, LIDs may be formed by resolution of a city council. Formation of LIDs and RIDs is generally successful only when a project is broadly supported within the affected community.

Multi-jurisdictional special districts, such as the TBD, are more difficult to implement because they require achieving consensus among different political constituencies. The one attempt made to form a TBD in south King County failed when the multiple-jurisdiction coalition fell apart because the wide variety of interests originally supporting the TBD came to have different opinions of its viability. Also, these districts have a separate governing board that administers the TBD revenues, which tends to be negatively construed as another layer of government. In the case of the south King County TBD, it was eventually realized that the benefit of multi-jurisdictional cooperation could be attained if needed via interlocal agreement.

In the survey of current practice mentioned earlier in this section, RIDs were acknowledged to be a potential source of funds, albeit of limited application. The concept of state authority for creation of improvement districts was also discussed. Although state improvement districts exist elsewhere (e.g., Virginia), none of the survey respondents supported this idea for Washington state. Given that several of the above improvement districts provide a means for local financing of state highway improvements when desired by local property owners, there appears to be no need to entertain state highway improvement districts.

Changes in Governance Structure

Mismatches between the capacity of the regional-urban highway system and the pace of development adjacent to or near these highways is at the heart of the debate on how to fund needed improvements. WSDOT is responsible for the highway system, while land use permitting decisions are made by local governments. Although land use permitting is subject to adequate transportation system capacity for local streets and roads, state law is ambiguous as to whether state highways should be similarly treated. Consequently, the current situation allows local government to permit local development while avoiding the cost required to ensure adequate transportation facilities. This is particularly problematic in the developing portions of urban areas, where state highways may be the only through-travel option available.

An alternative to development-based financing and state-managed financing of regional-urban highways -- delegation of authority to regions -- was explored at length with the Steering Committee for this study. The key concepts in this alternative were as follows: (1) maintenance and preservation of the regional-urban system would continue to be the sole responsibility of the state; (2) the regional-urban system would be subject to concurrency; (3) the state would establish regional funds which would provide partially for improvements to the regional-urban system; (4) regional transportation planning organizations would be responsible for programming the state funds; and (5) matching funds could be applied from a number of other sources, including federal funds from the Surface Transportation Program, funds made available on a competitive basis from the state's Transportation Improvement Account, impact fees for state highways, and local tax revenues. The final results of these discussions with the Steering Committee are presented in the main body of this report.

This alternative relies on governance as a tool to coordinate state highway capacity improvements with permitting authority. It is intended to address demand management as well as the financing of additional capacity. Local officials would be responsible for determining if additional development should be allowed in the area served by these highways. They would also program the heretofore state funds, and decide the priority these projects should receive relative to other capacity improvement projects.

Support for this concept by the Steering Committee was conditioned on the adequacy of funds to pay for improvements to the regional-urban system. Representatives of local jurisdictions on the committee were opposed to the concurrency requirement if local revenues were required to fund the improvements. Potential sources of state and federal funds to meet this need were analyzed subsequent to the committee presentations, and are described in the main body of this report.

SECTION 10
FUNDING IMPLICATIONS OF MULTIMODAL AND LOCAL PLANS

TABLE OF CONTENTS

SECTION 10
FUNDING IMPLICATIONS OF MULTIMODAL AND LOCAL PLANS

Introduction

The Washington State Department of Transportation (WSDOT) has prepared a Statewide Multimodal Transportation Plan, which is intended to provide guidance for state transportation programming decisions for the next 20 years. The plan defines performance objectives for the state transportation system, projects the future performance of the system relative to these objectives, and identifies highway, ferry, and other projects which are necessary to address deficient performance. An "interim final" version of the Multimodal Plan was adopted by the Transportation Commission in April, 1994, following approximately two years of effort. The interim final plan also identified the projects most likely to be funded over the next 20 years, presuming that future revenue growth would be consistent with past trends. This is also referred to as the "financially constrained" version of the plan.

At the same time that the Multimodal Plan was under development, local jurisdictions were preparing comprehensive plans pursuant to the requirements of the Growth Management Act (GMA). These local plans adhere to a methodology that is similar to that employed for the Multimodal Plan, whereby transportation improvements are conditioned on locally-adopted level-of-service (LOS) standards. Unlike the Multimodal Plan, however, the local LOS standards carry the force of law. A local jurisdiction must either include new roadway capacity projects in the plan so that the LOS standard is not violated, or target development to areas that can sustain additional development within available transportation system capacity. If new projects are included, revenues to finance those projects must be identified. This requirement is referred to as "concurrency" - that is, adequate transportation system capacity must be provided concurrent with new development.

The GMA required the local plans to include "arterials and transit routes" in the assessment of transportation capacity. This language is ambiguous with respect to whether state arterials should be included in the local plans and thus be subject to the concurrency requirement. Due to this ambiguity, some local jurisdictions have included state arterials in their plans and some have not. Additionally, given that the state and local plans were prepared in parallel and by different parties, there exists the potential for divergent notions of needed improvements to state owned and or operated transportation facilities. This raises an important policy question for the state: what is the magnitude of unfunded state projects which are required to meet the concurrency requirements in local plans?

A comparison of the Multimodal Plan and local plans found that unfunded state facility improvements may be a material factor in addressing concurrency requirements in local plans. This finding is based on the following observations:

- A relatively large number of local jurisdictions already include or will include state-owned or operated transportation facilities in their local plans, even though not strictly required to by state legislation.

- Based on a review of 116 state highway "concurrency" projects identified in local plans, 14% were excluded from the Multimodal Plan and another 13% may be unfunded in the "financially constrained" Multimodal Plan.

- The total unfunded amount of state concurrency projects is difficult to ascertain with the available data, but appears to be in the range of $1.0 billion to $1.8 billion - or between 15% and 28% of the financially-constrained "mobility" projects now included in the Multimodal Plan.

Despite general agreement on the location and extent of highway deficiencies, important differences appear to exist between state and local priorities regarding improvements to state transportation facilities. These differences tend to be most pronounced with respect to principal arterials and minor arterials in urban areas. While some differences also exist between state and local plans with respect to Interstate highways, these are limited to interchange improvements.

The remainder of this section presents additional details describing the treatment of state facilities in local plans, points of divergence between state and local plans, and the characteristics and costs of unfunded projects.

Treatment of State Facilities in Local Plans

Twenty-four counties and approximately 175 cities are developing or have developed local comprehensive plans pursuant to the Growth Management Act. Each of these jurisdictions was invited to participate in the *State Transportation Facilities and Local Comprehensive Plan Survey*, conducted by Henderson Young and Company and JHK Associates (see Section 1 of this report) as part of this study. The survey results were used as a basis for determining the extent to which local jurisdictions were including state transportation facilities in their local comprehensive plans.

At the time that the research was conducted for the findings presented in this section, 96 jurisdictions had responded to the survey. The responses indicate that a relatively large number of local jurisdictions include state-owned or operated transportation facilities in their local plans, even though not strictly required to by state legislation:

- Eighty-three jurisdictions (86%) indicated that state facilities have or will be included in their local comprehensive plans. Some of these jurisdictions included only portions of state facilities in their plans (e.g., interchanges) while others included all state highways.

- Twenty (21%) jurisdictions that had either completed their plans or had the plans under final review included state highway facilities in their concurrency requirements. This means that the capacity of state facilities was taken into account in determining the types of improvements needed to satisfy future demand.

- Eighteen of these jurisdictions (19%) indicated that improvements to state facilities were necessary to achieve concurrency.

The jurisdictions which comprise the above categories are presented in Exhibit 10-1.

These findings confirmed that many local jurisdictions have considered the effect of state highways on the future performance of local streets and roads. Furthermore, some of these jurisdictions have identified improvements to state facilities that would be necessary to meet concurrency requirements. This invites the question of how these locally-defined improvements relate to the projects included in the state's Multimodal Plan.

Points of Divergence Between State and Local Plans

The state Multimodal Plan includes a class of projects, known as *mobility* projects, that are intended to address capacity deficiencies on state highways. These projects are similar in function to the concurrency projects included in local comprehensive plans. Points of divergence between the Multimodal Plan and local plans were identified by comparing the project definitions from each plan for projects located on the same section of roadway. The methodology and results of this process are described below.

Methodology

Project descriptions for locally-defined state concurrency projects were obtained from local comprehensive plans for eight jurisdictions - King County, Clark County, Kitsap County, and the cities of Bellevue, Everett, Bellingham, Olympia, and Ellensburg. These jurisdictions represent approximately 25% of the population for those cities and counties which are developing local comprehensive plans, and were selected to strike a reasonable balance between population size, location, and density of state highway segments. Five other jurisdictions were contacted, but either declined to participate in the analysis or were unable to provide the information needed to perform the comparison.

In all, 116 locally-defined state highway projects were identified for comparison to the Multimodal Plan. Although roughly 80% of the projects are located in the central Puget Sound, other characteristics of the projects are quite diverse. The types of improvements included widenings (39%), HOV and transit-related improvements (28%), interchanges (28%), and other miscellaneous projects (5%). These projects were distributed across principal arterials (52%), interstate highways (29%), minor arterials (15%), and other facilities (4%).

Exhibit 10-1

Treatment of State Facilities in Local Comprehensive Plans

page 1 of 2

JURISDICTION	*LOCAL PLAN DOES OR WILL INCLUDE STATE FACILITIES*	*PLAN COMPLETE OR UNDER REVIEW: STATE FACILITIES SUBJECT TO CONCURRENCY*	*PLAN COMPLETE OR UNDER REVIEW: STATE IMPROVEMENTS NEEDED TO ACHIEVE CONCURRENCY*
Cities:			
Airway Heights	X		
Anacortes	X	X	X
Arlington	X		
Bainbridge Island	X	X	
Bellevue	X		X
Bellingham	X	X	X
Black Diamond	X		
Bonney Lake	X		
Bothell	X	X	X
Burien	X		
Camas	X		X
Carnation	X		
Chehalis	X		
Cheney	X		
Coupeville	X		
Dayton	X		
DuPont	X	X	
Duvall	X	X	
East Wenatchee	X		
Eatonville	X	X	
Everett	X	X	X
Federal Way	X		
Forks	X		
Hunts Point	X		
Kennewick	X		
Kittitas	X		
LaCenter	X	X	X
Lacey	X	X	X
Lynden	X		
Lynnwood	X		
Mabton	X		
Medina	X		
Millwood	X		
Milton	X		
Moses Lake	X		
Mount Vernon	X		
Mountlake Terrace	X		
Naches	X		
Napavine	X		
Nooksack	X		
Oak Harbor	X		X
Olympia	X	X	X
Port Angeles	X	X	X
Port Townsend	X		
Rainier	X		

Exhibit 10-1
Treatment of State Facilities in Local Comprehensive Plans
page 2 of 2

JURISDICTION	*LOCAL PLAN DOES OR WILL INCLUDE STATE FACILITIES*	*PLAN COMPLETE OR UNDER REVIEW: STATE FACILITIES SUBJECT TO CONCURRENCY*	*PLAN COMPLETE OR UNDER REVIEW: STATE IMPROVEMENTS NEEDED TO ACHIEVE CONCURRENCY*
Redmond	X		X
Rock Island	X		
Roslyn	X		
Seattle	X	X	
Sedro Wooley	X	X	X
Selah	X		
Sequim	X		
Snohomish	X		
Snoqualmie	X		
South Prairie	X		
Sumner	X	X	X
Tacoma	X	X	
Tenino	X		X
Toppenish	X		
Tumwater	X		
Walla Walla	X		
Wenatchee	X		
Yakima	X		
cities total	*63*	*16*	*15*
Counties:			
Benton	X		
Chelan	X		
Clallam	X		
Clark	X	X	X
Columbia	X		
Douglas	X		
Garfield	X		
Island	X		
Jefferson	X		
King	X	X	X
Kitsap	X	X	X
Lewis	X		
Mason	X		
Snohomish	X		
Spokane	X		
Stevens	X		
Thurston	X	X	
Whatcom	X		
Yakima	X		
counties total	*19*	*4*	*3*
GRAND TOTAL	82	20	18

Source: Henderson, Young & Co., *Survey of State Transportation Facilities and Local Comprehensive Plans*, conducted for the LTC Level-of-Service Study.

Each project was compared to the Mobility project list in the Multimodal Plan, in cooperation with planning staff from the WSDOT regions. Each locally-defined project was first checked against the Mobility project list to determine if a project was included in the Multimodal Plan for that segment of a state route. This step was performed for all 116 projects. The second step was to determine if the corresponding Mobility project was included in the *financially constrained* version of the Multimodal Plan. At the time the analysis was performed, this information was available only for the four-county central Puget Sound region - King, Kitsap, Pierce, and Snohomish counties.

Results

The results of the comparison show that a considerable number of locally-defined concurrency projects on the state highway system are not included in the Multimodal Plan. Approximately 14% of the locally-defined projects are excluded from the full set of Mobility projects included in the Multimodal Plan. Another 13% of the projects were excluded from the smaller set of Mobility projects contained in the *financially-constrained* version of the plan, for the central Puget Sound region alone. This degree of divergence reflects both the difference in methods used by the state and by local jurisdictions, and the relatively low priority of some of the projects from the state's perspective.

The locally-defined projects which do not appear in the financially-constrained state plan are diverse, and include construction of new interstate or primary arterial interchanges, widening of interchange crossings, HOV treatments at interchanges, widening of arterials, park & ride lots, and the construction of new bridges. WSDOT suggests that the correction of some of these deficiencies is a local or at most joint responsibility requiring further study.

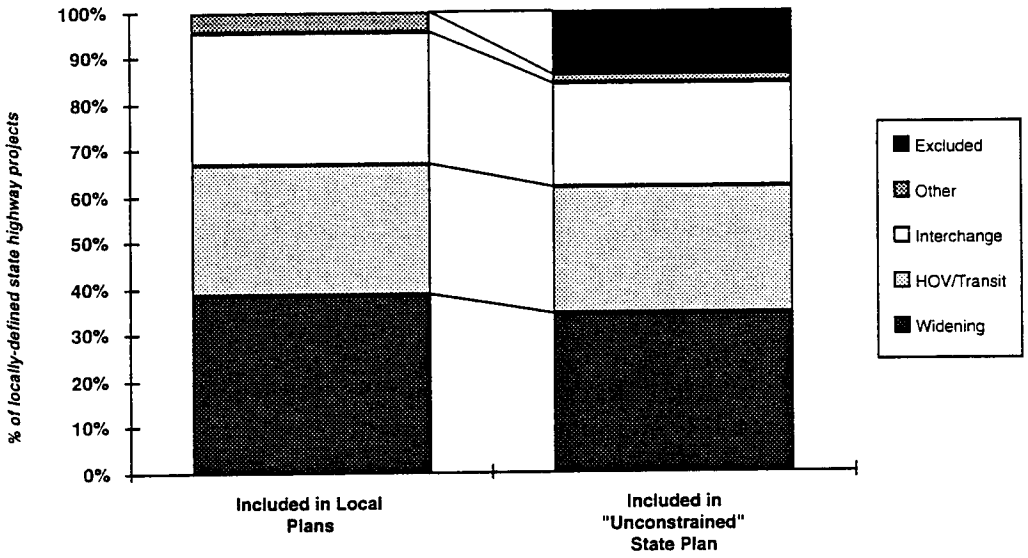
Additional details on the comparison to the full Mobility project list and to the financially-constrained list are presented below.

Projects Excluded from the "Full" Mobility Project List

Local and state plans are generally in agreement on the existence and location of deficiencies, as summarized in Exhibit 10-2. There exists almost unanimous agreement on transit and HOV-related projects. Nonetheless, about 14% (or sixteen) of the locally-defined state projects are excluded from the Multimodal Plan. These projects are comprised as follows:

- ***Interchange improvements or new construction*** - Interchange improvements were the most frequent type of locally-defined project excluded from the Multimodal Plan, accounting for seven of the sixteen projects. Four of these were on Interstate highways, three on principal arterials, and one on a minor arterial. These omissions are due in part to the emphasis given to mainline traffic in the Multimodal Plan, with somewhat less emphasis given to interchanges.

Exhibit 10-2
Comparison of Locally Defined State Concurrency Projects to Mobility Projects in the Multimodal Plan



Type of Improvement in Local Plan:	Facility Class	Extent of Agreement with State Plan: Agreement	Partial Agreement	Not Included	totals by improvement type	% of improvement type
Widening	Interstate	3	–	–	3	6.7%
	Principal Arterial	23	3	2	28	62.2%
	Minor Arterial	8	3	3	14	31.1%
	subtotal	***34***	***6***	***5***	**45**	100.0%
HOV/Transit	Interstate	17	1	1	19	57.6%
	Principal Arterial	8	5	–	13	39.4%
	Minor Arterial	1	–	–	1	3.0%
	subtotal	***26***	***6***	***1***	**33**	100.0%
Interchange	Interstate	5	3	4	12	36.4%
	Principal Arterial	16	1	2	19	57.6%
	Minor Arterial	1	–	1	2	6.1%
	subtotal	***22***	***4***	***7***	**33**	100.0%
Other		1	1	3	5	
totals	Interstate	25	4	5	34	29.3%
	Principal Arterial	47	9	4	60	51.7%
	Minor Arterial	10	3	4	17	14.7%
	Other	1	1	3	5	4.3%
	total	**83**	**17**	**16**	**116**	100.0%
	% of total	71.6%	14.7%	13.8%	100.0%	

Includes the cities of Bellevue, Everett, Bellingham, Olympia, & Ellensburg; and King, Kitsap, & Clark counties (total population 1.12 million; approx. 25% of GMA counties)

Source: Interviews with local and WSDOT planning staff. Results drawn from the April, 1994 Interim Final Multimodal Plan and local comprehensive plans.

- ***Widenings*** - Five of the sixteen excluded projects were for widenings. Three of these projects were on minor arterials, the other two were on primary arterials. The two primary arterial projects are new bridges in Kitsap County, the need for which is viewed differently by the county and the WSDOT.

- ***Others*** - Four other projects were excluded from the state plan. These included two park & ride lots, a newly proposed state route connector, and a minor lane widening on a state collector.

In addition to the above projects, for which no corresponding definition was found in the Multimodal Plan, another 15% of the projects fell under the category "partial agreement". This means that both the state and the local jurisdiction agree that a deficiency exists, but have in mind considerably different solutions to correct the deficiency.

Projects Excluded from the "Financially Constrained" Mobility Project List

Whereas the full list of Mobility Projects totals approximately $14.7 billion statewide over twenty years, the financially-constrained Multimodal Plan includes only $6.5 billion of Mobility projects. Consequently, one can expect that more of the locally defined state projects would fall off the list, adding to those which were not included in the full Multimodal Plan.

A sample of projects from the central Puget Sound was reviewed with WSDOT planning staff to determine which would be funded in the financially constrained plan. These results are summarized in Exhibit 10-3. About 13% of the projects were found to be unfunded. This is in addition to the 14% which were not included in the full Multimodal Plan.

