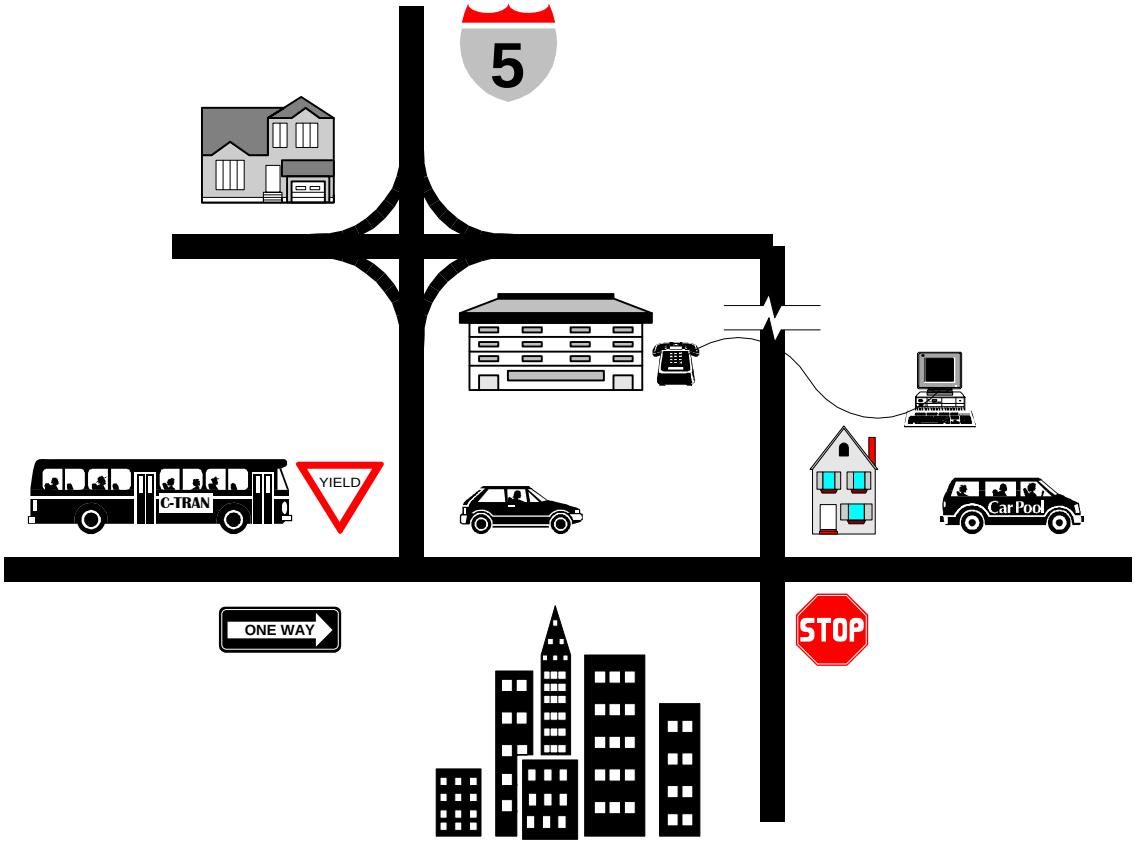
Transportation Futures Committee Report



DECEMBER 1996

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INTRODUCTION

A. THE NEED FOR THE TRANSPORTATION FUTURES COMMITTEE

1. A CITIZEN-BASED APPROACH TO EXAMINE TRANSPORTATION ISSUES

The Growth Management Act (GMA) of 1990 was passed in response to concerns statewide about rapid growth and the impacts on traffic congestion, air quality, housing costs, and quality of life. The GMA set up a framework for a long range comprehensive planning process that addressed growth related issues. The transportation element of the GMA Plan for Clark County calls for establishing a regional transportation system that is balanced across all modes of travel and recognizes the link between transportation and land use in order to provide mobility for the movement of goods and people. The Plan identifies three major activity centers, downtown Vancouver, Salmon Creek/Washington State University and Vancouver Mall. A key element of the Plan is the identification of the need to develop high capacity transit (HCT) in the travel corridors connecting the activity centers.

Previous transportation system analysis concluded that all HCT modes, including light rail transit (LRT), should be evaluated further in the I-5 corridor and that only HCT bus options should be evaluated further in the I-205 corridor. Analysis of the two bi-state corridors resulted in the selection of the I-5 corridor as the first priority for HCT in Clark County. Subsequent studies resulted in the selection of LRT as the preferred mode and I-5 as the preferred alignment in Clark County with a terminus in the vicinity of 88th Street. A local financing proposal was developed to provide local funding for a LRT project from Clark County to Clackamas County, Oregon.

In February 1995, Clark County voters defeated the financing proposal for the Clark County portion of the South/North LRT project. The defeat of the LRT vote led to an extensive discussion of the next steps for addressing bi-state transportation needs. Policy makers agreed that it was imperative to engage the community in a full debate on a wide range of transportation issues and needs facing Clark County. Hence, shortly after the vote, local elected officials recommended that a citizens-based discussion of future transportation issues be implemented.