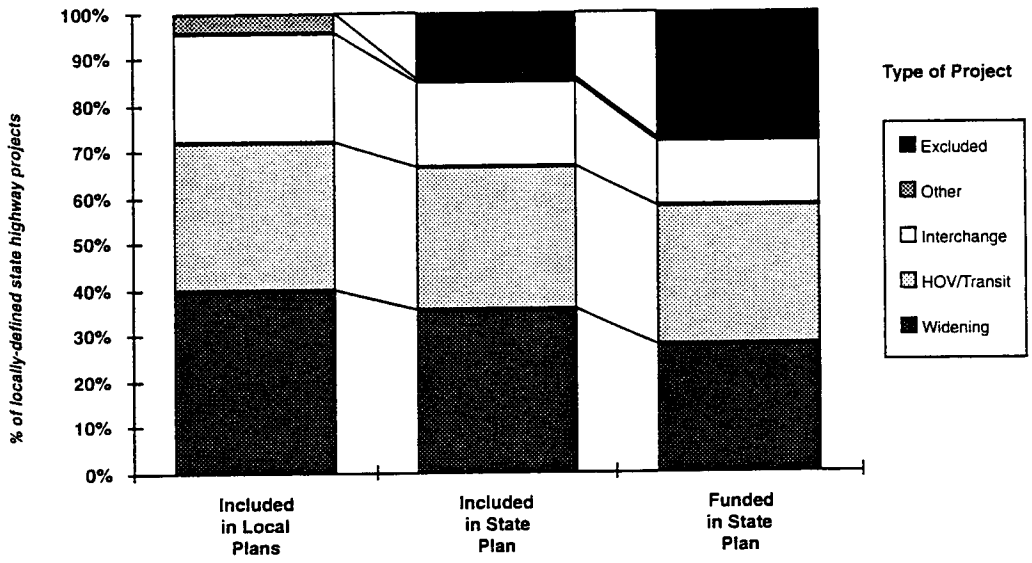
In the Puget Sound sample, no particular group of projects seems to fare worse than others among the projects that were eliminated due to financial constraints, except to note that only one HOV/transit project was eliminated. Of the other twelve projects which were eliminated, seven were lane widenings and four were interchanges, which is in proportion to the total number of projects included in each of these classes.

Funding Shortfall

Although the project-by-project comparison is helpful for understanding the points of diversion between state and local plans, the overall project cost is equally important to establish because it expresses the amount of financial exposure the state may have if state facilities were to be subjected to the concurrency requirement.

The precision of the estimate for the funding shortfall is limited, however, by the available information. In some cases, the locally-defined state projects had no cost estimates, and ballpark estimates had to be developed using gross unit costs. The analysis also was limited to the sample of projects for the central Puget Sound, since these were the only ones for which

Exhibit 10-3
Comparison of Locally Defined State Concurrency Projects to Mobility Projects in the Financially Constrained Multimodal Plan
Central Puget Sound Sample



Type of Improvement in Local Plan	Facility Class	Extent of Agreement with State Plan: Underway/ Included and Funded	Partial Agreement/ NFS and Funded	Included and Not Funded	Not Included	totals by improvement type	% of improvement type
Widening	Interstate	2	–	–	–	2	5.4%
	Principal Arterial	13	3	5	2	23	62.2%
	Minor Arterial	5	3	2	2	12	32.4%
	subtotal	***20***	***6***	***7***	***4***	**37**	100.0%
HOV/Transit	Interstate	15		–	1	16	53.3%
	Principal Arterial	8	5	–	–	13	43.3%
	Minor Arterial	–	–	1	–	1	3.3%
	subtotal	***23***	***5***	***1***	***1***	**30**	100.0%
Interchange	Interstate	1	3	3	3	10	45.5%
	Principal Arterial	8	1	–	1	10	45.5%
	Minor Arterial	–	–	1	1	2	9.1%
	subtotal	***9***	***4***	***4***	***5***	**22**	100.0%
Other/Park & Ride			1		3	**4**	
totals	Interstate	18	3	3	4	28	30.1%
	Principal Arterial	29	9	5	3	46	49.5%
	Minor Arterial	5	3	4	3	15	16.1%
	Other		1	–	3	4	4.3%
	total	**52**	**16**	**12**	**13**	**93**	100.0%
	% of total	55.9%	17.2%	12.9%	14.0%	100.0%	

Source: Interviews with local and WSDOT planning staff. Results drawn from the April, 1994 Interim Final Multimodal Plan and local comprehensive plans.

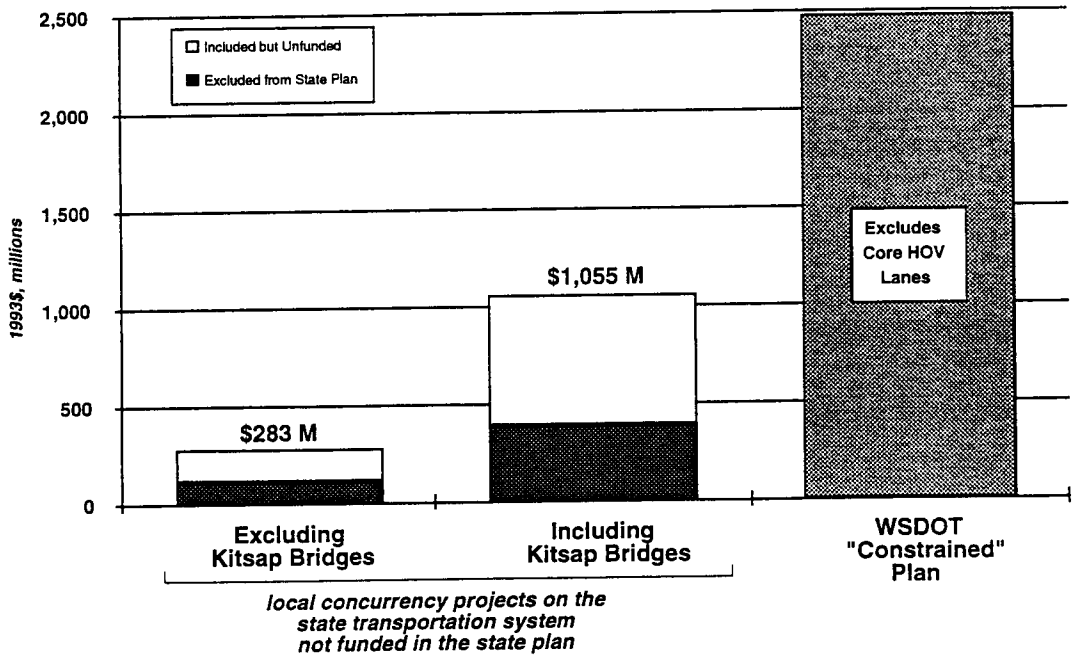
state funding information was available. The local jurisdictions included in the sample represent about 35% of the population in King, Kitsap, and Snohomish counties.

Based on the central Puget Sound sample alone, somewhere between $283 million and $1.1 billion of the locally-defined state projects are unfunded, either because they were not included in the full Multimodal Plan, or because they were of insufficient priority to be included in the financially-constrained version of the Multimodal Plan. These results are summarized in Exhibit 10-4. The range of the shortfall is affected substantially by the costs of new bridges in Kitsap County, which account for almost three-quarters of the unfunded amount. The total amount of the shortfall is contrasted in the exhibit with the financially-constrained Mobility project funding for the three counties included in the sample. While this is not a completely valid comparison, since not all jurisdictions in the three counties were included in the sample, it indicates that the value of the unfunded projects is fairly large in relation to the funded Mobility projects.

Expanding these results for total population in the central Puget Sound yields an estimate of $1.03 billion to $1.81 billion for the value of locally-defined concurrency projects that are unfunded in the financially-constrained Multimodal Plan. The low end of the range uses $283 million as the point of departure, and expands this number based on the ratio of sample population to total population for King, Kitsap, Pierce, and Snohomish counties. The upper range uses $1.1 billion as the point of departure, and adds the difference between $1.03 billion and $283 million. This approach protects against overstating the shortfall due to the value of the bridges. The estimated range of the shortfall represents 15% to 28% of the Mobility project cost included in the financially-constrained Multimodal Plan.

Would this estimate be higher if areas outside the central Puget Sound were included? It is likely that some "concurrency" projects in other regions of the state would be excluded from the financially constrained Multimodal Plan, and thus the overall unfunded cost would be higher. Because there is not a good basis for expanding the above sample results, the conclusion from this analysis should be limited to acknowledging that the cost of these projects would add materially to the state's financially-constrained program.

Exhibit 10-4
Value of Unfunded State Concurrency Projects in Local Plans
Central Puget Sound Sample



Note: the jurisdictions included in the above graph account for 35% of the population in King, Kitsap & Snohomish counties

SECTION 11
ALLOCATION OF STATE TRANSPORTATION REVENUES

TABLE OF CONTENTS

SECTION 11
ALLOCATION OF STATE TRANSPORTATION REVENUES

Introduction

The future allocation of state transportation revenues for state highways will be greatly influenced by the investment plan described in the Multimodal Plan. The mobility component of this plan identified capacity-improvement projects necessary to maintain a level-of-service (LOS) D on urban highways and C on rural highways. Given the importance of state highways in meeting local concurrency requirements, as documented in the prior two sections, it is important that the mobility program be both effective and attainable.

This section of the report presents an analysis of a range of factors that influence the content and attainability of the Mobility program. These include factors such as population, highway system demand and supply, and projected deficiencies in the state highway system. The effectiveness and equity of the plan are also major considerations in obtaining support for a revenue package.

The review of the Mobility program presented below found the program to be effective in allocating resources to the projected deficiencies, and to be relatively well balanced with respect to regional equity within the state. Rural highway deficiencies, however, were found much more sensitive to a reduction in LOS than is the urban system, indicating the severity of urban congestion relative to that projected for rural highways.

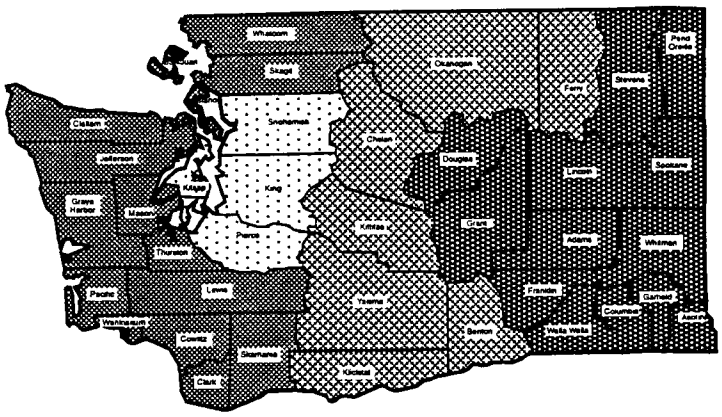
Factors Affecting Resource Allocation

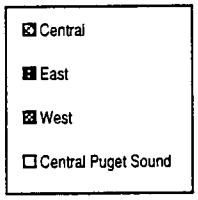
Population

Changes in the distribution of population can have significant impacts on the distribution of highway needs and the generation of highway revenues, both of which are relevant to a long range transportation plan. The Office of Financial Management, which prepares the official population forecasts for the state, has projected that state population will reach 6.4 million residents by 2012. This is a 31% increase relative to the state's 4.9 million residents in 1990. The net change in population over this period is about the same as that experienced between 1970 and 1990.

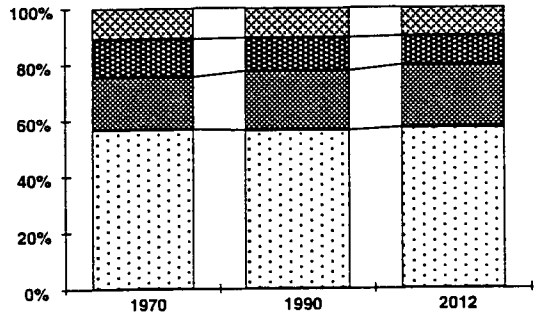
Exhibit 11-1 presents a breakdown of state population by region for 1970, 1990, and OFM's projected 2012 population. The regions are bounded as follows: *east* includes those counties east of the Columbia River; *central* includes those counties lying between the Columbia River and the Cascades; *central Puget Sound* includes King, Kitsap, Pierce, and Snohomish Counties; and *west* includes those counties lying west of the Cascades and outside the central Puget Sound region. This geographic breakdown is used throughout this section to describe various attributes of the highway system.

Exhibit 11-1
Historical & Projected State Population by Region

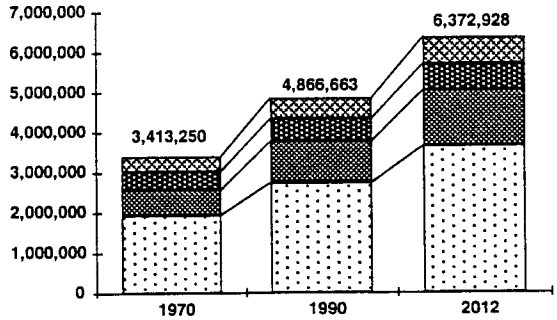




Share of State Population by Region



Population by Region



Source: Office of Financial Management, 1994.

The population projections indicate that the central Puget Sound and central Washington regions will maintain constant shares of the state population. Western Washington counties will gain population while eastern counties will lose population. None of these changes in the distribution are dramatic. The current pattern of supply and demand in the transportation system should continue to be much like today, except with more people.

Highway System Supply and Demand

The supply of and demand for highways across various classes of roadway and among different regions is a primary determinant of maintenance, preservation, and construction expenditures.

WSDOT manages a highway network of approximately 6,700 centerline miles. The components of this network can be described by the classification system defined in the LOS Study, which focuses on the significance to the state and regions of different portions of the state highway network. This system is described in detail in Section 13. It includes a four-way breakdown: state significant facilities in urban areas, state significant facilities in rural areas, regionally significant facilities in urban areas, and regionally significant facilities in rural areas.

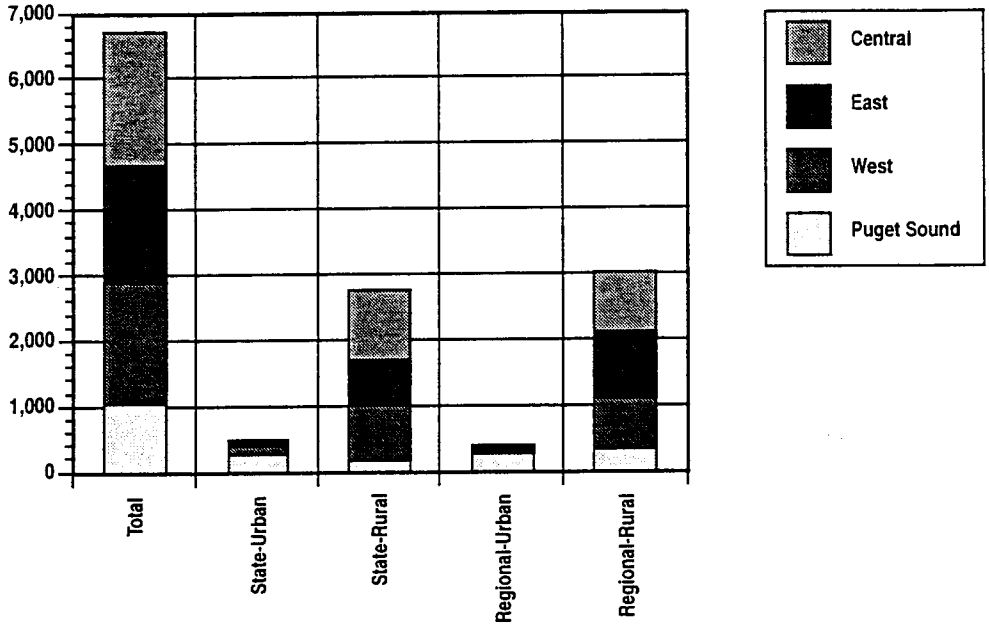
Components of WSDOT network are summarized in Exhibit 11-2. These statistics are further broken down by regions. Almost 86% of the state's highway mileage is in rural areas, and is divided about equally between state significant and regionally significant highways. These are distributed roughly equally among the eastern, central, and western regions outside of the central Puget Sound region. The urban highway system, comprising the remaining 14%, is represented in all parts of the state, but is concentrated in the central Puget Sound region.

Use of the highway system is distributed much differently, reflecting the concentration of population and economic activity in urban areas. The distribution of vehicle miles traveled (VMT) on the state highway network is summarized in Exhibit 11-3. Almost 60% of VMT occurs on the urban portion of the system, principally in the central Puget Sound region. State-significant facilities accommodate about 75% of all travel on state highways.

LOS Deficiencies on State Highways

The LOS on state highways is measured by the ratio of traffic volume to highway capacity. These volume-to-capacity (V/C) ratios are differentiated according to the type of highway: multi-lane highways, two-lane highways and signalized highways. Each of these designs has different implications for traffic separation and accordingly for traffic throughput. LOS is assigned a grade (A to F) depending on the relative congestion on a segment of highway, calculated as a function of its V/C ratio.

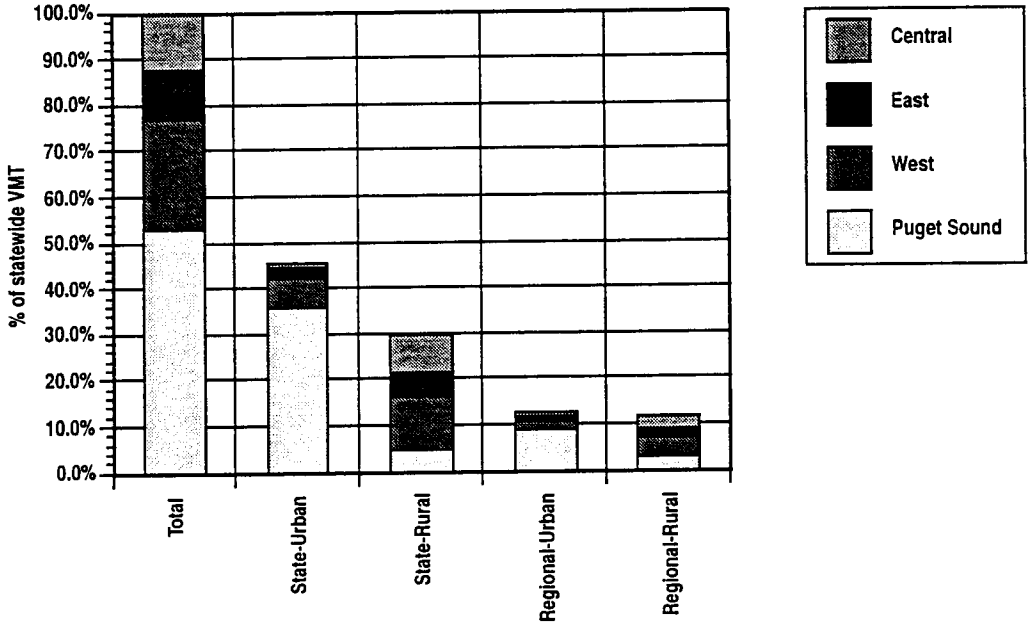
Exhibit 11-2
Distribution of Centerline Mileage by Region



Puget Sound	1,059	267	183	267	342
West	1,833	140	841	69	783
East	1,808	55	688	51	1,014
Central	2,022	54	1,051	38	879

Source: Centerline mileage estimated by Porter & Associates, Inc. from WSDOT source data.