2. HOW THE CITIZEN-BASED PROCESS WAS DEVELOPED

As a first step in the process, the Board of Clark County Commissioners and the Vancouver City Council appointed a group of citizens to serve on a Focus Group that had the following two objectives:

- Define the transportation issues that the community needs to examine.
- Identify a process for a citizen-based examination of those transportation issues.

The Focus Group included twenty citizens with diverse transportation perspectives, interests and knowledge. It included people who were advocates for and against light rail transit. The Focus Group shared an interest in community transportation issues and a common desire to define a citizen process that would engage the community in a discussion of future transportation issues. Participants included the following individuals:

Glenn Baldwin	United We Stand
Lynn Carman	Clark County Neighbors
Skip Enes	Educational Service District 112
Richard Galt	Camas/Washougal Chamber of Commerce
Byron Hanke	Port of Vancouver

Bruce Holmstrom	Citizen
Joe Lanning	Downtown Vancouver Association
Roger Lantz	Battle Ground Chamber of Commerce
Steve Madison	Citizen
Lynn Mathers	Washington State University of Vancouver
Debra Maul	Vancouver Neighborhood Alliance
Dr. Thomas Meyer	Citizen
Clint Page	Community Choices-2010
Dellan Redjou	Hazel Dell/Salmon Creek Business Association
Catherine Rich-Daniels	Greater Vancouver Chamber of Commerce
John Spence	Citizen
Vern Veysey	Citizen
Terry Weiner	Clark County Natural Resources Council
Doug Williams	Southwest Washington Medical Center
Bob Yoesle	Coalition for Environmental Responsibility and Economic Sustainability

Focus Group meetings were held on May 3 and May 11, 1995, at the Vancouver City Hall. In an effort to promote community awareness and participation, the meetings were widely advertised. Citizens were encouraged to attend the meetings and given the opportunity to contribute to the Focus Group discussions. The meetings were broadcast live on CVTV Channel 47 and also rebroadcast. A *Columbian* Info-Line number was established to provide more opportunity for citizen comment. Written comments also were encouraged.

The primary objective of the first meeting was to define the transportation issues the community needs to examine. The issues they identified are listed below. They became the foundation for the issues subsequently examined by the Transportation Futures Committee (TFC):

- The use of alternative technologies and other ways to reduce travel demand
- Alternatives and options for dealing with bi-state travel
- Public transit's role in the community
- Refining of the road system
- Transportation financing

At the second meeting, the Focus Group reviewed the list of transportation issues developed in the first meeting and defined a community-based process to examine future transportation issues. The Focus Group's recommendations called for establishing a broadly-based citizens group that would address a full range of transportation issues. The role of the citizen group would be to:

- Fully examine the transportation issues the community faces and conduct fact finding on them.
- Identify how transportation issues affect our community based on the examination of issues and the findings.

The Focus Group further recommended that the scope of this effort should be a comprehensive process that addresses a wide range of issues and options. Another important task was to develop a broadly-based public outreach and information process that would involve the community and help people to be aware of the transportation issues. Based on these recommendations, Clark County and the City of Vancouver agreed to appoint the Transportation Futures Committee (TFC).

B. ESTABLISHING THE TFC

1. APPOINTMENT PROCESS

The City of Vancouver and Clark County established an open public process to select members of the Transportation Futures Committee (TFC). An application form was developed that asked for background, areas of transportation interest, perspective, and previous community/professional affiliations. Applications were available through neighborhood and community newsletters and newspaper advertisements. Hundreds of applications were requested, and 98 applications were submitted.

From this number, a total of 30 people were selected who were representative of the community's diversity and views about transportation. Committee members were asked to represent themselves and were not asked to speak for specific interest groups, organizations or neighborhoods. They were individual citizens who reflected the diversity of the community in regard to transportation issues in Clark County.

From the original 30 appointed by the Vancouver City Council and the Clark County Board of Commissioners, two members subsequently resigned for medical and work reasons. The following list of Committee members and the demographic information on the next page indicates the Committee's diversity.

TRANSPORTATION FUTURES CITIZENS' STUDY COMMITTEE

Members

Judi Allison
Ronald Barca
Madeleine Dulemba
Roland Emetaz
Sean Francom
John Gear
Tim Gould
Patrick Graves
Harold Hansen
Mark Heintz
Stephen Houston
Jeanette Johnson
Barbara Johnston
Jack Kane
Jack Kondrasuk
Kent Landerholm
Chris Lucia
Thomas Meyer
Stephanie Ongtooguk
Tracey Lee Pemberton
Catherine Rich-Daniels
Peggy Rigney
Richard Sande
Sara Stutheit
Sondra Tackett
Ron Webb
Dorothie Wilson
John Wilson

Member Statistics

Total Applicants	98	Demographic	
Committee Members	28	Working	20
Occupation/Interest		Retired	1
Business	6	Student	4
Downtown Business	1	Disabled	3
Real Estate	1	Geographic Distribution	
Construction	1	Central City	3
Freight/Trucking	2	North of Downtown	2
Neighborhood/Civic	8	East of Downtown	5
Environmental	4	Hazel Dell	4
Human/Social Services	3	East County	7
Education/Arts	1	North County	3
Homemaker	1	I-205 Corridor	4
Demographic			
Male	18		
Female	10		

2. PURPOSE AND SCOPE

The Transportation Futures Committee was the keystone for a citizen-based approach to shaping a range of future transportation options that will help the community meet its goals for land use, transportation, and other factors that maintain and sustain our quality of life. The Committee's purpose was to provide elected officials with a set of citizen findings that can be considered as transportation plans and programs are developed.