Exhibit 11-3
Distribution of Vehicle Miles Traveled on State Highways, 1990



Puget Sound	53.0%	35.8%	5.0%	9.2%	3.0%
West	24.0%	6.8%	11.4%	1.6%	4.1%
East	10.6%	2.0%	5.2%	1.2%	2.2%
Central	12.4%	1.1%	8.2%	0.8%	2.4%

Source: Estimated by Porter & Associates, Inc. from highway segment data provided by WSDOT.

As part of its planning process for the statewide Multimodal Plan, WSDOT used LOS performance standards of D for highways in urban areas, and LOS C for highways in rural areas.[1] These performance standards represent congested and moderately congested conditions, respectively. They are based on the following V/C ratios:

Type of highway:	LOS C	LOS D
Multi-lane highways	0.65	0.85
Two-lane highways	0.35	0.55
Signalized highways	0.80	0.90

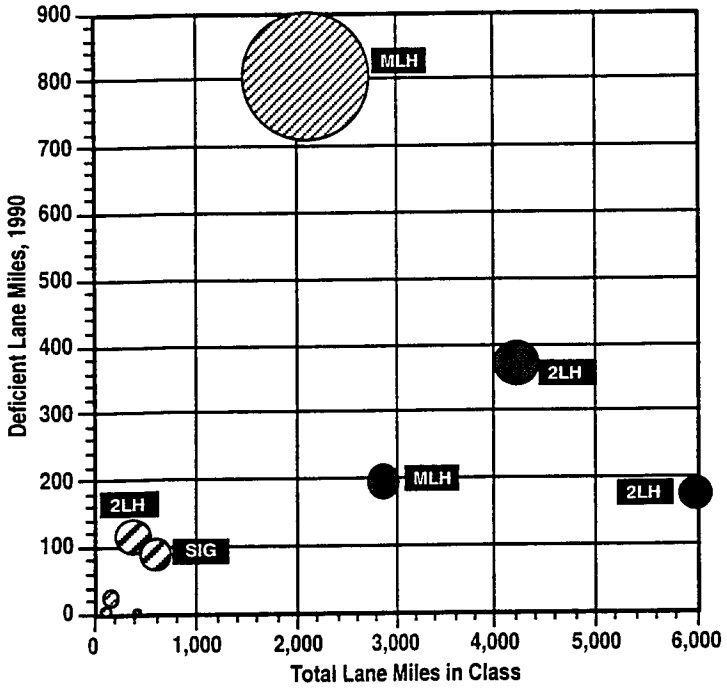
Exhibit 11-4 presents a summary of existing deficiencies on state highways given the above V/C ratios. For each segment of the highway system performing below the standards, the number of lane miles and affected VMT were summarized. The graph illustrates the relationship between deficient highway segments (y axis) and total lane miles on the class of facility (x axis), using the state-regional classification system identified above. The circles represent the relative amount of VMT on each class of highway for the three types of highways presented in the table immediately above. If the deficiencies were evenly distributed, all the points would be the same size and lie on a 45-degree line running from the origin to the northeast corner of the graph. The urban highways lie to the north of that line, indicating that their share of deficient lane miles is considerably greater than that of rural highways. The large amount of VMT on these affected segments is also noticeable, most prominently for state-significant facilities in urban areas, which account for 76% of all traffic on currently deficient highways.

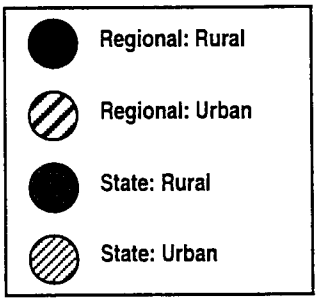
Exhibit 11-5 presents similar information for highway deficiencies projected for 2012. By comparing the two graphs, rural highways can be observed to account for a much higher proportion of highway deficiencies in the future than is the case today. This is somewhat paradoxical given that new growth is intended to be focused in urban areas. Part of the reason for this situation is the relative prominence of two-lane highways in rural areas. As noted in the chart above, LOS C is reached on these roads when traffic volume is just 35% of capacity. The resulting forecast of deficiencies is very sensitive to small changes in traffic.

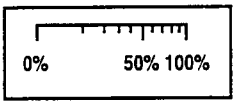
A sensitivity analysis of lane-mile deficiencies to the LOS performance standards was performed to determine the effect of two alternative policies: (1) equivalence between urban and rural LOS; and (2) a one-step reduction in the LOS for both urban and rural highways, taking urban highways to LOS E and rural highways to LOS D. The results are presented in Exhibit 11-6.

[1] These V/C ratios were taken from *Statewide Transportation Systems Plan Draft Technical Report: Documentation of Computing Volume-to-Capacity Ratios and Travel Forecasts*, May, 1993, TRIP Division.

Exhibit 11-4
Summary of Existing Deficiencies (1990) on State Highways







The size of the circle denotes each class' share of statewide VMT on deficient segments of the highway system.

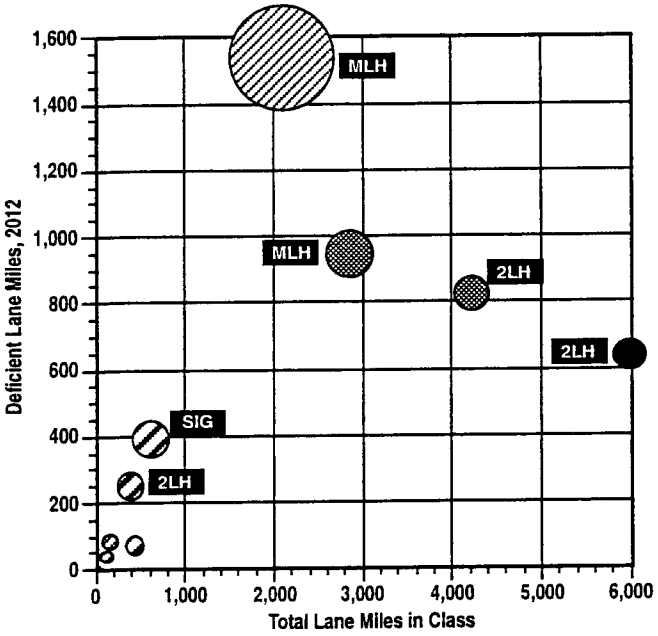
Facility Type:

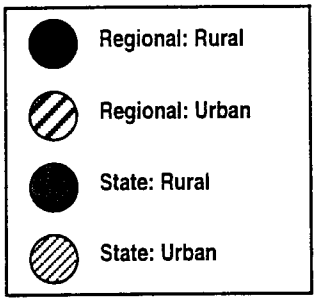
MLH – multi-lane highway
2LH – two-lane highway
SIG – signalized highway

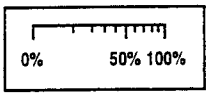
deficiencies are based L-O-S "D" for urban growth areas (UGAs) and L-O-S "C" for non-UGAs

Source: Highway segment data (approx. 3400 segments) provided by WSDOT. Interpretation and summarization by Porter & Associates, Inc.

Exhibit 11-5
Summary of Projected Deficiencies (2012) on State Highways







The size of the circle denotes each class' share of statewide VMT on deficient segments of the highway system.

Facility Type:

MLH – multi-lane highway
2LH – two-lane highway
SIG – signalized highway

deficiencies are based L-O-S "D" for urban growth areas (UGAs) and L-O-S "C" for non-UGAs

Source: Highway segment data (approx. 3400 segments) provided by WSDOT. Interpretation and summarization by Porter & Associates, Inc.

Exhibit 11-6
Sensitivity of Deficiencies to Changes in LOS

	Baseline Deficiency	Set Rural Highways to LOS D		Set Urban Highways to LOS E, Rural Highways to LOS D	
Component	Miles	Miles	% reduction	Miles	% reduction
State-significant highways					
Urban	1,703	1,703	0.0%	1,546	9.2%
Rural	1,781	698	60.8%	698	60.8%
total	3,484	2,401	31.1%	2,244	35.6%
Regionally significant highways					
Urban	694	694	0.0%	618	11.0%
Rural	649	189	70.9%	189	70.9%
total	1,343	883	34.3%	807	39.9%
Total	4,827	3,284	32.0%	3,051	36.8%

Source: Compiled from WSDOT highway segment by Porter & Associates, Inc.

Rural highways are much more sensitive to a change in performance standards than urban highways. A 32% reduction in deficient lane miles was achieved by reducing rural LOS to D from C, indicating that a large number of rural highway segments are at the margin. In contrast, lowering the urban LOS to E produced only an additional 6% reduction in deficient lane miles. Accordingly, congestion problems are much more severe on urban highways than is projected for rural highways.

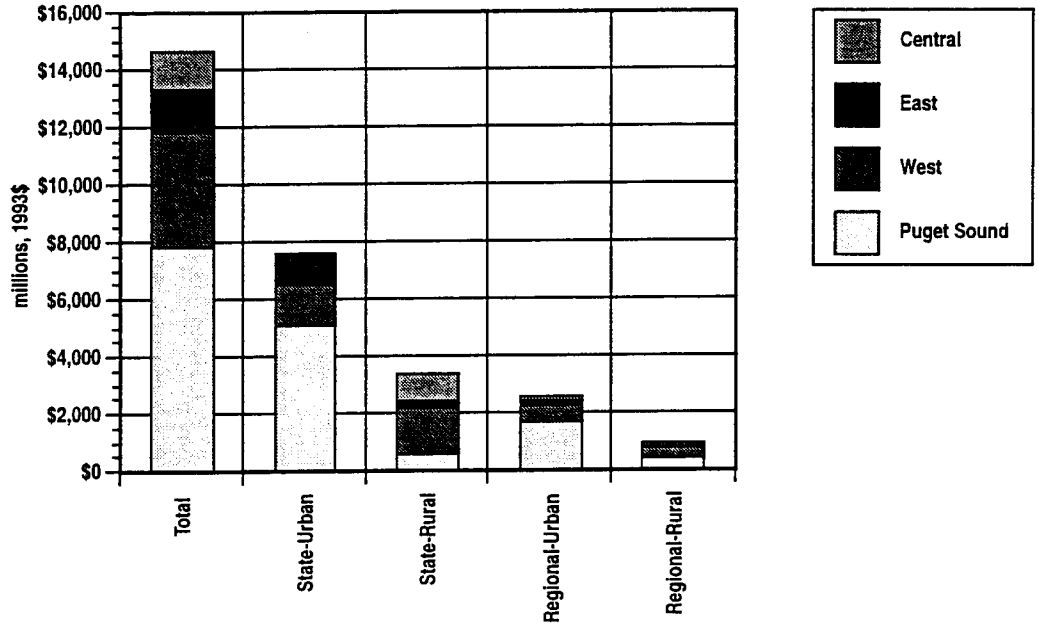
Mobility Program Needs

The complete Mobility program for state highways totals approximately $14.65 billion over a 20-year period. The program's distribution of project cost by classes of the state/regional highway system, and geographic regions within the state, are presented below.

Program Needs by State/Regional Class

The overall Mobility program needs are summarized in Exhibit 11-7 with respect to the state-regional highway classification system, and the portions of this system lying within four large

Exhibit 11-7
Mobility Program by State/Regional Highways and Region



Puget Sound	$7,856	$5,110	$569	$1,748	$429
West	$4,021	$1,394	$1,646	$581	$400
East	$1,437	$1,054	$238	$113	$31
Central	$1,336	$93	$956	$147	$141

Source: Compiled from WSDOT Mobility Program database by Porter & Associates, Inc.

regions in the state. Approximately 70% of the Mobility program costs are attributed to urban highways, with 52% associated with highways of state significance and 18% associated with regionally significant highways. The remaining 30% belongs to rural highways, with 23% going to state-significant highways and 7% going to regionally significant highways. Among the regions, the central Puget Sound accounts for the greatest share (54%). The shares of the remaining regions are as follows: west 27%; east 10%; and central 9%.

Backlog and Future Deficiencies

The mobility projects included in the Multimodal Plan were differentiated according to whether an improvement was needed to address an existing deficiency (referred to as a backlog) or a future deficiency. The cost of these two types of projects are summarized in Exhibit 11-8 for the state-regional classification system.

Approximately 72% of mobility project costs are attributed to existing deficiencies. The ratio of backlog to future deficiencies is highest for the state-urban portion of the system, at 4.4 to 1. It is lowest for the regional-rural system (0.7 to 1) with the other two components falling about midway in between. This emphasizes the relative priority of major urban projects.

The deficiencies are summarized by region in Exhibit 11-9. The central Puget Sound accounts for about 60% of backlog deficiencies, and is followed by the west (24%), east (9%), and central (7%). Both the Puget Sound and western Washington regions account for a higher percentage of the backlog than of the overall program.

Mobility Program Effectiveness and Equity

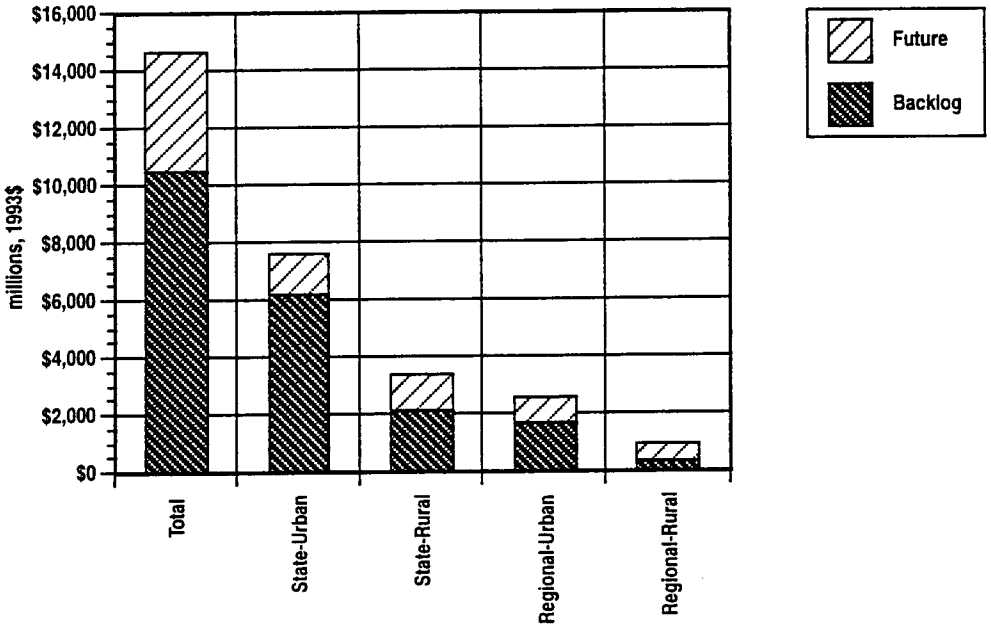
A comparison of the Mobility program components with various measures of highway system deficiency finds that the projected expenditures closely match the pattern of deficiencies. Further, the distribution of program costs on a per capita basis is remarkably consistent across the major regions within the state. Both analyses are presented below.

Comparison to Measures of Deficiency

The percentage of mobility cost attributed to the four classes of the state-regional system is compared in Exhibit 11-10 to two current and future measures of deficiency: lane miles and VMT. Both of these statistics are only counted for deficient segments of the highway system.

The exhibit indicates a general positive relationship between the extent of deficiencies and Mobility program cost, and appears to strike a reasonable balance among the facility classes. Within the state-significant system, the share of mobility costs falls in the middle of the range of the deficiencies. The share of costs is higher than the share of deficient lane miles for state-urban facilities, probably reflecting the higher unit cost of improvements to these facilities. Costs are lower than lane-mile deficiencies for the state-rural system, probably reflecting that

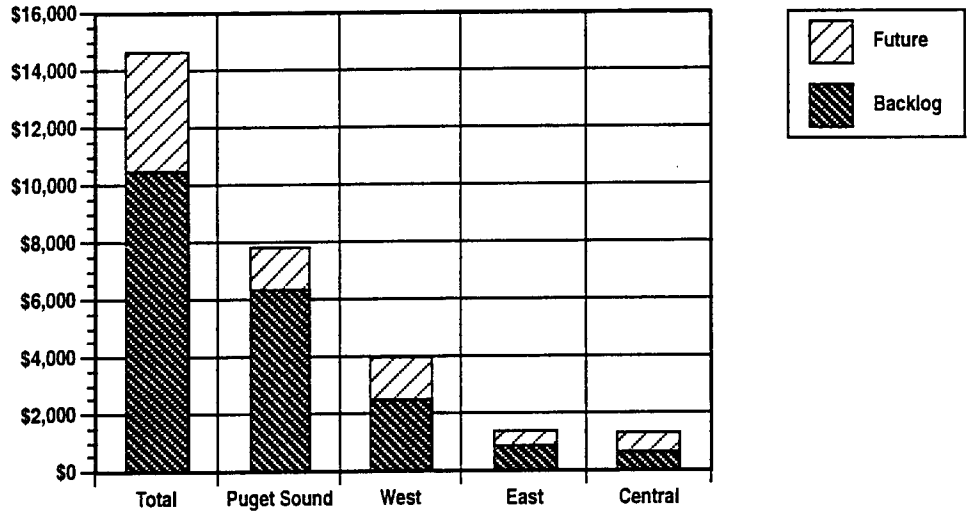
Exhibit 11-8
Backlog and Future Deficiencies Addressed by the Mobility Program



Backlog	$10,492	$6,244	$2,129	$1,721	$398
Future	$4,158	$1,407	$1,280	$867	$604

Source: Compiled from WSDOT Mobility Program database by Porter & Associates, Inc.

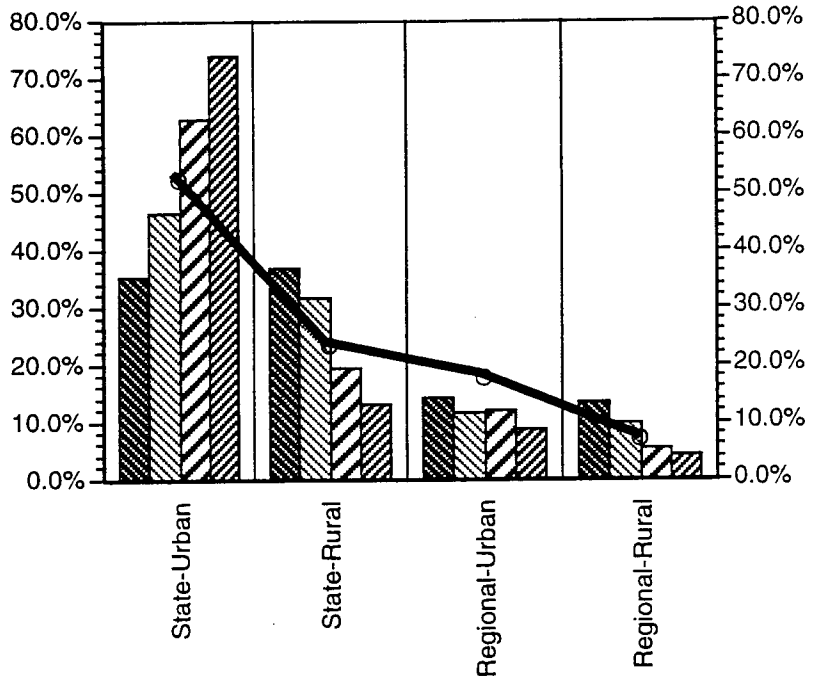
Exhibit 11-9
Backlog and Future Mobility Deficiencies by Region



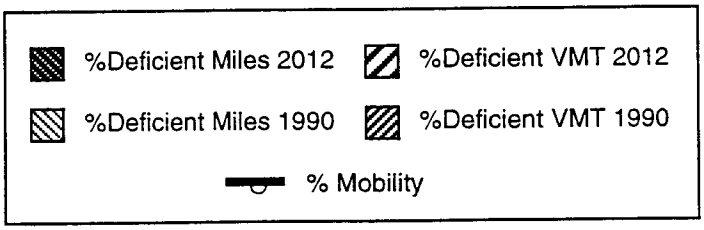
	Total	Puget Sound	West	East	Central
Backlog	$10,492	$6,361	$2,541	$884	$706
Future	$4,158	$1,495	$1,480	$553	$630

Source: Compiled from WSDOT Mobility Program database by Poter & Associates, Inc.

Exhibit 11-10
Mobility Program Allocations Compared to Measures of Deficiency



%Deficient Miles 2012	35.3%	36.9%	14.4%	13.4%
%Deficient Miles 1990	46.7%	31.8%	11.6%	9.8%
%Deficient VMT 2012	63.0%	19.4%	12.2%	5.4%
%Deficient VMT 1990	73.8%	13.1%	8.8%	4.3%
% Mobility	52.2%	23.3%	17.7%	6.8%



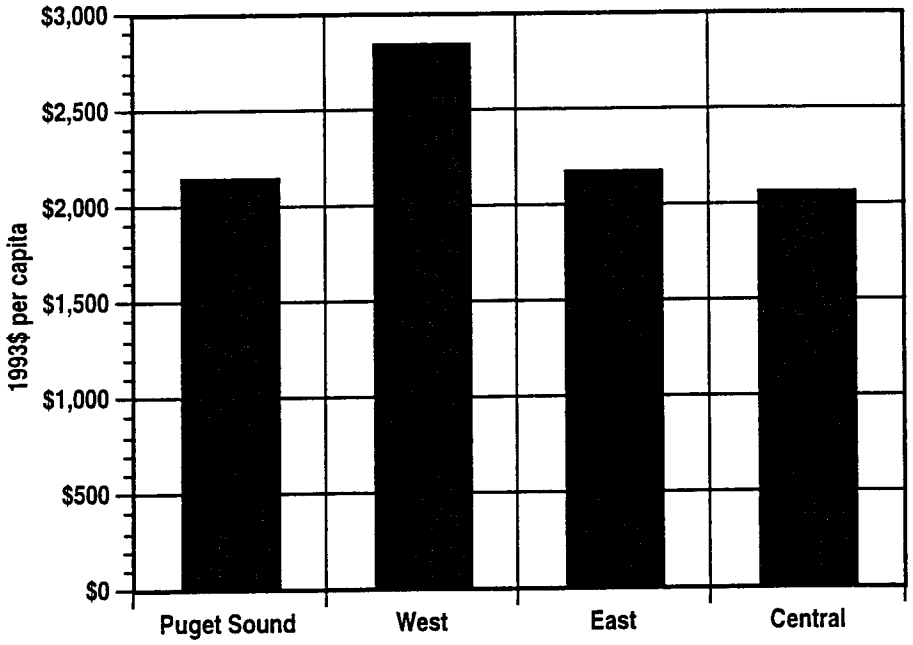
Source: Deficient lane-mile, deficient VMT, and Mobility Program allocations estimated by Porter & Associates, Inc. from WSDOT source data.

system's lower costs for improvements. For regionally significant facilities, the urban system appears to receive proportionately greater emphasis than the rural system.

Per Capita Distribution of Mobility Needs by Region

The Mobility program achieves a surprisingly even distribution of program costs per capita. This is summarized by region in Exhibit 11-11. The statewide average cost per capita, using the 2012 population projections, is approximately $2,300. The Puget Sound, eastern Washington, and central Washington regions tally a per capita figure just below the state average. Western Washington is the net recipient, at about $2,850 per capita. This range of difference is inconsequential. None of the regions suffer or gain tremendously relative to the others. This calculation, however, is based solely on the full Mobility program. If costs which are more mileage-dependent were taken into account, such as maintenance and preservation, the regions having relatively less mileage would see a reduction in the per capita distribution.

Exhibit 11-11
Per Capita Shares of Mobility Program by Region
(based on 2012 population projections)



Source: Per capita values estimated by Porter & Associates, Inc. from WSDOT source data, and from OFM population projections by county.

SECTION 12
PROGRAMMING AND PRIORITIZATION AND LEVEL OF SERVICE DEFICIENCIES

TABLE OF CONTENTS

Exhibits

SECTION 12
PROGRAMMING AND PRIORITIZATION AND LEVEL OF SERVICE DEFICIENCIES

Introduction

Programming and prioritization of highway construction projects is determined by two separate but integrated steps of WSDOT's project implementation process: the selection of projects in the *financially constrained Multimodal Plan*, and the programming of these projects for the biennial transportation budget, as exercised by the *Priority Programming System (PPS)*. Of these, the priorities set forth in the Multimodal Plan have the most controlling influence, since these priorities determine the funding available to each program. Because the Multimodal Plan and the PPS use considerably different methodologies for project selection, the projects ultimately receiving funding may not occur in the same order as anticipated in the Multimodal Plan.

The remainder of this section describes the project selection process of the Multimodal Plan and the PPS, and discusses the implications of their differences.

Financially Constrained Multimodal Plan

The Multimodal Plan, which is the state's 20-year plan for transportation improvements, establishes the framework within which construction priorities will be determined for each biennium. The subset of construction projects most relevant to the biennial programming and prioritization system are the mobility projects. The need for these projects is conditioned on a level of service (LOS) deficiency. The Multimodal Plan provides a general project description for the segments of the state highway system having an LOS deficiency. Only those mobility projects that have been defined in the Multimodal Plan, however general that description may be, are eligible for consideration in the PPS. This planning process for the Multimodal Plan and its results were described in Section 11.

In addition to identifying the projects that address LOS deficiencies, the Multimodal Plan established priorities for transportation expenditures subject to the constraints of a trend line revenue forecast. The resulting categorization of expenditures is known as the *financially constrained* Multimodal Plan. Whereas the full Multimodal Plan for highway expenditures totaled $27 billion, the financially constrained plan totals $18.07 billion. Exhibit 12-1 summarizes the expenditure priorities identified in the April 1994 version of the plan.

The Mobility program absorbed all the reduction in costs between the unconstrained and financially constrained versions of the Multimodal Plan. The financially constrained Mobility program is $6.73 billion, a 57% reduction relative to the unconstrained program.

Exhibit 12-1
Multimodal Plan Priorities

Program Component	Unconstrained Plan	Financially Constrained Plan
Maintenance	$2.55 B	$2.55 B
Transportation Systems Management	$0.61 B	$0.61 B
Preservation	$4.00 B	$4.00 B
Safety	$2.00 B	$2.00 B
Economic Initiatives	$1.49 B	$1.49 B
Environmental Retrofit	$0.79 B	$0.79 B
Mobility	$15.52 B	$6.73 B
Total	$26.96 B	$18.07 B

Source: WSDOT, Statewide Multimodal Transportation Plan - State Owned Component, Interim Final Plan, April 1994

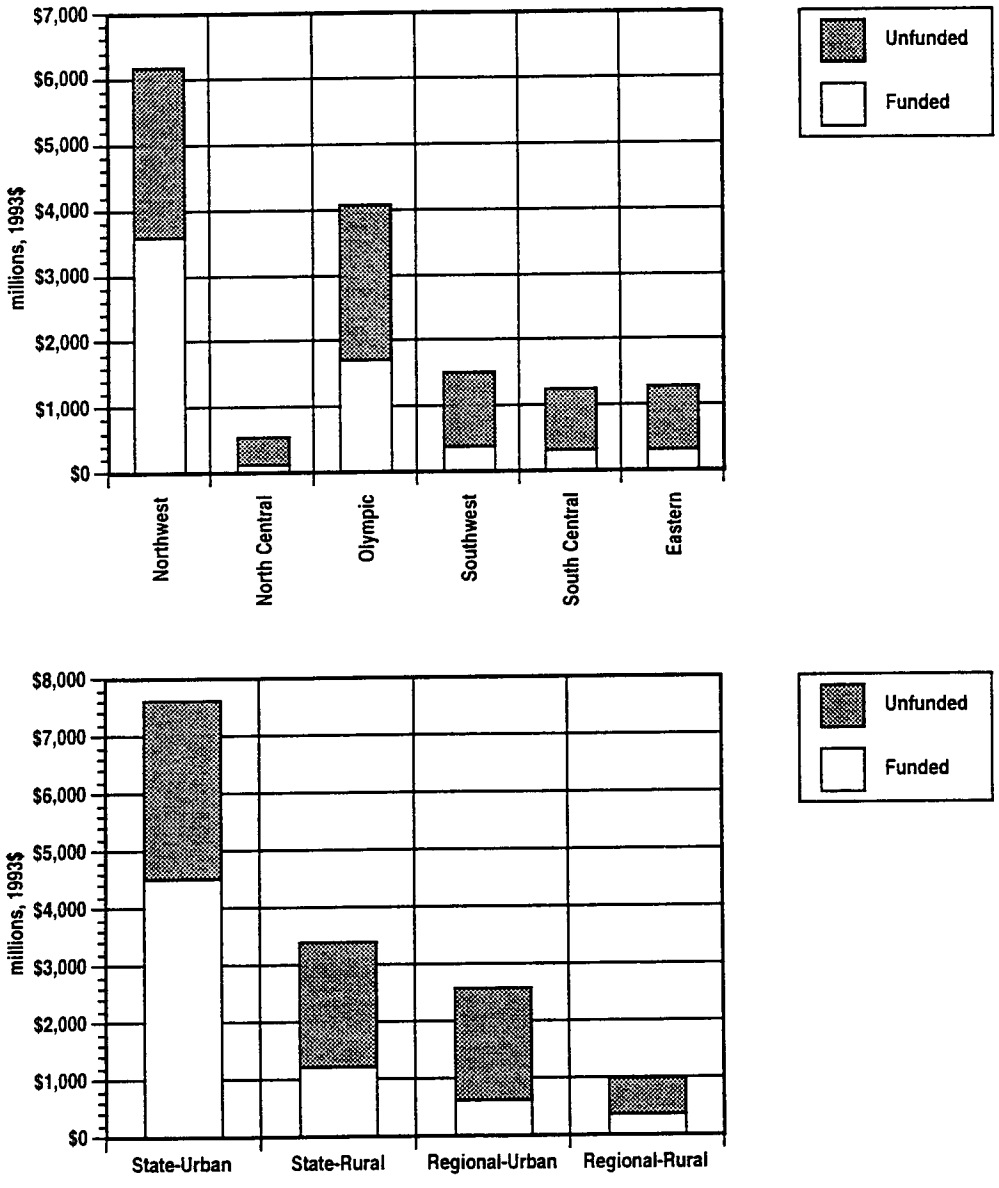
In order to define the projects that would be included in the financially constrained Mobility program, WSDOT developed the following scheme for allocating the $6.73 billion plan budget:

- The Puget Sound Core Freeway HOV Lane System was fully funded ($2.11 billion).
- Urban and rural programs were separated, so these areas of the state would not compete for state highway funds.
- Seventy-five percent of the remaining urban program and 75% of the rural program were allocated to each WSDOT region, based on that region's share of the state total urban or rural program in the unconstrained Mobility program, after deducting the Core HOV Lanes above.
- Twenty-five percent of the remaining urban program and 25% of the rural program were allocated to WSDOT regions based on a "worst-first" statewide ranking of projects, within the urban and rural categories.

The selection of projects within each WSDOT region was based on a mobility ranking that took into account the following factors: (1) peak hour and daily traffic; (2) average vehicle occupancy; (3) projected and desired volume-to-capacity ratios; and (4) percentage of truck traffic. This ranking index resulted in a scale ranging from 130 to 1, with higher scores indicating relatively higher levels of deficiency.

The results of this process are presented in Exhibit 12-2.

Exhibit 12-2:
Funded and Unfunded Components of the Financially-Constrained Mobility Program



Source: Funded and unfunded amounts by WSDOT region from Multimodal Transportation Plan, Interim Final Plan, April, 1994. Funded and unfunded amounts by state-regional highway classification system estimated by Porter & Associates, Inc. from WSDOT Mobility Program database.

The program reductions were spread across all WSDOT regions and classifications of the highway system, the latter presented according to the statewide-regional significance classification system described in Section 13 of this report. Overall, the reductions tended to favor the state-significant highways in urban areas. With respect to WSDOT regions (top graph), the Northwest region and the Olympic region retained relatively more of their programs than the other four regions. This reflects the construction cost of the Puget Sound Core HOV Lanes, and the relatively more intense congestion that exists in these regions which was emphasized by the mobility ranking noted above. However, the ranking scheme also produced a disproportionately large reduction in the regional-urban component of the highway system. This will be a concern if the state decides to include these highways in concurrency requirements of local comprehensive plans.

Priority Programming System

The Priority Programming System (PPS) has been developed over the last several years in an attempt to allow a systematic evaluation of the relative priority of new construction projects. The design of the PPS takes direction from RCW 47.05:

> *It is the intent of the legislature that investment of state transportation funds to address deficiencies on the state highway system be based on a policy of priority programming having as its basis the rational selection of projects and services according to factual need and an evaluation of life-cycle costs and benefits which are systematically scheduled to carry out defined objectives within available revenue.*

The process for applying the PPS starts with the identification of Mobility projects in the Multimodal Plan, as described above. In preparation for the biennial transportation budget, the Programs Division requests each WSDOT region to submit projects for ranking. The regions prepare a detailed description of the projects, in response to the criteria used to develop the ranking.

Project rankings are based on the following criteria: (1) cost efficiency, based on the net present value of a project's costs and benefits, weighted at 65%; (2) community support, based on a variety of measures of community support or opposition, weighted at 14%; (3) environmental performance, which measures the project's effect on wetlands, water quality, and noise, weighted at 8%; (4) mode integration, which measures a project's support of linkages among modes of passenger and freight conveyance, weighted at 7%; and (5) land use, which measures the relative value of a project to accomplishing implementation of local comprehensive plans, weighted at 6%. Each project has a maximum score of 100 points.

Project selection is based on four categories of projects, following the scheme used in the Multimodal Plan to allocate the Mobility program funds. The role of the PPS is primarily to

provide relative rankings of projects within each district, with statewide project rankings being somewhat less influential on project selection. The role of the PPS within each category is as follows:

- **Urban projects** - Statewide funding for these projects is based on the urban project share (63%) of 75% of Mobility program funds remaining after other commitments (e.g., the Puget Sound Core HOV Lane system) have been met. Funding for each region is based on each region's share of the urban program, as identified in the Multimodal Plan. Project selection is then based on the PPS score for urban projects within that region. Projects are selected in order until the funding constraint is reached. If a project at the border is too large to meet the constraint, lower ranked projects of lower cost may be selected. Local jurisdictions can also increase a project's ranking by contributing other sources of funds.

- **Rural program** - The process for selecting projects for the rural program is identical to that for the urban program. The rural program, however, receives approximately 37% of the 75% of Mobility program funds remaining after other commitments (e.g., the Puget Sound Core HOV Lane system) have been met.

- **"Worst-first" urban projects** - Statewide funding for these projects is based on the urban project share (63%) of 25% of Mobility program funds remaining after other commitments (e.g., the Puget Sound Core HOV Lane system) have been met. Unlike the above two categories, however, project selection is based on *statewide* rankings of Mobility projects.

- **"Worst-first" rural projects** - The process for selecting projects for the rural program "worst-first" program is identical to that for the urban "worst-first" program. The rural program, however, receives approximately 37% of the 25% of Mobility program funds remaining after other commitments (e.g., the Puget Sound Core HOV Lane system) have been met.

Project selection for the 95-97 biennium is the first application of the PPS. These results have only recently been released and have not been reviewed in detail in this study. The relative importance of the PPS in project selection is, however, relatively small today. Not only is the categorization of projects a greater determinant of where the funds will be spent, but the amount of funds available for new projects in the 95-97 biennium is inconsequential. All but approximately $30 million of budgeted mobility expenditures are allocated to carryover projects from the current biennium. New projects are being identified for design only - not for construction.

Assessment of the Integration of the Multimodal Plan and the PPS

The Multimodal Plan and the PPS rely on two very different methods for project selection. The Multimodal Plan used a mobility ranking that emphasized deficiencies, weighted for traffic flow (though not restricted to vehicular flow), without regard to project costs. The PPS is influenced primarily by a project's net present value of costs and benefits, with capital costs being assigned a 4% real cost of money (or discount rate). Although a detailed analysis of the relative rankings produced by these two systems has not been performed, the PPS potentially will yield a lower ranking for projects on severely deficient highways, because these typically require a high capital cost solution. The benefits produced by such a project would have to be significant enough to overcome the discounted annual capital cost. A likely result is that lower cost highway improvements in developing urban areas, realizing a high rate of traffic growth, would rank higher than projects on the Interstate system or principal arterial system where the rate of traffic growth is more modest (though in absolute terms still considerable) and the capital costs are considerably larger.

The most distinguishing feature of the PPS is its use of net present value (NPV) – a widely accepted approach for valuing projects of different scales and costs. The interpretation of NPV results, however, is most valuable when one is considering alternative projects that attempt to solve the same problem. NPV is less useful when comparing many different types of projects, each of which has a different intended use.

The stratification of Mobility projects by the four categories described above is an indirect way of adjusting for spurious results that can be produced by the NPV method. Urban and rural projects, for example, are very different by nature. Likewise, urban projects in central Puget Sound have a different character than urban projects in central Washington.

In summary, the PPS presents a rational basis for project selection, within a given category and geography of projects. If the state decides to implement the state-regional highway classification system described in Section 13, the PPS should continue to be applied to projects on state-significant highways. For projects on regionally significant highways, however, local priorities for community acceptance and integration with land use plans should predominate over the NPV approach, for the reasons cited above.

SECTION 13
STATE FACILITY
FUNCTIONAL CLASSIFICATION

TABLE OF CONTENTS

Exhibits

SECTION 13
STATE FACILITY
FUNCTIONAL CLASSIFICATION

Introduction and Purpose

A major question posed by this study is how local and regional comprehensive plans under the Growth Management Act address concurrency and level of service on state transportation facilities. The answer to this question depends upon the role and function of the particular state facilities being examined. After much discussion, the Steering Committee agreed that there are some state facilities that are of *statewide* importance, where the level of service and improvements required to meet concurrency are primarily the responsibility of the state. There are also state facilities that have more *regional* significance, in that they accommodate some degree of local traffic and are key elements in local transportation plans.

The purpose of this section is to provide background information regarding the framework and draft criteria used to assign state transportation facilities into either statewide significance or regional significance. This section will also present a preliminary map of facilities and their classification. The recommended classification process is described in the study recommendations section.