The work scope of the Committee was the following:

- Review the community's transportation goals to be achieved by the transportation system in-light of the adopted land use and transportation plans.
- Identify transportation policies for internal Clark County mobility, transit utilization, traffic congestion, freight movement, pedestrian/bike access, bi-state mobility and financing options that best match the vision for the transportation system.
- Measure a range of proposed transportation options by comparing the Committee's findings with the community's transportation goals.
- Identify the ways to engage the larger community in the discussion of future transportation issues and options.
- Report the findings of the Transportation Futures Committee to the community at large and to the Board of County Commissioners and Vancouver City Council.

This examination was to include a review of previous study information and the development of new information where necessary to understand the facts and develop findings for the following:

- The role of alternatives to single occupancy vehicle travel and strategies to reduce peak hour travel demand such as: carpooling, telecommuting, staggered shifts, local job creation, technology, and others.
- Clark County's current arterial system and determine what can be done to improve it and utilize it for alternative travel modes.

- The role of public transit as a component of the transportation systems in our community and the function of how mobility needs for urban, rural, and bi-state transit service are best met.
- Bi-state travel demand between Clark County and Oregon and the best way to provide for the mobility for people and goods as the region continues to grow, including assessing bi-state improvement concepts such as a new highway corridor and bridge, I-5 and I-205 LRT, expansion of the I-5 corridor, and others.
- The current state of transportation financing and the most equitable approach for maintaining current funding levels or seeking new funding.

CHAPTER II.
TRANSPORTATION FUTURES COMMITTEE PROCESS

A. COMMITTEE STRUCTURE AND STUDY PROCESS

The structure and study process allowed Committee members to determine their own direction and informational needs to be supported by staff. The role of staff and consultants was to develop and present information to the Committee. Every effort was made to provide the Committee with additional information upon request to ensure that members had the foundation they needed to deliberate appropriately and make well grounded decisions.

1. STRUCTURE

Figure 1 displays the TFC structure. The Management Team, composed of representatives from the participating jurisdictions, provided direct support to the Committee and was responsible for all support activities, including the development of information, managing consultant activities, responding to Committee requests, setting meeting agendas, and managing public outreach.

The facilitator's role was to design the process, promote a positive environment for Committee relationships and discussion, to ensure opportunities for all Committee members to equitably participate in the process and also provide an environment for public review and comment.

The opportunity for participation and comment by the community was an important element in the Committee's deliberations and meetings. In addition to the community outreach activities described in Section B of this chapter, public comment time was available at the meetings. The Committee also received presentations from members of the community and other interest groups who shared their ideas for addressing transportation problems in Clark County.

2. OVERVIEW OF STUDY PROCESS

Between September 28, 1995, to July 11, 1996, the Committee met twenty times, an average of twice a month. These included evening meetings and three all-day Saturday workshops. A synopsis of each meeting is contained in Appendix A.

There were four distinct phases of the process which are illustrated in Figure 2.

a) Background Information

This consisted of providing a transportation primer for Clark County. Committee members were given information about historical and future growth in Clark County, with an emphasis on population, employment, traffic, and travel patterns. Additional, extensive transportation-related information was prepared at the request of the Committee.

b) Transportation Vision

This phase of the Committee's process included the development of consensus on a transportation vision, members' view of what Clark County's transportation system should be in the future, and how it should function. This served as the foundation for evaluating transportation policies and options in the next phase of the study. Chapter III, Section A describes the process and approach to how the TFC's vision was developed.