Current State Classification Systems

Background

To identify a system of state facilities that will distinguish statewide and regional significance, the consultant team first reviewed current classification systems used in Washington. The systems reviewed included the following:

- Functional Classification System from the 1960's-- which identified a hierarchy of highways for purposes of design standards and funding priority
- National Highway System-- a congressionally mandated system of highways that serve the nation
- Trunk and Branch System-- developed by WSDOT initially to identify which facilities served a statewide purpose (never adopted)
- Master Plan of Limited Access Facilities-- also from the 1960's, which established routes where right of access was to be purchased by the state and access restricted to interchanges
- Level of Development-- a system from the 1980's to set engineering standards for design and maintenance.
- Access Classification System (1992)-- which set criteria for permitting access on all "controlled access" state facilities (other than limited access facilities)
- State Transportation Plan-- a long range plan to meet the requirements of ISTEA.

The basis for most classification systems is the functional classification system. This system distinguishes a hierarchy of transportation facilities and is typically depicted as a function of both access control and movement or, more recently, access and mobility. In general, accommodation of through traffic or through movement is inversely proportional to the amount of local access (refer to Section 8). Higher classifications of roadways have access restricted to controlled interchanges. These interchanges are metered in some cases to increase through movements. Lower roadway classifications primarily serve local access such as cul-de-sacs.

Description of Systems

The relevant classification systems are described in detail below:

Federal Functional Classification System

The USDOT has developed a functional classification of highways with the following components:

- Interstate (Major Federal Funds and High Design Criteria)
- Principal Arterial
- Minor Arterial
- Collector Arterial

All highways are classified as urban and rural with the urban-rural boundary set every ten years based on census data. Note that this boundary is similar to but not identical to the urban growth boundary specified under GMA.

Interstate Highways are those selected by the state and the FHWA under terms of the Federal Aid Acts as being the most important to the development of a national system. They are also generally the highways most important to the welfare of the nation and the states.

The laws of the State of Washington (RCW 47.05.021) support the federal classification system and provide that:

The Department of Transportation is hereby directed to conduct periodic analyses of the entire state highway system, report thereon to the legislature biennially and based thereon, to subdivide, classify, and sub-classify according to their function and importance all designated state highways and those added from time to time and periodically review and revise the classifications, except those highways designated as part of the nation system of interstate and defense highways, into the following three functional classes:

The ***Principal Arterial*** *system shall consist of a connected network of rural arterial routes with appropriate extensions into and through urban areas, included all routes designated as part of*

the interstate system, which serve corridor movements having travel characteristics indicative of substantial statewide and interstate travel;

*The **Minor Arterial** system shall, in conjunction with the principal arterial system, form a rural network of arterial routes linking cities and other activities centers which generate long distance travel, and, with appropriate extensions into and through urban areas, form an integrated network providing interstate and inter-regional service; and*

*The **Collector System** shall consist of routes which primarily serve the more important inter county, intracounty, and intraurban travel corridors, collect traffic from the system of local access roads and convey it to the arterial system, and on which, regardless of traffic volume, the predominant travel distances are shorter than on arterial routes.*

*Those state highways that perform no arterial or collector function, which serve only local access functions, and which lack essential state highway characteristics shall be designated **"Local Access" Highways**.*

The system of state transportation facilities is reviewed regularly. Most recently, the **Road Jurisdiction Study** (RCW 47.17) identified additions, deletions, and changes to classifications.

Funding

Prior to the Intermodal Surface Transportation Efficiency Act (ISTEA), funding for this system was based on the following categories:

- Federal Aid Primary (FAP)
- Federal Aid Secondary (FAS)
- Federal Aid Urban System (FAUS)
- Rural Route Primary (RRP)
- Rural Route Grade Crossing
- Hazard Elimination Safety (HES)

After ISTEA funding was determined based on the following funding categories:

- National Highway System (NHS)
- Surface Transportation Program (STP)
- Congestion Mitigation and Air Quality (CMAQ)
- Demonstration Projects

National Highway System

The *National Highway System* is a system of highways with national importance, which includes all of the interstates, strategic defense highways, and congressional high priority

routes. Mileage targets were assigned to assist in the development of the system. The *Trunk and Branch* system was developed by WSDOT to identify routes of statewide significance and was used to establish the State of Washington's portion of the National Highway System. This system is used internally within WSDOT but has not been formally adopted.

Master Plan Of Limited Access Highways

This system of highway classifications designates those facilities from or to which owners, occupants or other persons have no right or limited rights of access. The state established a plan (1988) for the eventual purchase of access on these routes. The plan includes provisions for full and partial access (both established and planned), and a process for the facility to "move-up" in classification as access is acquired. The State Transportation Plan identifies $100,000,000 for purchasing access over the next twenty years.

Access Classification System

This system of highway classifications is intended to distinguish locations of allowable access on all state facilities. It was established as a result of RCW 47.50. The classifications are rated on a scale of 1 to 5, as follows:

1 High speed, high volume, long trips serving interstate, interregional and intercity travel. Service to abutting land is subordinate to service of major traffic movements.

2 Medium to high speeds, medium to high volumes, medium to long trips serving interregional, intercity and intracity travel. Service to abutting land subordinate to service of traffic movement.

3 Moderate speeds, moderate volumes, short trips serving intercity , intercommunity travel. Balance between land access and mobility. Used where land use is less than maximum buildout, but development potential is high.

4 Moderate speeds, moderate volumes, short trips serving intercity, intracity and intercommunity travel. Balance between land access and mobility. Used where level of development is more intensive and major land use changes less likely.

5 Low to moderate speeds, moderate to high volumes, primarily short trips serving intracity and intracommunity travel. Service of land access dominant function.

Level Of Development Plan

This system is a classification developed to identify how design standards will be applied to transportation facilities. Typically, higher order facilities with high traffic volumes may require a higher maintenance and design standard than lower volume, lower classification facilities. There are three categories: Maintain-Only, 3 R, and Full Standards.
Many factors influence the scope of a 3-R project, including:

- Roadside conditions
- Funding constraints

- Environmental concerns
- Social/economic concerns
- Changing traffic and land use patterns
- Surfacing deterioration rate
- Accidents or accidents rates
- Right of way needs
- Ability to obtain right of way

Metropolitan Transportation System

The Puget Sound Regional Council's proposed MTS includes all of the NHS and other state principal and minor arterials, and collectors. Ferries are also included.

Establishment of Criteria

The criteria that define these classification systems vary by system. While none of the classification system criteria fully met the needs of this task, the following guidelines used to designate the federal functional classification system are particularly relevant:

- Urban population centers within and without the state stratified and ranked according to size;
- Important traffic generating economic activities including but not limited to recreation, agriculture, government, business, and industry;
- Feasibility of the route, including availability of alternative routes within and without the state;
- Directness of travel and distance between points of economic importance;
- Length of trips;
- Character and volume of traffic;
- Preferential consideration for multiple service which shall include public transportation;
- Reasonable spacing depending upon population and density; and
- System continuity.

Other useful criteria which define the National Highway System are as follows:

- Movement of Interstate Commerce and Economic Vitality
- Strategic Defense Connections
- Service to all Portions of the Nation
- Mileage Targets

Development of Preferred Classification System

Initially, the LTC Steering Committee examined a classification system with three levels of significance--statewide, regionally and mutually significant. The consultant team initially reviewed the Functional Class, Trunk and Branch and National Highway systems. The

systems were compared by layering them one on top of the other to see if there was a logical classification system or overlap of systems that could be used to establish facilities which were of statewide or regional significance. The results of this layering are shown in **Exhibit 13-1**.

As shown in **Exhibit 13-1**, some facilities do not fit neatly into one category or the other. Therefore, the committee examined the possibility of including a third category, entitled "mutually significant." This category was a useful catalyst to discuss the role of the "urban" principal arterials, since these are the facilities which often play a dual role of serving statewide and regional interests. The mutually significant classification was ultimately removed from the recommended two-level system, in order to maintain simplicity and consistency with other classification systems.

The committee was also very interested in acknowledging the key role of non-state facilities in meeting many regional needs. While not specifically part of this study, these locally owned and operated facilities should be discussed in the context of the regionally significant state facilities.

The following assumptions were used in helping to set the appropriate classifications for statewide and regionally significant facilities:

- Need explicit connection between classifications and local land use decisions
- State-owned and operated facilities only
- Utilize existing classification systems to greatest extent possible
- System must have relevance in urban and rural areas[1] of the state
- Concurrency would not be applied to facilities of "statewide" significance, but would be applied to other state facilities (subject to funding availability)
- Need for governance structure for setting performance standards (e.g., levels of service) and for establishing funding priorities within each facility classification

Exhibit 13-2 shows a range of suggested criteria for statewide, regionally, and locally significant facilities. These criteria were reviewed by a working group of local, regional, and state agencies. While not adopted by the committee as a recommendation, the criteria were acknowledged as a starting point for more in-depth negotiations by the affected jurisdictions. **Exhibits 13-3** and **13-4** illustrate the consultant team's preliminary assessment of facilities which might be classified, respectively, as statewide or regionally significant. This assessment of significance is for information only, and has not been subjected to detailed scrutiny at the local, regional, or state level.

[1] For purposes of this study, the definitions of urban and rural relate to the GMA designations of Urban Growth Areas

Exhibit 13-1
Classification of Transportation Facilities

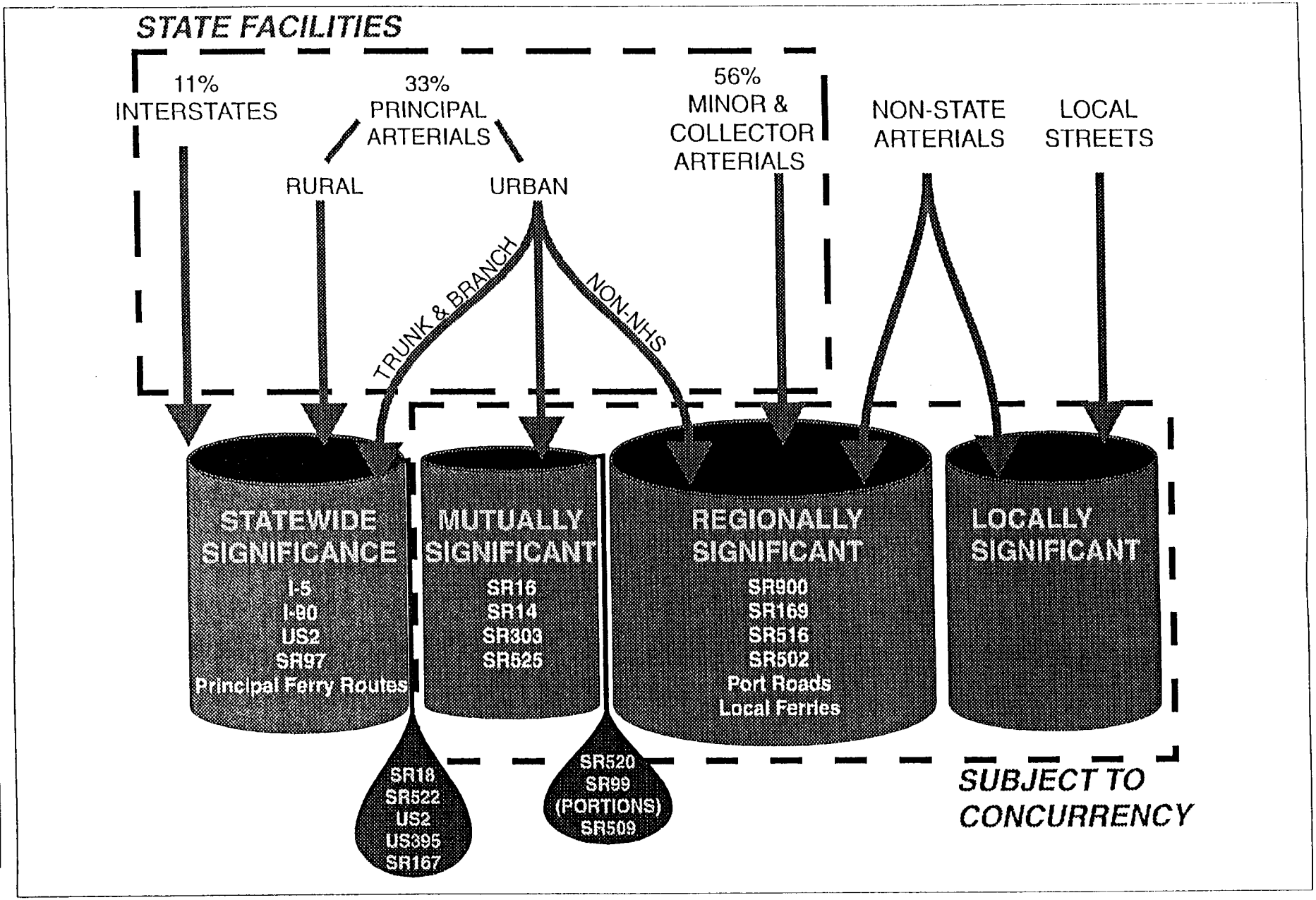


Exhibit 13-2
Suggested Criteria

	State Owned Facilities		Local Facilities
Criteria	Statewide Significance	Regionally Significant	Locally Significant
Connection of Centers	Connects Major Population Centers. Serves Statewide and Interregional Travel	Connects Major Population Centers within a Region and Serves Intraregional Travel	Serves small centers within local jurisdiction
Average Trip Length	Over 10 Miles	10 Miles or Less	6 Miles or Less
Balance of Through versus Local Travel	Mostly Long Haul Through Trips. Through Trips are Greater Than 50 %	Mostly Local Travel. Through Trips are Less than 50%	Local Trips are greater than 80 %
Movement of Freight	Serves Long Haul Truck Travel (i.e., T1 Truck Class Routes)	Serves Some Long Haul Truck Travel but Mostly Intraregional Truck Connections	Local Access Truck Use Only
Spacing with Other Routes	No Other Major State Route Serves the Same Corridor	Other Statewide Significant Routes may Serve the Corridor	Part of a Local Street Network
Degree of Access Control	High to Medium (limited access; class 1,2)	Medium (class 2,3)	Low to medium (class 4,5)
Jurisdictional Boundaries	Typically Crosses Several Jurisdictional (local, regional) Boundaries	Can cross jurisdictional lines (local, region). Generally within One or Two Counties	Typically Entirely within Local Jurisdiction (City or County)

Note: Criteria can be applied to a corridor or to individual facilities within the corridor.

Definitions:
Corridor: A combination of transportation facilities and services linking common origins and destinations.
Center: Major = 50,000 or higher population; small = less than 50,000 population.
Through Trips: Trips which have no origin or destination within the corridor. Typically trips exceeding 10 miles in length along the corridor.
Jurisdictions: Local = city or county; region = RTPO boundary.

Exhibit 13-3
Facilities of Statewide Significance

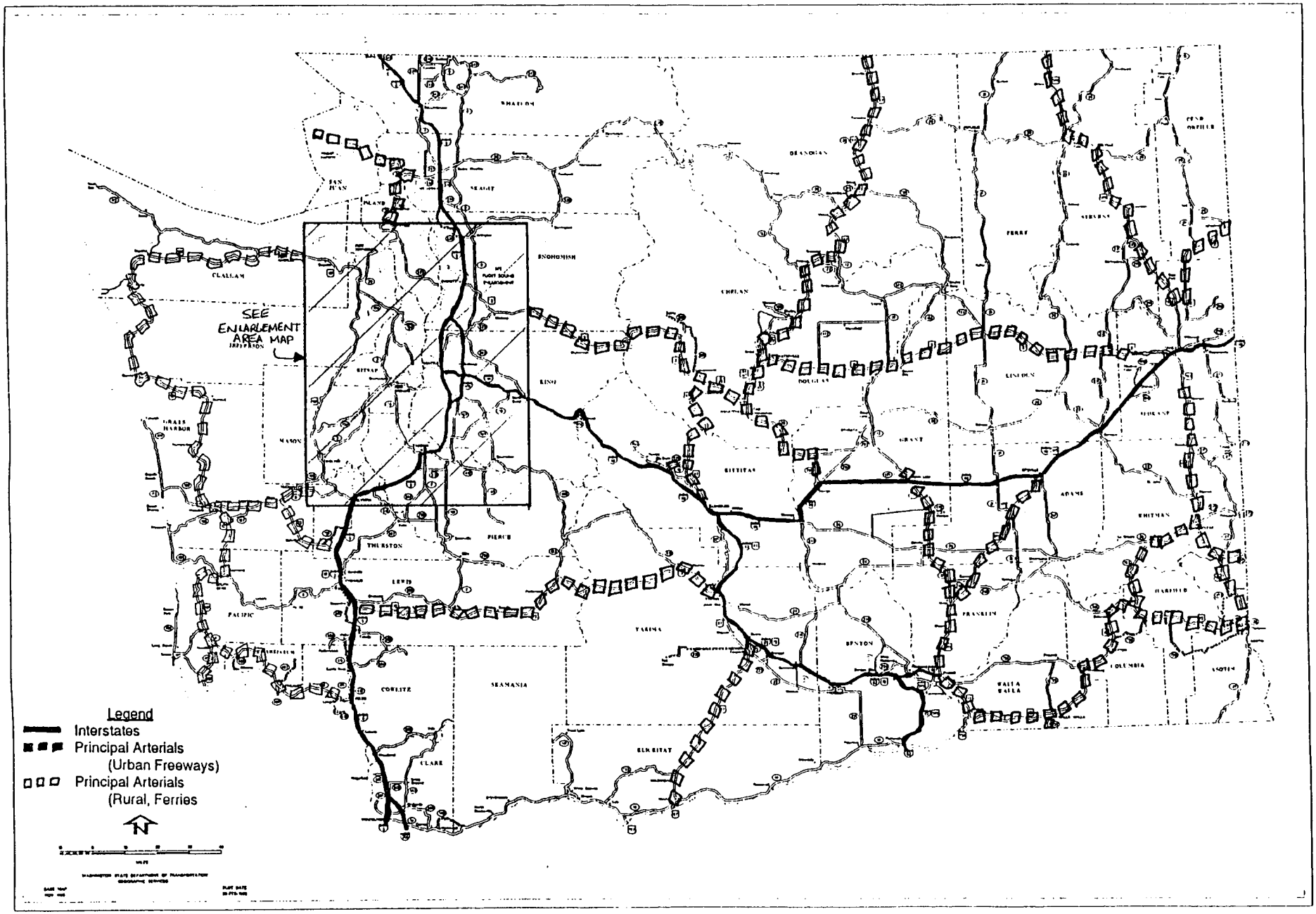


Exhibit 13-3 (cont.)
Facilities of Statewide Significance

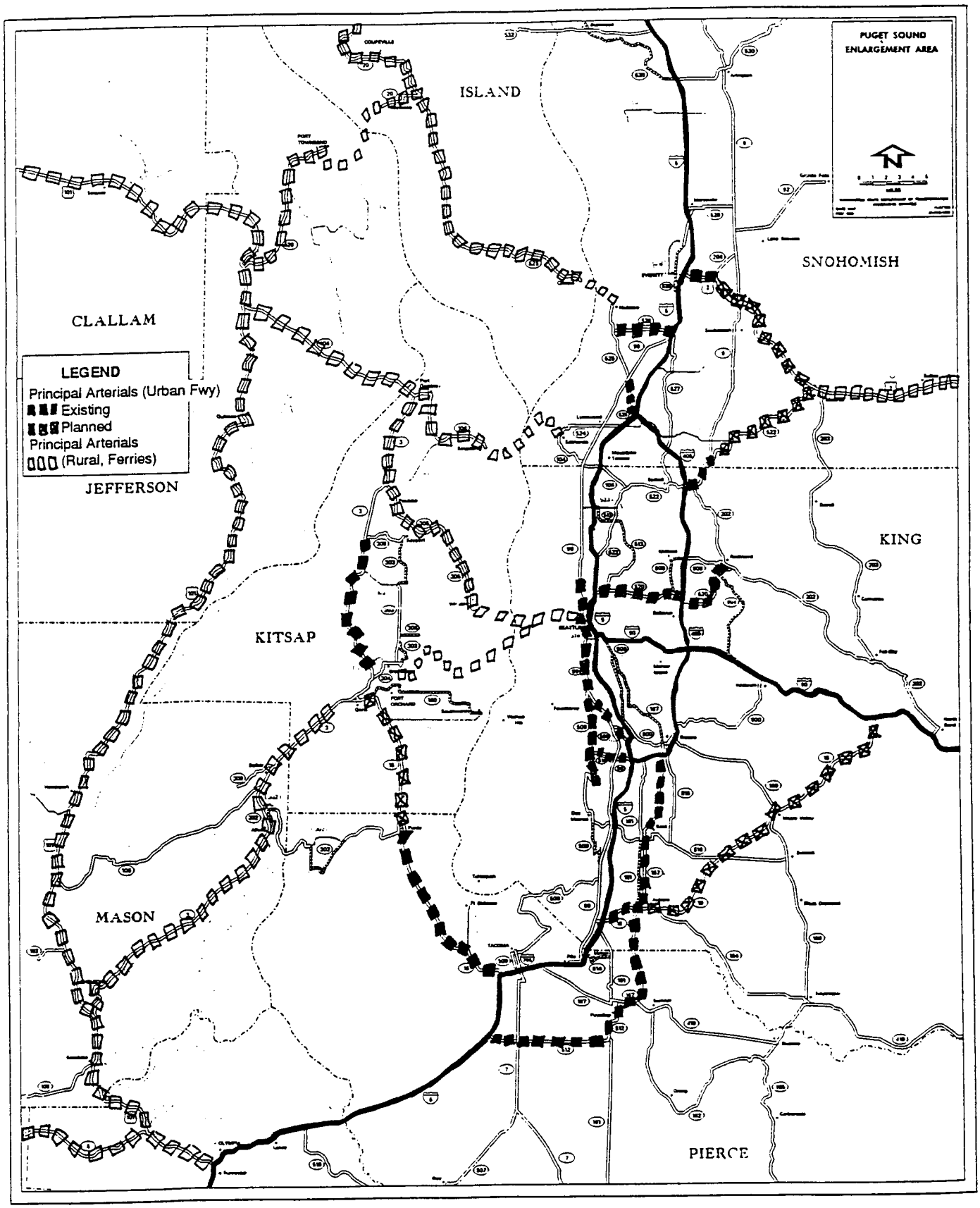


Exhibit 13-4
Facilities of Regional Significance

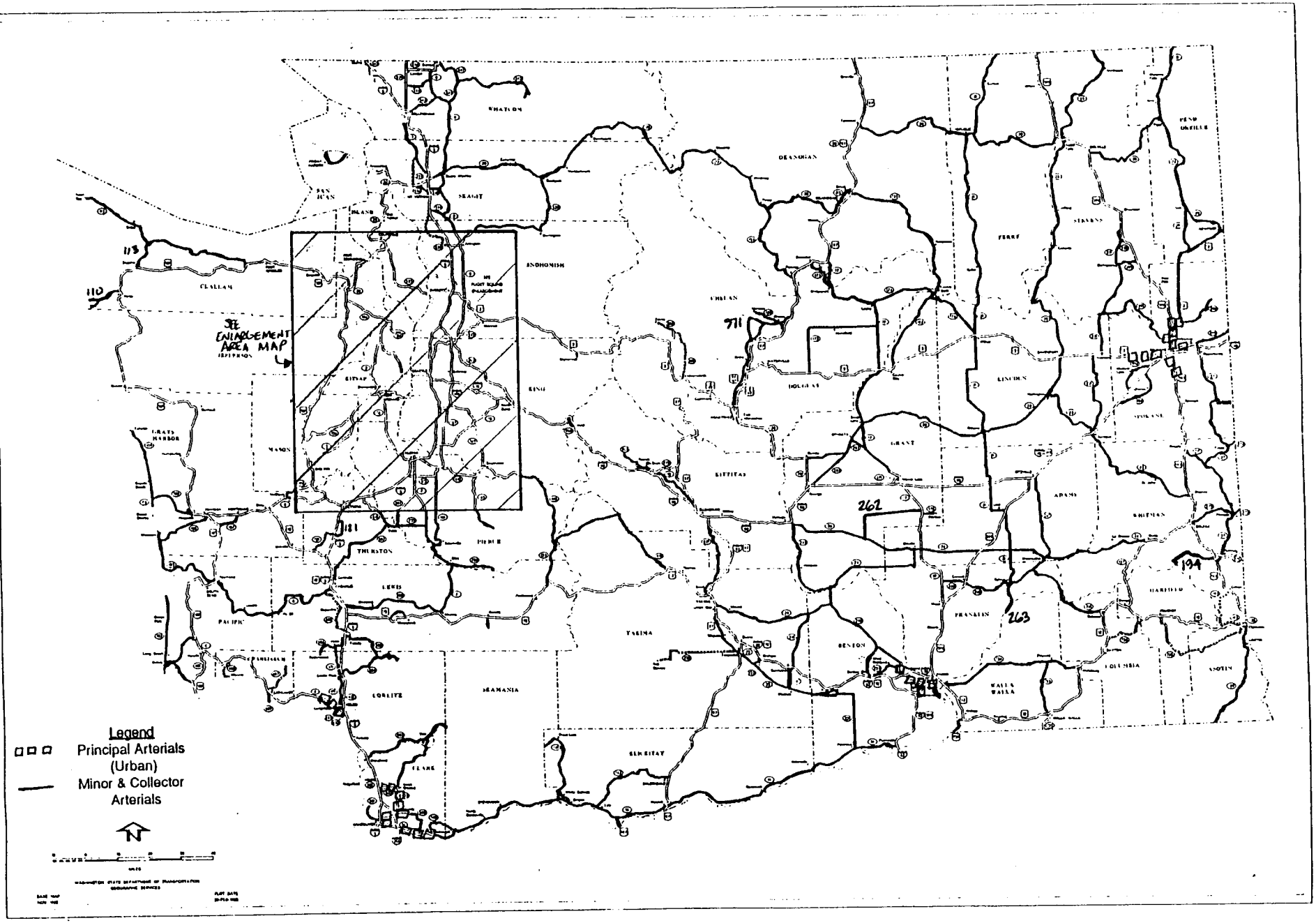
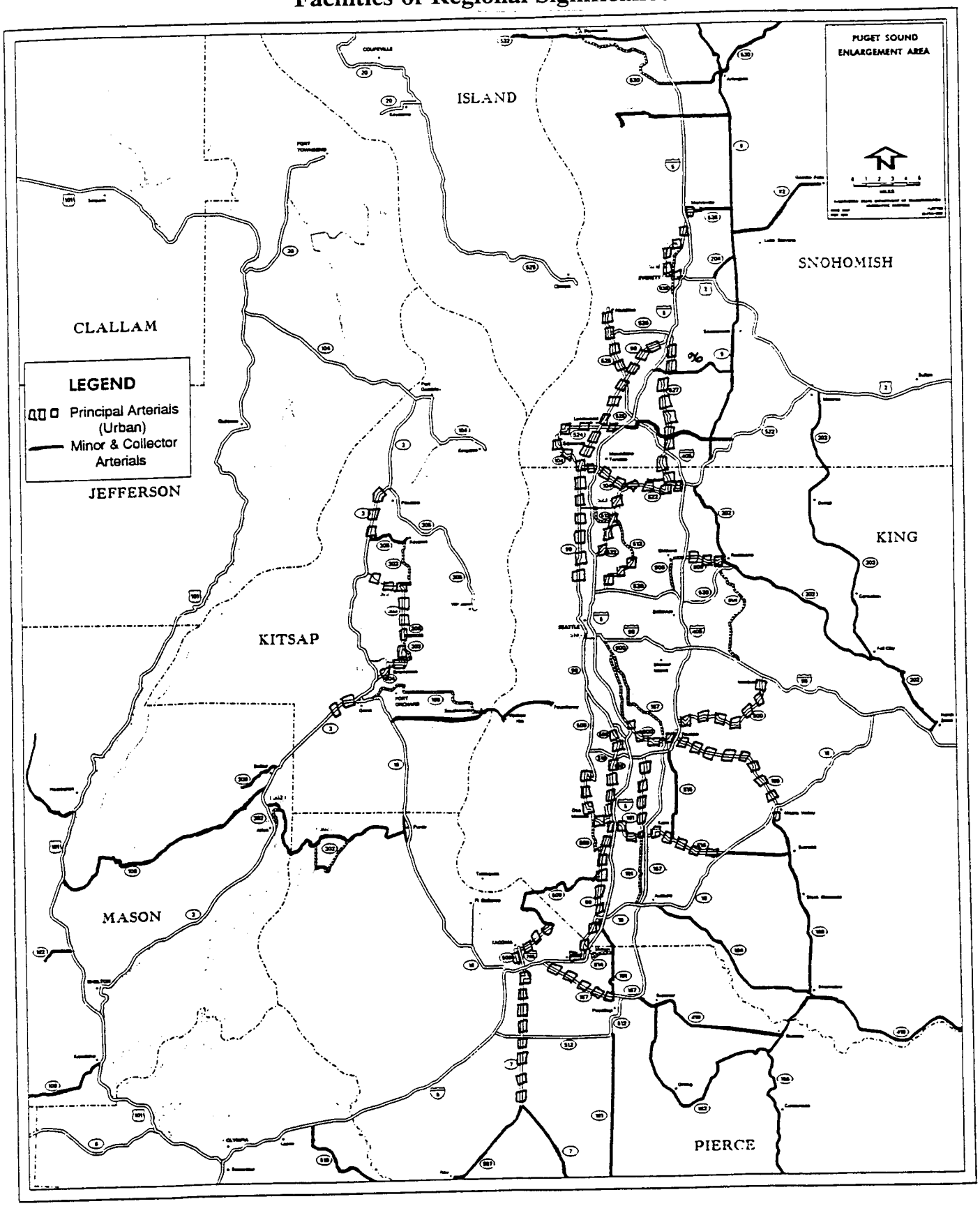


Exhibit 13-4 (cont.)
Facilities of Regional Significance



Recommended Approach

State transportation facilities should be categorized as followings:

1. Statewide Significance-- of primary interest to the state
2. Regional Significance-- of primary interest to local jurisdictions within a defined regional transportation planning area. The state will maintain an interest as defined in RCW 47.17.

The specific classification of state facilities within these two categories should be performed through a collaborative process (including state, regional, and local agencies) used to apply a set of technical and policy criteria similar to those listed in **Exhibit 13-2**. As a starting point for agency negotiation, the following facility definitions and classifications were suggested (note: all references to facility classifications relate to the adopted *Functional Classifications for Washington State Highways* (January 1993)):

Facilities Of Statewide Significance

Definition: Facilities that provide major connections between urban areas and serve "statewide" and "interstate" travel movements for various modes, including persons and goods.

Facilities which should be included (Statewide Significant):

- Interstate Highway System
- State Principal Arterials outside of urban areas[2]
- Selected state principal arterials within urban areas which serve "interregional" travel. (Interregional implies major travel movements between regions of the state)
- Ferry system connections that serve statewide travel

Facilities Of Regional Significance

Definition: Facilities which primarily serve regional travel patterns and whose operation can frequently be directly affected by local land use decisions. Facilities may also provide link through urban areas within a region or provide link to facilities of statewide significance.

Facilities which should be included (Regionally Significant):

- Selected state principal arterials within urban areas which serve "regional" travel. (regional implies travel movements between jurisdictions within the region)
- Minor and collector arterials
- Ferry system connections that serve local or regional travel

[2] Urban Growth Areas

The following classifications were determined to require further discussion:

- **Principal Arterials (urban)**-- These facilities constitute 29% of the total facility mileage and show 39% of the identified deficiencies. The degree to which urban principal arterials are designated as statewide or regionally significant will have a substantial impact on the structure of the funding and concurrency programs. Application of the identified factors will require a segment by segment analysis.
- **Principal Arterials (rural fringes)**-- Significant impacts can occur on principal arterials at the fringes of major and minor urban areas. This is a growing concern for small cities and rural counties which have "urbanizing" growth pressures along state principal arterials, for which there may be few if any alternative highways currently available.
- **Interstate Access Points**-- While there is general agreement to include all interstate highways within the statewide significant category, there is a need to discuss the treatment of the access points to and from the Interstate System. The access points (ramps and ramp junctions with arterial streets) are more directly impacted by new developments.

Implementation of Level of Service Standards and Concurrency Using the Classification System

Once the two-tiered classification system is established, the affected agencies will need to develop guidelines for implementing Comprehensive Plan Updates, applicable Level of Service (LOS) standards and concurrency management systems. The purpose of this section is to summarize a suggested process for implementing these actions. The series of graphical examples provided in **Exhibits 13-5** through **13-11** were developed for preliminary discussion purposes and do not represent a recommendation of the committee.

Each Figure is introduced below, followed at the end of this section by the series of graphics illustrating the suggested process.

Comprehensive Plan Update (Exhibit 13-5)

Local Comprehensive Plan updates would be required to provide information regarding state facilities. However, the Capital Facilities Plan and the financing plan would only be required for locally owned facilities and state facilities of regional significance.

Set Performance Standards (Exhibit 13-6)

A key element of the comprehensive plan is the designation of performance standards, typically referred to currently as Level of Service standards. The performance standards on state facilities would be determined in a cooperative approach among state and local agencies in a regional forum. These standards would be incorporated into the comprehensive plan update and in the concurrency review process.

Example of LOS Setting Process (Exhibit 13-7)

Setting LOS would be similar for both regionally and statewide significant facilities. This graphic illustrates that the only major difference would lie in the final determination of an LOS standard. In essence, regionally significant facilities would require a cooperative approach to LOS setting using regional facilitation if necessary. For statewide significant facilities, the state would reserve the right to make a final determination of LOS.

Concurrency Management System (Exhibit 13-8)

A process is shown for implementing a concurrency management system incorporating local streets and regionally significant state facilities. The approach would be similar to the current SEPA and concurrency systems used by local agencies. However, mitigation of deficiencies on the state facilities would require active state review and agreement prior to development approval.

Concurrency Management Process- Example (Exhibit 13-9)

A typical example is provided showing how a city might conduct a concurrency review of a development project which has impacts on state facilities which are regionally significant and which cross jurisdictional lines.

Real-Life Examples of Areas in Washington State (Exhibit 13-10)

Three examples are provided of interjurisdictional state facilities of regional and statewide significance. The locations include Kelso, Bothell, and Wenatchee.

Specific Example- Pierce County (Exhibit 13-11)

Pierce County is used as an example to show how the current LOS and concurrency management system might be modified to include the impacts of state facilities.