Transportation Futures Committee Structure

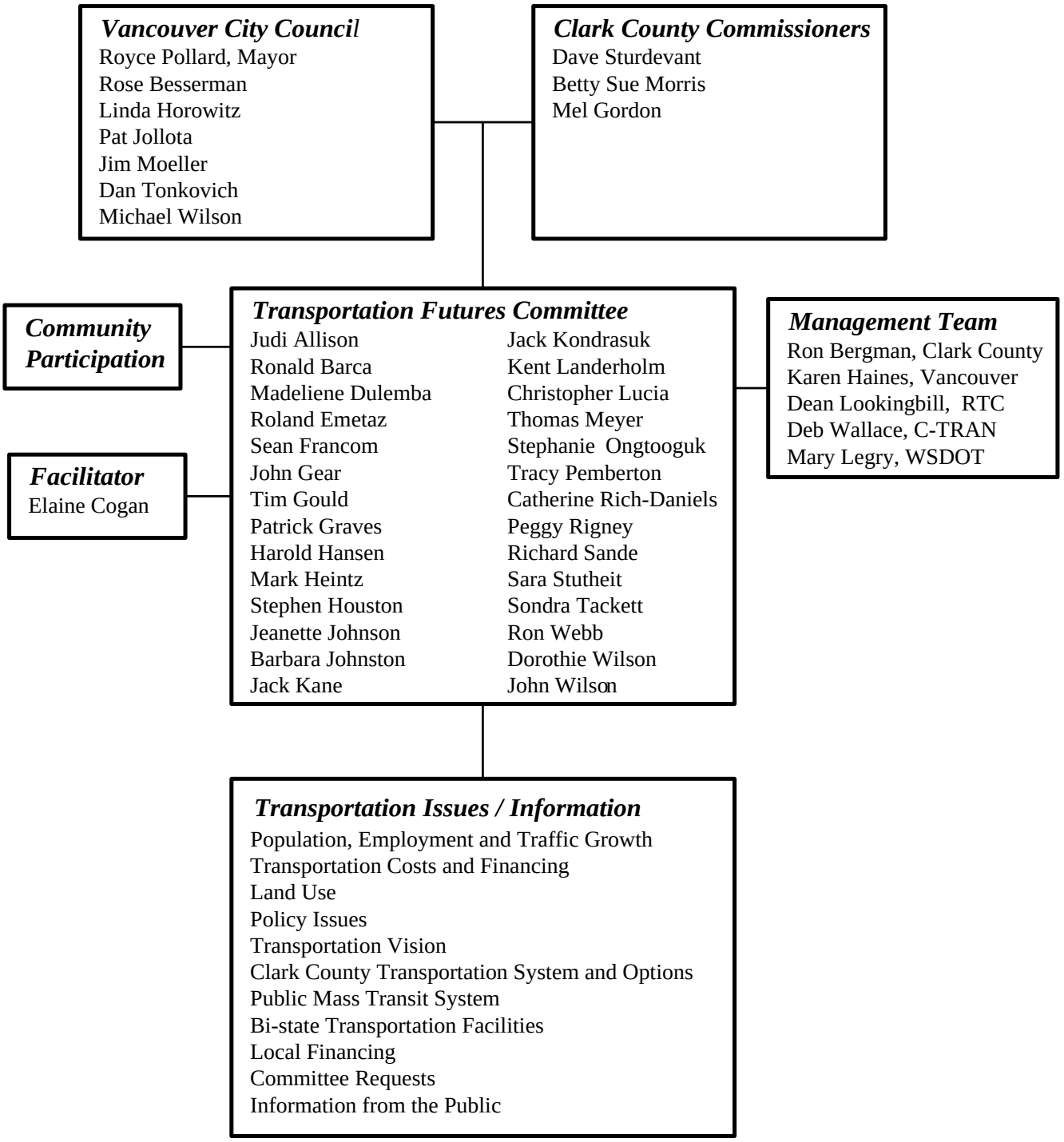


Figure 1

Transportation Futures Committee Study Process

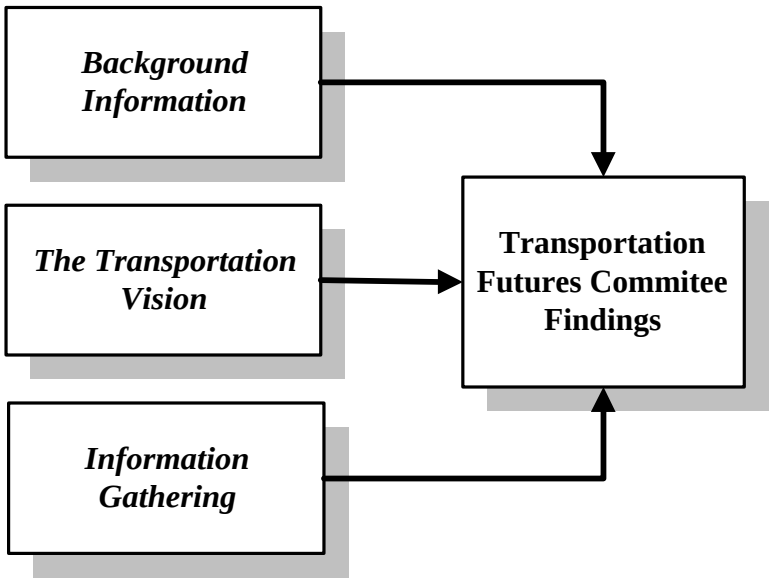


Figure 2

c) Information Gathering

This phase was devoted to gathering a wide range of facts and analysis about transportation issues and options that the Committee felt was important to evaluate. It included information about transportation policies, the Clark County transportation system, public mass transit options, bi-state transportation facilities, and local financing options.

d) Findings

The Committee reviewed and discussed the information presented and compared it to the vision developed previously. The findings describe the Committee's position on transportation policies, approaches and options that best implement the transportation vision.