Exhibit 13-5
Comprehensive Plan Update

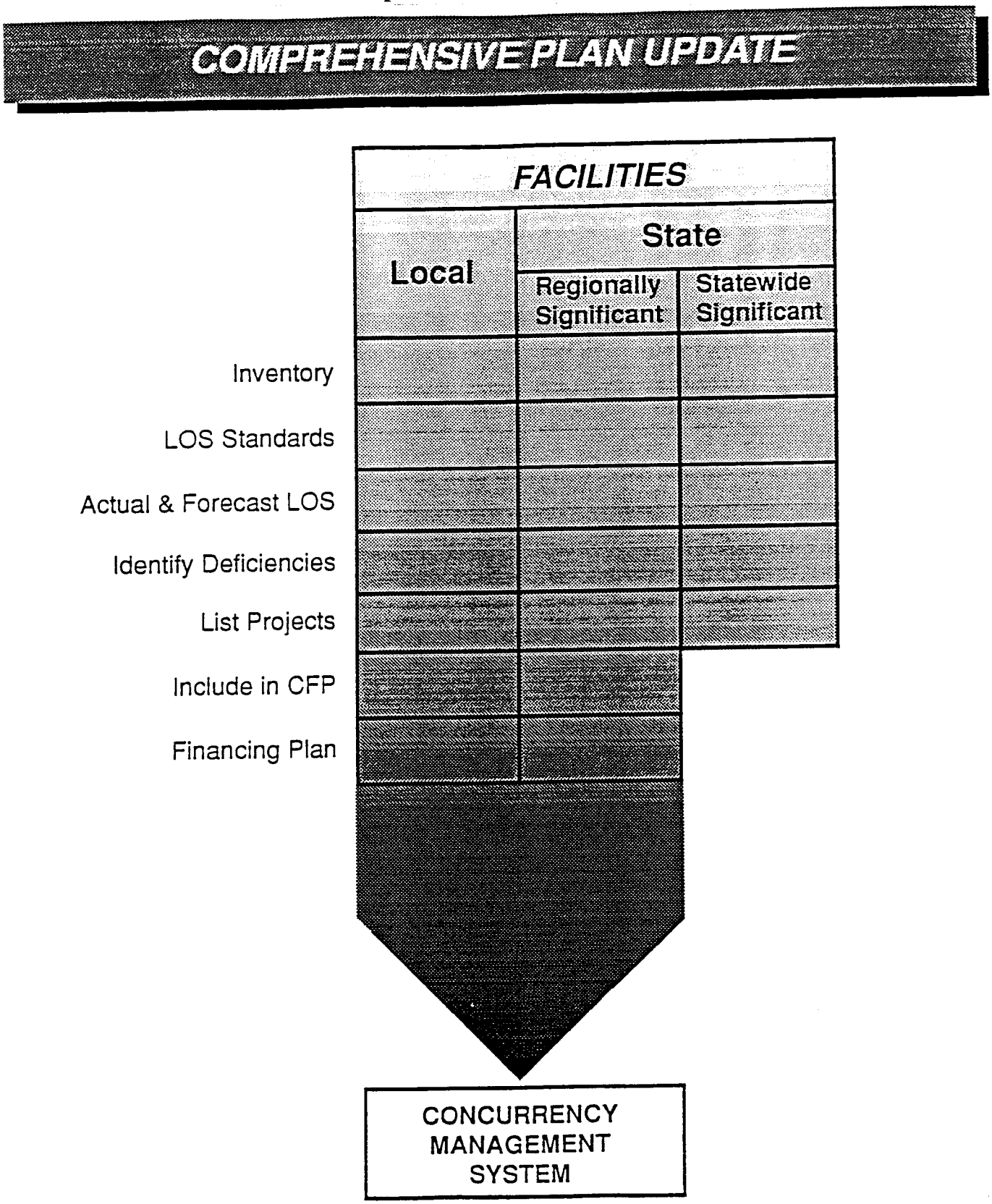


Exhibit 13-6
Set Performance Standards

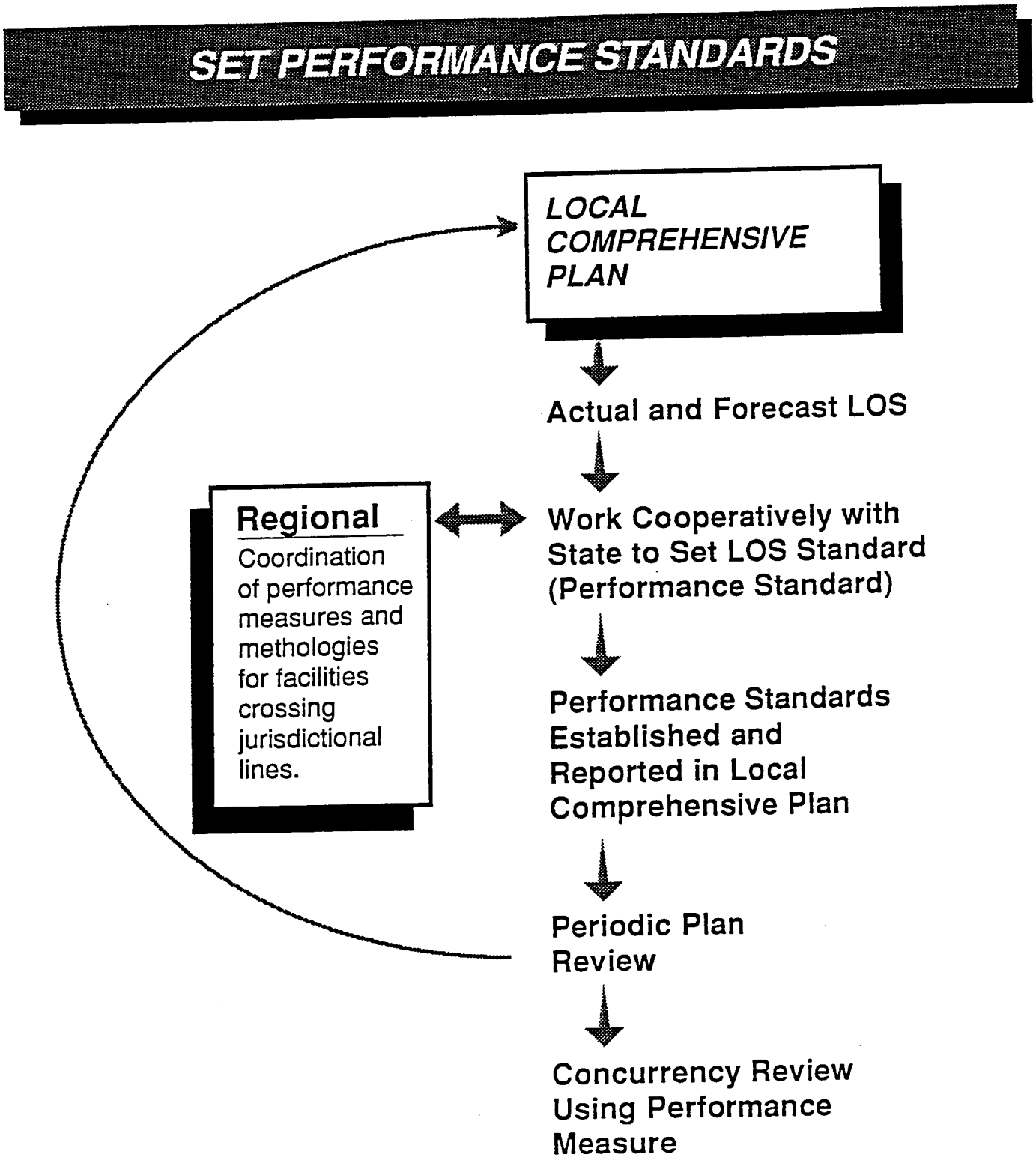
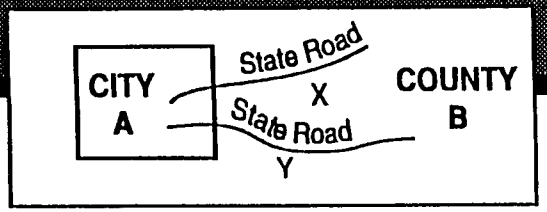


Exhibit 13-7
Example of LOS Setting Process

Example



LOS SETTING PROCESS

"Regionally" Significant Road X	"Statewide" Significant Road Y
• State Provides Draft Service Objective to City A and County B	• Same
• City A and County B Analyze State Road in Comprehensive Plan	• Same
• Findings Given to State and RTPO	• Same
• State Compares with Draft "Service Objectives" (may need translator for different methodologies)	• Same
• City A, County B, and State Cooperate in Setting Final LOS Standard for Road X Option: Regional Facilitation	• State Recommends LOS Standard for Road Y. City A and County B Comment • State Makes Final Determination of LOS Standard on Road
• City A and County B Document LOS Standard in Comprehensive Plan	• Same

↓

CONCURRENCY MANAGEMENT PROCESS
(next page)

Exhibit 13-8
Concurrency Management System

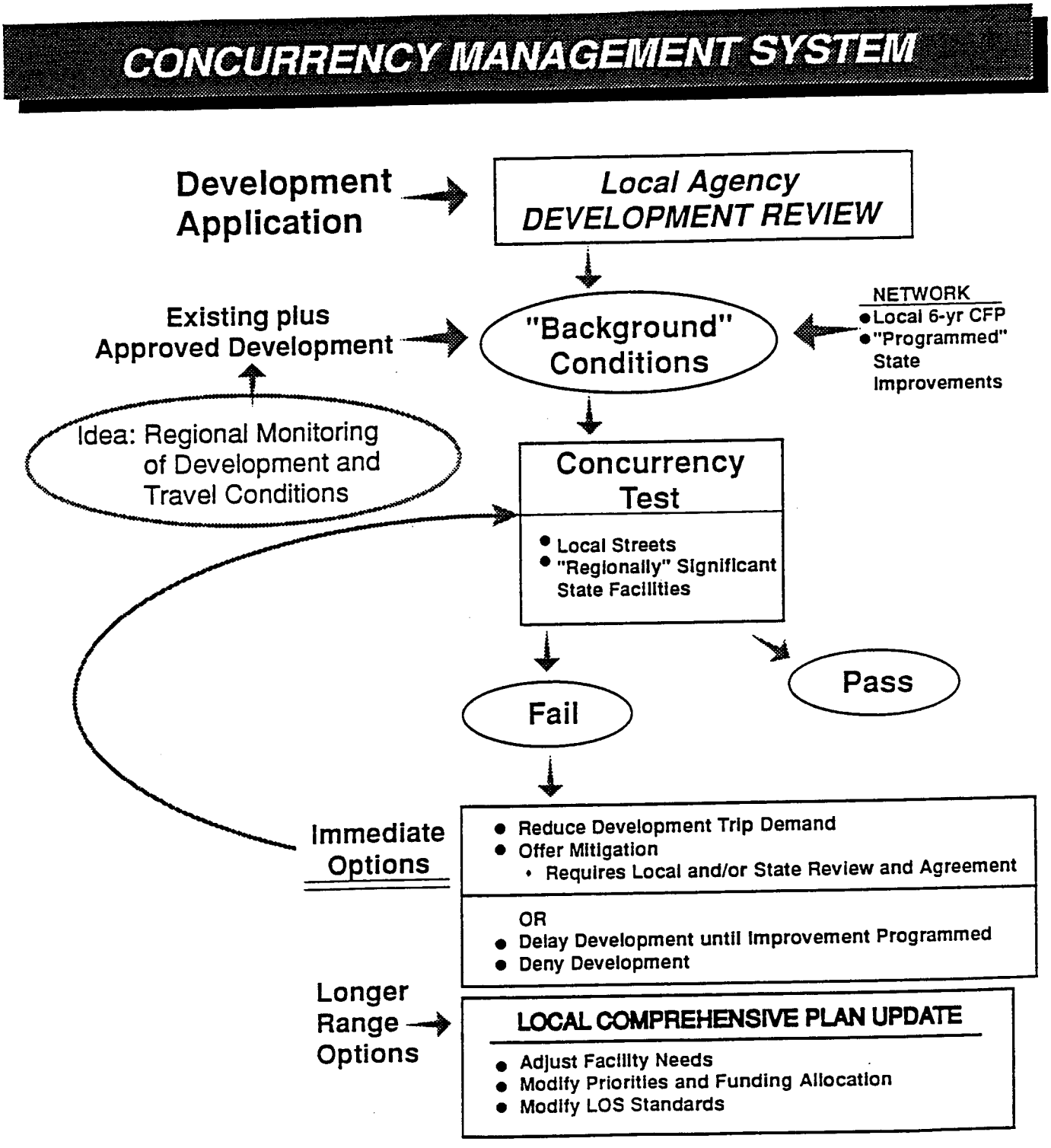
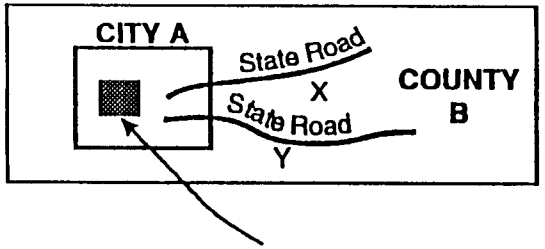


Exhibit 13-9
Concurrency Management Process



Concurrency Management Process

• **Development Application to City A**
• **City A Reviews Concurrency for:** **--City Streets** **--State Road "X" (Regionally Significant)** [Note: Analysis would Assume any Programmed Improvements to Road X or other State Facilities -- Priorities Set Regionally]
• **Concurrency Test Shows that Development Adversely Impacts Road X (I.e., Exceed LOS Standard)**
• **Development cannot Proceed until LOS Deficiency on Road X is Mitigated, by:** **1. Developer Mitigation (Cooperatively Accepted by City A, County B, and State)** **2. Additional *Programmed* Improvements to Road X (Regionally Determined)** **3. LOS Standard Modified in Comprehensive Plan Update**

Exhibit 13-10
Real-Life Examples of Areas in Washington State

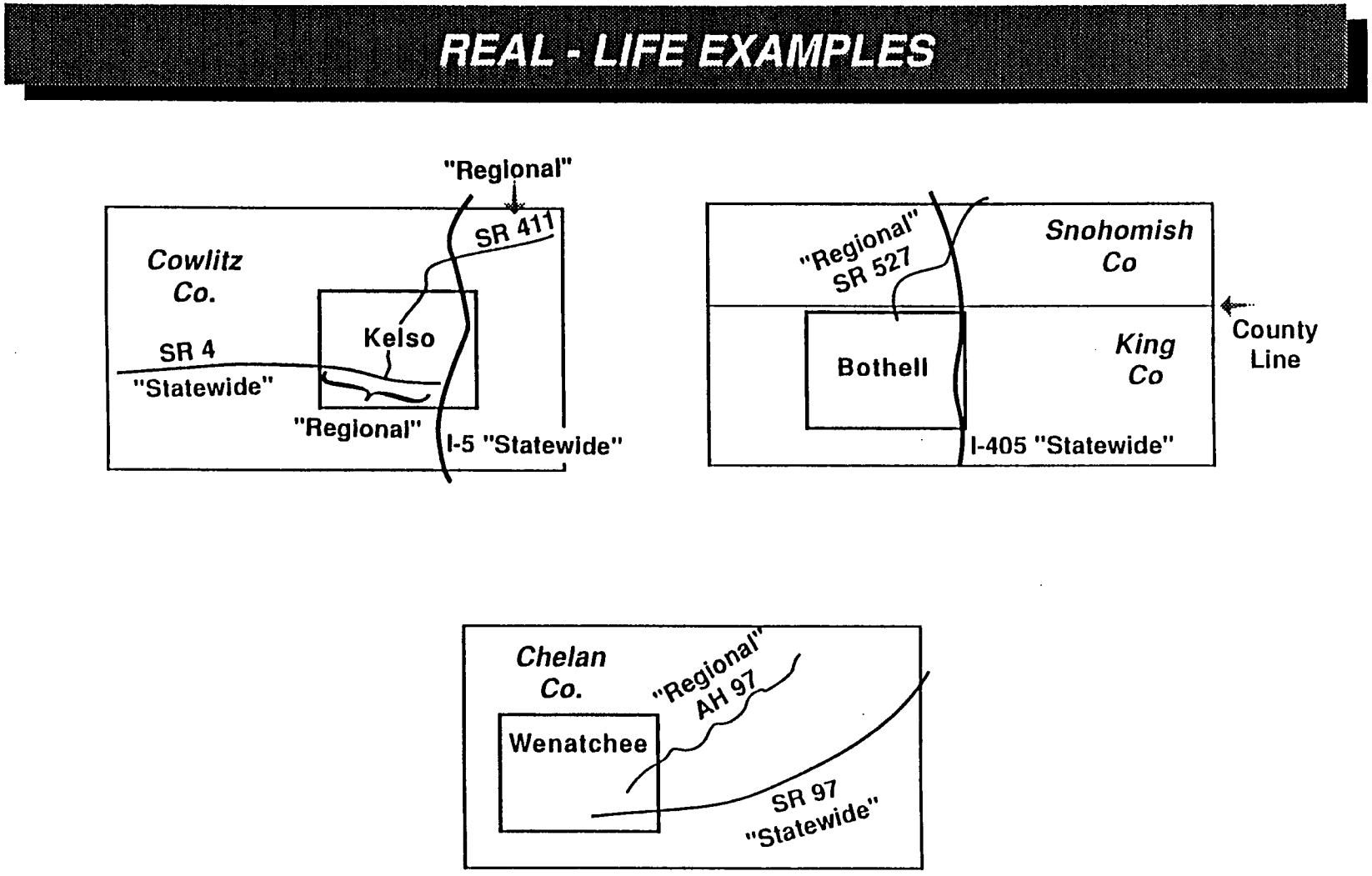
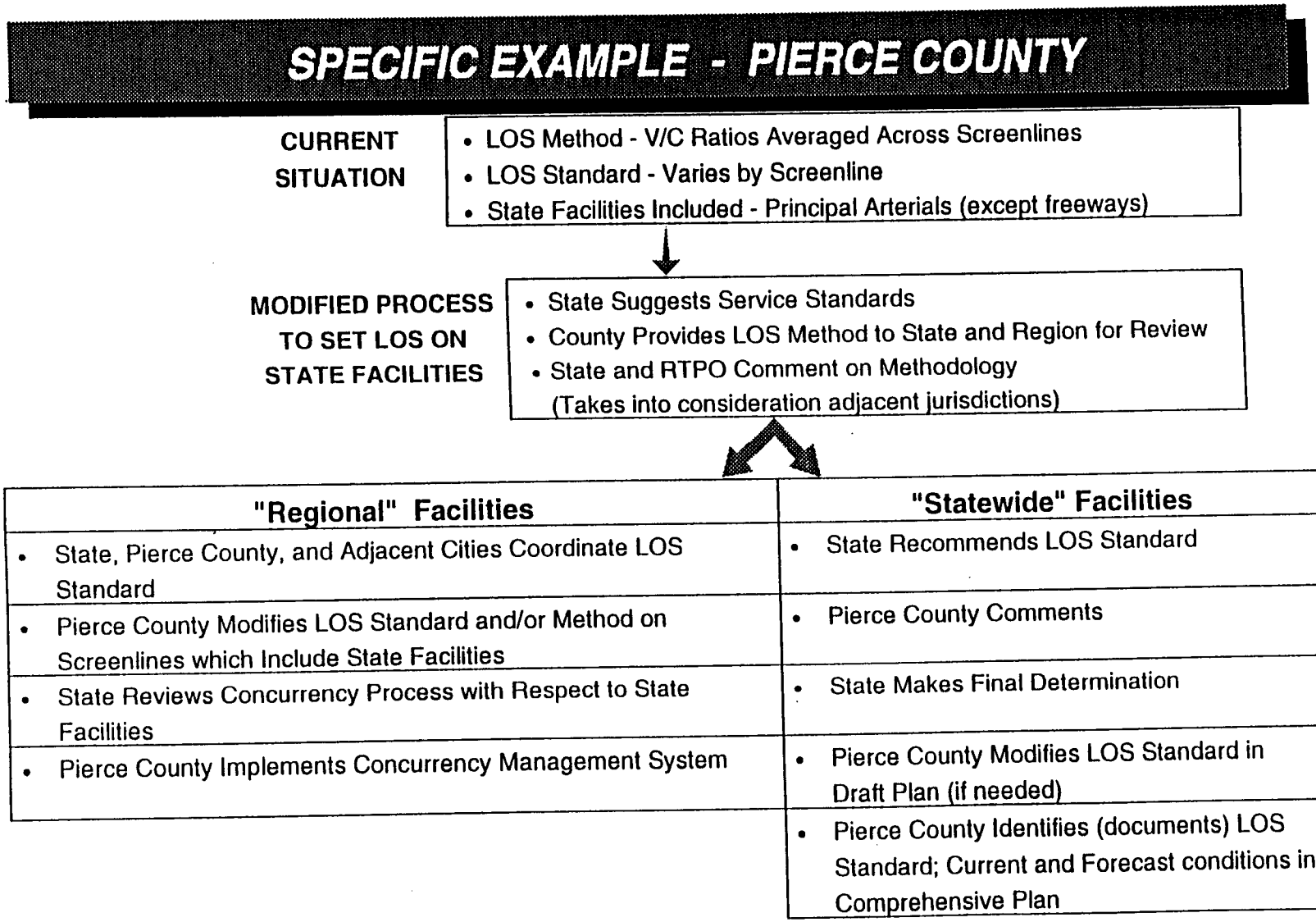


Exhibit 13-11
Specific Example -- Pierce County



SECTION 14
FUNDING OPTIONS FOR REGIONALLY SIGNIFICANT FACILITIES

TABLE OF CONTENTS

Exhibits

SECTION 14
FUNDING OPTIONS FOR REGIONALLY SIGNIFICANT FACILITIES

Introduction

This section identifies and analyzes various funding options for regionally significant facilities. It follows up on the Steering Committee's final meeting of December 7, 1994, at which the Committee reached agreement on the need for a new designation of regional facilities, to be accompanied by new revenue sources for these facilities. Pending approval by the Legislature of such new monies, the issue remaining was what existing funding sources could be used to finance these facilities.

The study team was charged with identifying potential funding mechanisms out of existing sources that might be available before new revenues are authorized by the Legislature. This memo summarizes research and analysis evaluating various existing funding sources. Three broad funding sources are examined:

- Existing WSDOT funds
- Federal STP funds
- Transportation Improvement Board funds

The following outlines the findings in each of these areas and makes recommendations.

Washington State Department of Transportation (WSDOT) Funds

As a starting point for any discussion or analysis of funding options for a newly designated system of state and regionally significant facilities, it is useful to understand how WSDOT funding has flowed to various projects and facilities. That is, assuming, that the LOS Steering Committee's proposed bifurcated system had been in place over the last three biennia, how much funding in total would facilities of statewide and regional significance have received?

An analysis prepared by WSDOT staff and by the consultants shows that a certain portion of WSDOT funding is already flowing to state-owned facilities of regional significance. Two analyses were undertaken: a comparison of WSDOT funding flowing to National Highway System versus non-NHS facilities; the other was a disaggregation of WSDOT funding by facilities of statewide and regional significance according to the consultants' classification (outlined in Section 13).