B. COMMUNITY OUTREACH

1. PURPOSE

Both the initial Focus Group and, later, the TFC identified the need for a broadly-based public outreach process, and the work scope for the TFC included engaging the larger community in the discussion of transportation issues. There were three primary goals of the community outreach program. The first was to ensure that every effort was made to engage the community in the discussion of future transportation issues. Second, was to make the community aware of the TFC process. The third goal of the outreach program was to provide the community with the ways and means to become involved in the Futures process and provide the Committee with their opinions and concerns on transportation issues in Clark County. A special projects outreach team, composed of the consultant and staff from participating jurisdictions, was charged with designing and implementing public outreach activities during the TFC process.

2. OUTREACH ACTIVITIES

The public outreach team identified a wide range of activities to promote public awareness and participation in the TFC process. This section provides a summary of the activities that occurred during the course of the TFC meetings up to the development of the findings. The next section describes the summer outreach program.

Meeting Notices - TFC meetings, times, and locations were advertised in *The Columbian*, the Battle Ground *Reflector* and the Camas *Post-Record*. In addition, the ads displayed the Columbian Info-Line number and announced that all meetings would be broadcast later on CVTV-Channel 47.

Info-Line - *The Columbian* newspaper Info-Line, 699-6000, extension 3636, was established in September 1995 to continue through November 1996. The Info-Line number was advertised in *The Columbian*, movie ads (see below), all TFC meeting announcements, and also in all TFC informational and outreach materials (also described below). Every caller to the Info-Line who left a number or address was sent information or was called back with an individual answer to a request or comment. Approximately 50 people left messages on the Info-Line with comments or requests for more information from September to July, when the findings were released. This does not include callers who only listened to the Info-Line message.

Movie Ads - Ads were placed at all ACT III movie screens at Vancouver Mall, Vancouver Plaza, Cascade Park, and Hazel Dell Theaters between December 1995 and January 1996. Three different slides were produced and played in rotation prior to the beginning of the trailers and movies. Each slide had a different photograph of traffic congestion in Clark County with the tag line "Clark County today….What about tomorrow?" The slide also displayed the TFC logo and the Columbian Info-Line number.

Cable Broadcasts - Every opportunity was made to arrange taping of the TFC meetings by CVTV for later broadcast on Channel 47. When CVTV was unable to tape meetings, an independent video production company was hired for the taping. Arrangements were made with CVTV to perform post-production work on the tapes for later broadcast on Channel 47.

Informational Flyers - 65,000 informational inserts were developed and distributed throughout the county in a number of innovative ways including: the *Columbian*, the Battle Ground *Reflector*, Camas utility bills, the Greater Vancouver Chamber of Commerce Newsletter, the Camas/Washougal Chamber of Commerce newsletter, and neighborhood newsletters.

The flyers provided basic information about the TFC and described how to get involved, obtain more information (such as the Info-Line and the web page), and provide comments; they also contained a citizen perceptionnaire described below.

Brochures - A three-color, six-panel brochure was designed and produced that provided background on the TFC process and described transportation issues that would be examined.

Similar to the flyers, it also provided information on how to get involved and included the Info-Line number, the web page address, and the citizen perceptionnaire.

The brochure was distributed at city halls, chamber of commerce offices, banks, major retail stores, major grocery stores and other locations around the county. They were also available at the special event displays described later in this section.

Citizen Perceptionnaire - A non-scientific, self selected survey was developed early in the transportation futures process. The perceptionnaire contained questions about growth, transportation travel options, and transportation financing. The purpose of the perceptionnaire was two-fold. The first was to raise community awareness of the TFC process. The second was to receive information about public attitudes and concerns regarding transportation in Clark County. These perceptionnaires were distributed throughout Clark County, primarily through the informational flyers and brochures. Approximately 65,500 perceptionnaires were distributed and almost 1,800 were returned. Results of the perceptionnaire analysis were shared with the Committee and are described in Appendix B.

The Internet - A web site was established for the Transportation Futures Committee process as another way to keep the public informed of TFC activities. The web page contained meeting agendas, meeting summaries, and material distributed by the Management Team at the Transportation Futures Committee meetings. It also provided links to other transportation pages such as Vancouver's Department of Community Preservation and Development, Clark County Public Works Department, and the Washington State Department of Transportation. The web page continued and was upgraded during the summer during the second phase of the outreach program. The web address was: *http://www.pacifier.com/~transfut*

Speakers Bureau - The purpose of the speakers bureau was to provide briefings to community interest groups on the proceedings and work of the Committee. Many of the TFC members volunteered their time to participate and were trained in communication skills prior to participating. A data base of approximately 175 organizations was developed, consisting of community organizations, neighborhood groups, grange associations, political parties and service organizations. A letter was sent to them offering to speak to their organization about the TFC process and deliberations. Fourteen presentations were made from February 1996, when the speakers bureau was established, through June of this year, just prior to the release of the findings. Groups included Clark County Home Builders Association, Kiwanis groups, and neighborhood associations.