Method 1 -- Using the National Highway System as a Surrogate for Statewide Significant Facilities

One way of estimating the amount of funding going to regionally significant facilities that is readily available is to look at the distinction between state facilities designated as part of the National Highway System and those that are not. Assuming that NHS facilities are of statewide significance, all others are presumably of regional significance. These distinctions can be used as a rough surrogate for WSDOT funds already being spent on regional facilities. During the Fiscal Years 1989-91, 1991-93 and 1993-95, a total of almost $2 billion was expended on state highways.

Exhibit 14-1
WSDOT Funds Flowing to NHS and Other Facilities
(Millions of Dollars)

Biennium	NHS/I-90	NHS Other	Non-NHS	Total
FY 89-91	$330.4	$216.2	$25.0	$571.5
FY 91-93	230.5	320.7	73.3	624.5
FY 93-95	72.0	649.8	64.3	786.1
Total 1989-95	$632.9	$1,186.7	$162.6	$1,982.1

Source: WSDOT Planning, January 1995

It is useful to note that interstate funding has declined over the 3 biennia, and the share of funding going to other state facilities has increased . Of the $1.98 billion total expended over 6 years, about $1.8 billion went to NHS-designated facilities, of which $630 million went to I-90, and about $1.2 billion went to other NHS facilities. Thus, less than $200 million was expended on non-NHS (or regionally significant) facilities. This represents 8% of total NHS designated facilities, or 12% if I-90 is excluded from the total.

Method 2 -- Using the Consultants' Classification of Regionally Significant Facilities

The second way of estimating the funds flowing to regionally significant facilities is to use the consultants' classification of statewide and regionally significant state-owned facilities.

The following table shows that a total of approximately 12% of WSDOT funding has gone to regionally significant facilities over the last 3 biennia. This analysis indicates that as interstate funding has declined over the 3 biennia, the share of funding going to regional facilities has increased from 8% in FY 89-91 to 12% in FY 91-93 and to 15% in FY 93-95.

Exhibit 14-2

WSDOT Funds Flowing to Statewide and Regionally Significant Facilities

(Millions of Dollars)

	State Significance			Regional Significance		
Biennium	**Interstate**	**Principal Rural**	**Principal Urban**	**Principal Urban**	**Minors & Collectors (Urban & Rural)**	**Total**
FY 89-91	$484.4	$33.5	$10.0	$27.0	$16.1	$571.1
	85%	6%	2%	5%	3%	100%
FY 91-93	411.7	64.2	49.8	32.7	40.2	598.5
	69%	11%	8%	5%	7%	100%
FY 93-95	351.1	130.0	186.0	66.6	44.7	778.4
	45%	17%	24%	9%	6%	100%
Total	$1,247.2	$227.7	$245.8	$126.3	$101.0	$1,948
	64%	12%	13%	7%	5%	100%

Source: WSDOT, JHK Associates, January 1995

An analysis of the proportions of state highways that are of statewide and regional significance was also undertaken for comparison purposes. It is shown in Exhibit 14-3:

Exhibit 14-3

State Highways of Statewide and Regional Significance

	Statewide Significance				Regional Significance		
	Interstate	**Principal Rural**	**Principal Urban**	**Minor Urban**	**Principal Urban**	**Minors & Collectors (Urban & Rural)**	**Total**
Road Miles	761	1,661	240	616	211	3,230	6,719
Percent of Total	11%	25%	4%	9%	3%	48%	100%
1993 VMT Percent of Total	48%	13%	12%	3%	8%	16%	100%

Source: Compiled by Porter & Associates from WSDOT Highway Segment Data, 1995

Comparing the state dollars that have flowed to each kind of facility (statewide versus regional) to the proportions of the total state highways system that each kind of facility takes up, yields useful insights. While regionally significant facilities have received 12% of funding over the last 3 biennia, they represent 51% of the road miles and 24% of the vehicle miles traveled on state highways. Similarly, facilities of statewide significance have received 89% of funds, but represent only 49% of road miles and 76% of vehicle miles traveled.

As touched on above, the Steering Committee has already agreed that new revenues will be needed to adequately fund facilities of regional significance. Should WSDOT or the LTC determine that a larger share of state funds should be expended on regionally significant facilities, the most logical source is the Motor Vehicle Fund-Basic Account. Funds could be allocated either by creating a new account and transferring funds to it, or by reprioritizing existing improvement monies.

Federal Funding Programs

Federal highway funds currently support approximately 29% of state highway expenditures and approximately 6% of local streets and roads expenditures. When looking for sources of funds for regionally-significant state facilities, it is logical that federal highway funds be part of the solution. The eligibility requirements for federal highway funds suggest, however, that the choices for funding regionally significant facilities are relatively narrow.

One of the federal highway programs - the Surface Transportation Program (STP) - has the broadest applicability for funding regionally significant state facilities. The STP is used to fund a wide variety of projects on federal-aid highways, without restriction as to the type of facility. Furthermore, annual funding through the STP will grow when the interstate construction program terminates in federal fiscal year (FFY) 1996. In contrast, the other federal highway programs are targeted to a specific uses, the most prominent of which include the interstate highway maintenance program, the bridge program, and the National Highway System (NHS). Although portions of the regionally significant state system would be eligible for other federal programs (e.g., bridge and NHS), the bulk of federal funding would need to come from the STP.

The STP funds which could theoretically be made available to regionally significant facilities are today used primarily for local projects. Of the $173 million projected for the STP statewide in 1996, a maximum of $92 million could be available for funding regionally significant facilities. This includes approximately $62 million in STP funds programmed by regions (TMAs, MPOs, and counties) and $30 million in statewide competitive funds programmed by the state's Multimodal Transportation Programming And Project Selection Committee. Today, virtually all the regional funds and 92% of the statewide competitive funds are used for local projects. While there is no legal prohibition against using these funds for state-owned regionally significant facilities, this would be construed as a significant change in practice.

An overview of federal highway funds and the Surface Transportation Program are provided below.

Overview of Federal Highway Funds

Federal highway funds received by the State of Washington are of two types - formula programs and discretionary programs. The formula programs totaled approximately $441 million in FFY 1993 (10/92-9/93), while the discretionary programs totaled approximately $20 million. Because the formula programs are both larger and more predictable than the discretionary programs, they are the logical starting point for consideration of federal funding for improvements to regionally significant state-owned facilities.

In order of magnitude, the formula programs are: Interstate Construction (IC); Surface Transportation Program (STP); Interstate Maintenance (IM); National Highway System (NHS); Bridge Replacement and Rehabilitation; and Congestion Management and Air Quality Improvement (CMAQ). The relative funding levels of these sources are shown in Exhibit 14-4 on the following page.

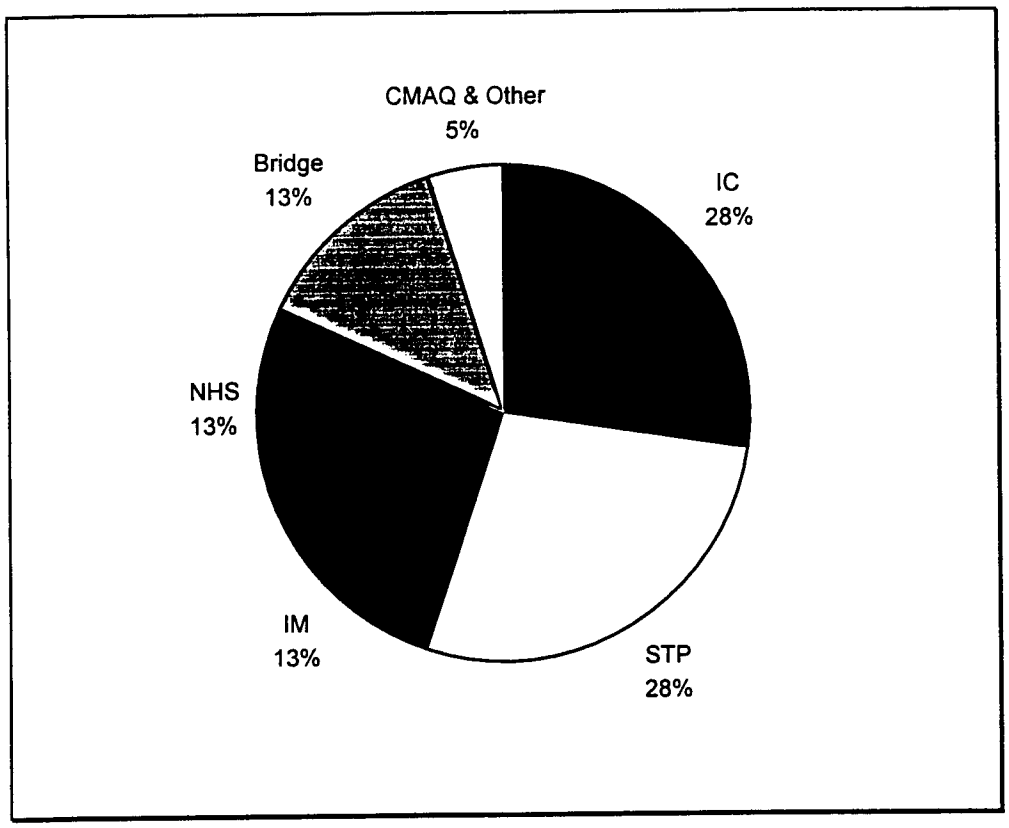
All but the STP funds are targeted for specific uses - interstate highways, the national highway system, or bridges. Because the state-owned, regionally significant highway system excludes interstate highways and most of the NHS as well, the STP is the most likely source of federal funds. Within the STP, however, there is a division of program funds which was agreed to by WSDOT and other major recipients of STP funds as part of implementing ISTEA.

The Surface Transportation Program

The STP, which will total $697 million by 1997, is the largest federal highway program for Washington State during the six-year authorization of the ISTEA. Annual funding for the STP will grow in the latter years of the ISTEA authorization because the STP receives adjustments to normalize funds among the states when the Interstate Construction program terminates.

Unlike the other highway programs, STP funds are distributed to a variety of recipients, each of which has programmatic authority. ISTEA prescribes the distribution of STP funds as follows: 10% for highway-railway crossing and hazard elimination programs; 10% for transportation enhancement activities; 50% to urbanized areas with a population exceeding 200,000; and 30% to transportation programs in any area of the state. A more specific division of STP funds was agreed to by the ISTEA Steering Committee, which is comprised of the Governor's office, the Legislative Transportation Committee (LTC), WSDOT, the Washington Association of Counties, the Association of Washington Cities, the Washington State Transit Association, the Washington Public Ports Association, the Puget Sound Regional Council, the Cowlitz-Wahkiakum Council of Governments, and the Washington

Exhibit 14-4
Distribution of Federal Highway Funds in FFY93 in Washington State
(Total $441 Million)



Transportation Policy Institute. The resulting STP funds distribution, reflecting actual apportionments through 1995, is shown in Exhibit 14-5.

Two of the distributions are most applicable to funding state-owned regionally significant facilities - the distributions to regions, and the statewide competitive fund. These funds are most applicable because they are not already committed to a specific use. Of the two, the state has most control over the statewide competitive fund, project selections for which are made by the Multimodal Committee. Projects funded through the regional distributions are selected by TMAs, MPOs, and counties which serve as their own MPO.

The statewide competitive fund will total $13.8 million in 1995, and will grow to $30.2 million in 1996 as the STP receives various apportionment adjustments. According to WSDOT Local Programs, the statewide competitive funds will be distributed as follows in 1995: cities 59%; counties 21%; transit 8%; state agencies 8%; and ports 4%.

Exhibit 14-5

STP Distribution Based on Actual 1995 Apportionments

(Millions of Dollars)

Recipient	1992	1993	1994	1995	1996	1997	Total	Percent of Total
TMAs	$11.2	$25.0	$39.9	$25.7	$36.7	$37.0	$175.5	25.2%
MPOs	0.0	5.6	9.4	5.9	8.7	8.7	38.3	5.5%
County Region	9.9	11.8	18.3	12.6	16.8	17.0	86.4	12.4%
WSDOT System Preservation	7.8	50.8	21.5	5.6	37.7	35.3	158.7	22.8%
Interstate Reconstruction	0.0	0.0	0.0	0.0	19.3	19.2	38.5	5.5%
Statewide Competitive	0.0	8.0	15.9	13.8	30.2	30.7	98.6	14.2%
RTPO Funds	0.0	0.6	0.6	0.6	0.6	0.6	3.0	0.4%
County Funds	0.0	0.7	0.7	0.7	0.0	0.0	2.1	0.3%
Subtotal	**$28.9**	**$102.5**	**$106.3**	**$64.9**	**$150.0**	**$148.5**	**$601.1**	**86.3%**
Safety	3.6	9.8	7.7	3.9	11.4	11.3	47.7	6.8%
Enhancements	3.6	9.8	7.7	3.9	11.4	11.3	47.7	6.8%
Total	**$36.1**	**$122.1**	**$121.7**	**$72.7**	**$172.8**	**$171.1**	**$696.5**	**100.0%**

Source: WSDOT Local Programs

RCW 47.066 authorizes the Multimodal Committee to select projects for the STP statewide competitive fund, as well as the Central Puget Sound Public Transportation Account, the Public Transportation Systems Account, and the High Capacity Transit Account. Each of these are treated similarly by the legislation with respect to project selection:

RCW 47.66.040 Selection process--Local matching funds.

(1) The multimodal transportation programs and projects selection committee shall select programs and projects based on a competitive process consistent with the mandates governing each account or source of funds. The competition shall be consistent with the following criteria:
   (a) Local, regional, and state transportation plans;
   (b) Local transit development plans; and
   (c) Local comprehensive land use plans.

(2) The following criteria shall be considered by the committee in selecting programs and projects:

(a) Objectives of the growth management act, the high capacity transportation act, the commute trip reduction act, transportation demand management programs, federal and state air quality requirements, and federal Americans with disabilities act and related state accessibility requirements; and

(b) Energy efficiency issues, freight and goods movements related to economic development, regional significance, rural isolation, the leveraging of other funds including funds administered by this committee, and safety and security issues.

(3) The committee shall determine the appropriate level of local match required for each program and project based on the source of funds.

While the legislation allows state-owned regionally significant facilities to be funded from the STP statewide competitive fund, any dedication of the fund would require a change to existing state law.

A second source of STP funds for state-owned regional facilities is the distribution made to TMAs, MPOs, and counties. This source will total $44 million in 1995, and will grow to $62.2 million in 1996. Project selection for these funds is managed by each individual TMA, MPO, and county. The three TMAs receive approximately 59% of the funds. These include the Puget Sound Regional Council, the Spokane Regional Council, and the Southwest Washington Regional Transportation Council. The remainder of the funds are allocated by MPOs (14%) and by counties not belonging to a TMA or MPO (27%).

The most likely use of the regional funds would be as a match to the state funds for regionally significant facilities. Today, the regions' STP funds are used primarily for local projects. An opportunity to leverage these funds for improvements to selected state facilities may be worthwhile for some local governments, if the roadway serves an important local purpose.

Transportation Improvement Board (TIB) Funds

The Transportation Improvement Board is a state agency directed by an 18-member board, comprised of 6 city members, 6 county members, and representatives of the Governor's office, the private sector, WSDOT and transit. The TIB administers four programs: the Transportation Improvement Account (TIA), the Urban Arterial Trust Account (UATA), the City Hardship Assistance Program (CHAP), and the Road Jurisdiction Transfer (RJT) program. The TIA and UATA each receive approximately 1.5 cents in dedicated gas tax revenues, or about $40 million per year.

The TIA provides funding for transportation projects submitted by cities and counties through two programs: the urban program and the small cities program. The urban program, receiving 87% of TIA funds, is for projects attributable to congestion caused by growth. Selection criteria include multi-jurisdictional and multi-modal planning and coordination and

public/private cooperation. Projects may receive up to 80% from the TIB, with a 20% local match.

The TIB uses "over-programming," i.e. it funds more projects than it has money for, on the assumption that some projects will be delayed or dropped. The agency thus has an aggressive approach to keeping its project pipeline full. Even so, cash flow is often erratic due to lack of predictability on project schedules. The TIB currently has a cash surplus, but is projected to experience a shortfall by the middle of the 1995-97 biennium. The TIB expects to use its $50 million in bonding authority to cover this cash shortfall.

The TIB is widely regarded as a successful program for a number of reasons. In addition to its aggressive approach to project funding, it is considered very flexible and responsive to its city/county constituency, for example, TIB funds can be used as local match for ISTEA and the TIB Board recently decided to allow funding of sidewalks. The TIB is also considered very customer-oriented, for example, in providing special sources of funds for very small cities or in accepting local definitions of "service levels" that may differ by region.

A significant portion of TIB-funded projects are already regional in nature. Using the consultants' method of classifying statewide and regionally significant facilities, over the 1990 to 1995 period TIB funds were distributed as follows:

Exhibit 14-6

TIB Funds Flowing to Statewide and Regionally Significant Facilities

(Millions of Dollars)

Statewide Significance			Regional Significance	Other	Total
Interstate	Principal Rural	Principal Urban	Principal Urban		
$14.9	$15.8	$6.7	$57.7	$283.1	$378.2
3.9%	4.2%	1.8%	15.3%	74.9%	100%

Source: Transportation Improvement Board, JHK Associates, January 1995

Over 15% of TIB funds were distributed to regionally significant state-owned facilities.

Due to its success as an institutional and funding model, the TIB has been repeatedly mentioned as the administrator of a new regional funding mechanism. A new funding source would be required to fund the new program and would thus be contingent on a revenue measure being authorized by the Legislature. Options for start-up funding prior to new revenues being available are to simply authorize the TIB to begin the new program and to commit TIA and UATA funds on an interim basis as loans to the new program, or to authorize additional bonding capacity to the TIB.

Potential New Funding Mechanisms for Regionally Significant Facilities

1. Create a new program within TIB that funds regional projects. The program could be specifically designated for regionally significant state facilities only, or it could also be made available to city and county owned regional facilities. In any case, unlike current TIB programs, WSDOT would be eligible to initiate and submit projects for selection. The TIB Board should be directed to develop criteria for project selection and a selection process. Guidance should be provided by enabling legislation on what projects are to be considered regional. The program should be funded with 2 cents of new gas tax monies.

2. Before the new revenue is available, there are two potential ways to provide seed funding for the new program:
   - Authorize the TIB to initiate a round of project selection and allow early stage planning and design funds to be committed from existing TIB funds. Upon authorization of new revenues, the TIB funds would be repaid from the new monies.
   - Authorize $50 million in bonds as seed funding for the new program. Until new revenues are authorized, the debt service would be paid out of existing TIB funds. Once new revenues are authorized, they would be used to pay debt service and to fund the new program.

3. Two sources of federal STP funds are candidates for the local match portion of the new TIB regional program:
   - The statewide competitive funds total $14 million in 1995 (and growing thereafter) and are administered by the Multimodal Committee. Although this funding source is the smallest of the candidate sources, its method of allocation by a multi-party project selection committee lends itself to the kind of systemwide coordination most likely to yield a regional emphasis.
   - The TMA, MPO and County distribution funds total $40 million in 1995 (and growing thereafter) and project selection is administered by the respective regional bodies. Although this funding source is relatively large, there will be substantial institutional pressure to use these funds for local streets and roads as a first priority.

   Both of these federal fund source should be considered as options for a portion of a funding package to address regionally significant state facilities.