Special Events - There were a number of opportunities to participate in special community events during the course of the TFC. The public outreach team identified them and designed a portable exhibit about the TFC, its process, the issues it was addressing, how to get involved, and informational brochures, as well as an interactive display with questions about transportation in Clark County. The events were staffed by TFC members.

The interactive display consisted of a large black box that became known as SAM (Studying All Modes) and was designed to respond with bells and green lights if the answer was right and with buzzers and red lights if the answer was wrong. It became an effective and entertaining method to draw attention to the overall display. Special events at which the TFC exhibit was on display, during this phase of the outreach included:

Vancouver Neighborhood Fair - September 1995
Vancouver Chamber Showcase - January 23, 1996
Earth Week at Clark College - April 22 to 28, 1996
Clark County Home and Garden Idea Fair - April 26 to 28, 1996
Celebrate Uptown Festival - June 1, 1996

Vancouver Mall Display - A special display was also designed with the same information and features as the movable display and also contained an interactive question and answer panel. It was placed in a kiosk at Vancouver Mall from March through September 1996 and was well used.

3. SUMMER OUTREACH PROGRAM

The purpose of the summer outreach program was to provide the widest possible community exposure to the findings of the TFC by providing a range of opportunities for citizens to comment and ask questions about the findings. Numerous TFC members participated in this program as members of the speakers bureau, co-hosts of events such as the County Fair and three community open houses. In addition, members served as interviewees for the TFC video and live call-in show on CVTV. Some of the activities described below were new. The others were a continuation of the outreach that occurred throughout the TFC process, but were updated to focus on the findings. Specific elements are described below.

Community Open Houses

Three community open houses were held in July at the following locations:

- July 23, 1996, Center for Educational Leadership, Vancouver
- July 24, 1996, Maple Grove Elementary School, Battle Ground
- July 25, 1996, Evergreen School District, East County

To advertise the open houses, 65,000 flyers were distributed through the *Columbian*, the Battle Ground *Reflector*, and the Camas *Post-Record*. The flyers announced the open house times and locations and included highlights of the findings.

The open houses were informal events that gave citizens the opportunity to discuss the findings with staff and TFC members and express their opinions on the findings. Each open house also provided time for small group discussions facilitated by TFC members. A summary of the public comment from the open houses is contained in Chapter VI, Section A.

TFC Brochure on Findings - A second brochure was published that described the TFC, its purpose, and included a survey based on the Committee's findings. The brochure was distributed in two different ways. The first included 5,000 copies that were distributed at the Clark County Fair, chambers of commerce, banks, city halls, and other locations throughout

the county. The second set -- 48,000 direct mail brochures -- were sent to motivated voters (people who voted two of the last four elections). Survey results are described in Chapter VI.

TFC Video - A 10 minute video was written by the outreach team and produced by CVTV consisting of narration and presentations by TFC members about the findings of the Committee. The TFC video was shown for the first time at the beginning of the live call show described below. It is available through the Fort Vancouver Library System, selected independent video stores, and RTC. The video, along with the call-in show described below, was advertised in the *Columbian* with information on where to check out a copy .

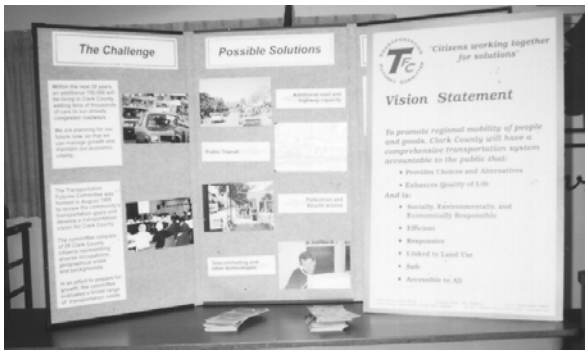
Live Call-in Show - A live call-in show on CVTV Channel 47 was aired on Wednesday, September 25, 1996, from 8 to 9 p.m. Ron Bergman, Clark County Public Works Director, and three TFC members were available to answer questions from callers.

TFC Web Page - The web page was upgraded to allow users to send e-mail with questions and comments about the findings and also to fill out the survey electronically. The e-mail and surveys were then forwarded to RTC for response or tabulation.

Speakers Bureau - The original list of 175 organizations was contacted again by mail with offers to make presentations on the findings. Most of the TFC speakers bureau agreed to continue. Seven presentations have been made since the findings were released in July. Groups included the Transportation Committee of the Vancouver Chamber of Commerce, Clark Utilities Coordinating Committee, and the Ogden and Salmon Creek Neighborhood Associations.

***Columbian* Info Line -** The *Columbian* Info-Line continued its operation through November 1996. Since the release of the findings, more than 50 people have called to leave messages, ask questions, and request findings. Callers who only listened to the Info-Line message were not counted. During the summer outreach, the Info-Line was used to summarize the findings, announce open houses, advertise the call-in show and video, and other activities.

Clark County Fair, August 2 to 11 - The TFC exhibit was the foundation of a transportation booth at the Fair. The exhibit included the updated portable display, SAM (the interactive black box), and brochures in addition to transportation related information from other Clark County transportation agencies. TFC members and jurisdictional staff volunteered their time to assist at the booth and answer questions from the public.



Vancouver Mall Display - Continued through September 1996 and was updated to advertise the Community Open Houses and reflect the Committee's findings.

CHAPTER III.
A TRANSPORTATION VISION FOR CLARK COUNTY

A. DEVELOPING THE VISION

By December 1995, the TFC completed their study of background information and began to develop their transportation vision by discussing ideas for the future transportation system in Clark County. The product of this phase of the process was the Committee's consensus on a transportation vision statement. It became the goal against which transportation options were identified and evaluated. Section B of this chapter describes how the vision was used to evaluate the transportation options.

1. THE VISIONING PROCESS

At an all-day Saturday workshop on December 7, 1995, held in an informal setting, members were asked to describe, in an ideal world, what Clark County's transportation system should be in twenty years. Members identified a number of functional aspects of the transportation system and its various categories including: local road and highway capacity, public transit, pedestrian/bicycle access, freight mobility, and bi-state mobility.

The Committee then divided into three groups to begin the discussion of what would need to occur in each of the categories to make the vision a reality. The process continued at the January 4, 1996, regular meeting. Committee members remained in their three groups. Although each group developed a unique approach, they all discussed similar broadly-based themes and issues. These themes later served as the foundation for the development of the transportation vision. The common themes are summarized below.

a) Common Themes Among All Three Groups

- Promote alternative transportation modes
  - -Promote public and private incentives
  - -Provide choices in transportation types/alternatives
  - -Promote transit, improve pedestrian networks and reduce reliance on cars
- Provide for effective freight movement
  - -Invest in high quality freight and intermodal facilities
- Enhance financial efficiency and innovation
  - -Wise investments contributing to long-term operation and maintenance
  - -Innovative finance of inter-state and intrastate facilities
  - -Financially sound/fiscally responsible transportation system

b) Common Themes Among Two Groups

- Develop and operate an efficient transportation system
- Maintain general mobility
  - -People can get where they want to go in a reasonable amount of time
- Take a regional bi-state approach
  - -Promote regional planning and consider bi-state transportation authority
  - -Bi-state and intra-county accessibility important
  - -Clark County is part of a larger metro area
- Integrate land use and transportation planning more effectively
  - -Tie transportation to comprehensive plan
  - -Transportation system reflects land uses and lifestyles of community
  - -Match density to mode

-Focus growth and plan infrastructure to serve it
-Transportation should be available to accommodate planned development

- Design flexibility into transportation system and consider all options
- Reduce peak hour travel
  -Eliminate the peak hour commute
  -Increase use of flex-time and telecommuting
- Consider environmental impacts and costs
  -System should be environmentally sound
  -Environmental costs should be considered
  -Reduce resource consumption
- Use smaller buses where appropriate

A second all day visioning workshop was held on January 13, 1996, where the three subgroups exchanged themes and issues with each other. The full Committee then reconvened, and in a consensus-based process, agreed on a transportation vision for Clark County. The workshop ended with a draft vision. An illustration of this process is shown in Figure 3.

Process for Developing the TFC Vision

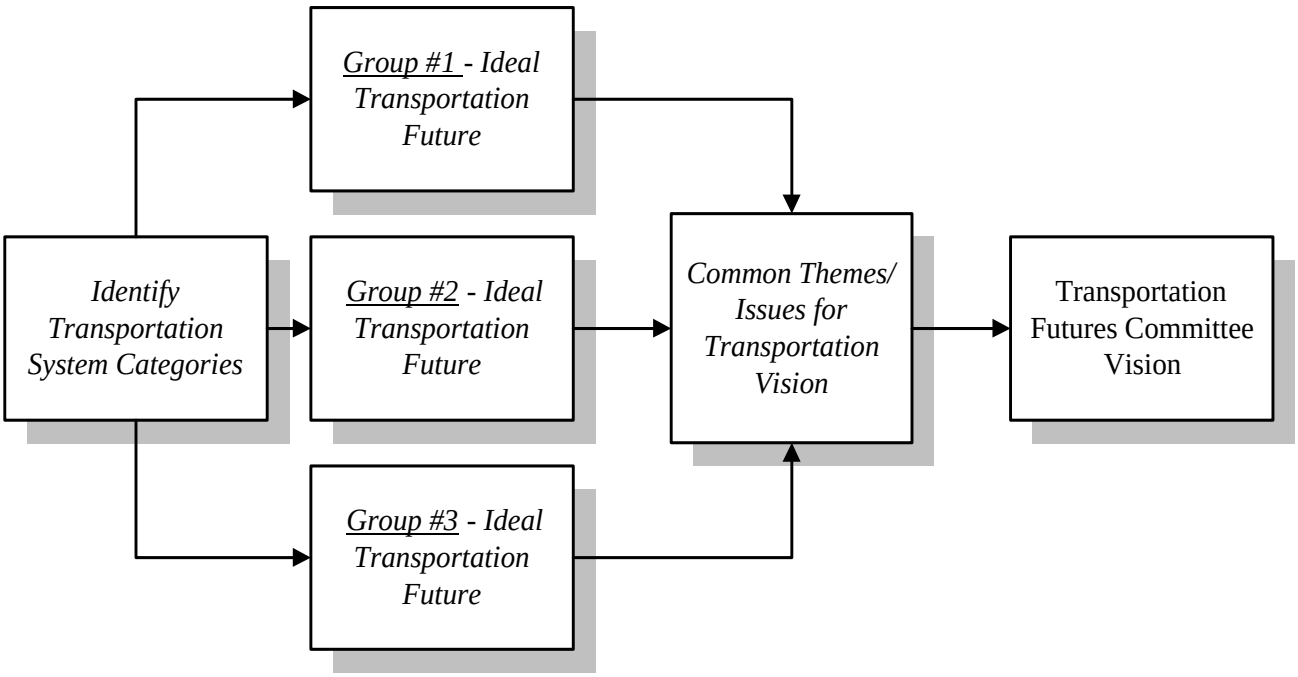


Figure 3

The visioning process was completed at the following TFC meeting when the Committee reviewed and approved its Transportation Vision for Clark County.

2. THE TRANSPORTATION FUTURES COMMITTEE VISION

The following 20-year vision approved by the Transportation Futures Committee provided an approach to assess transportation options and lay the groundwork for identifying problems and constraints to achieving the vision.

> *To promote regional mobility of people and goods, Clark County will have a comprehensive transportation system accountable to the public that:*
>
> - *Provides choices and alternatives*
> - *Enhances quality of life*
>
> *And is:*
>
> - *Socially, environmentally and economically responsible*
> - *Efficient*
> - *Responsive*
> - *Linked to land use*
> - *Safe, and*
> - *Accessible to all.*

B. EVALUATING THE TRANSPORTATION OPTIONS IN LIGHT OF THE VISION

Once the vision was completed, the Committee began developing an approach for evaluating transportation options in light of the vision. This process resulted in the transportation options evaluation matrix and is illustrated Figure 4.

Development of the Transportation Options Evaluation Matrix

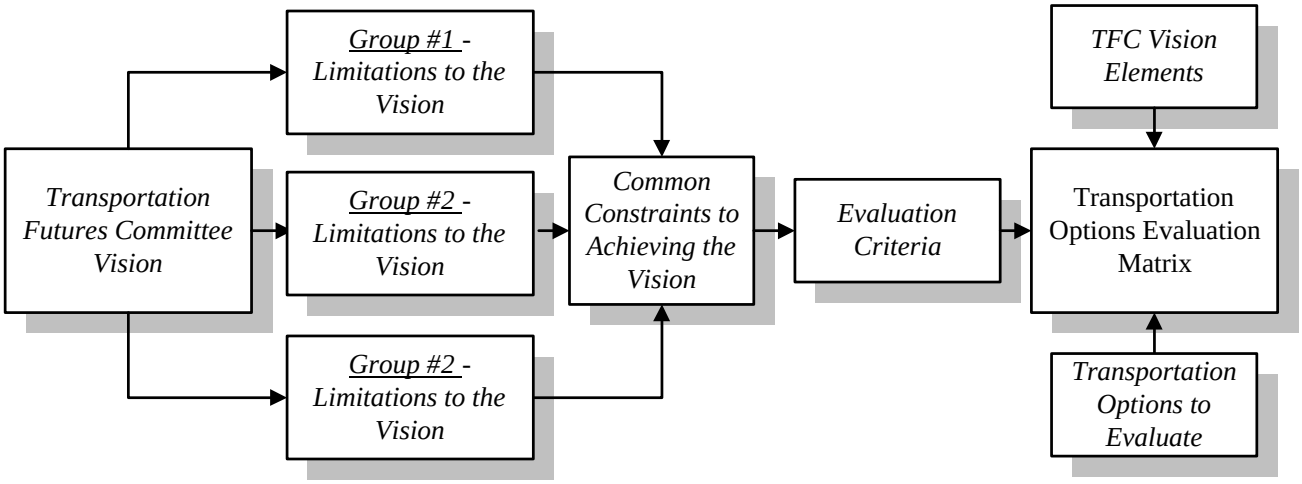


Figure 4

1. LIMITATIONS TO ACHIEVING THE VISION

The first step in this process was to identify problems and constraints that limit the community from achieving the vision. This process was the first step in developing a method for evaluating transportation options and is illustrated in Figure 4. Committee members once again divided into small groups. They were asked to relate the problems they identified to the categories (such as 'Provides choices and alternatives') in the vision statement. Small group discussions, led by TFC members, continued over a period of two meetings; the Committee reconvened as a full group to share their findings. A summary of the small group discussions for each vision category displayed the following common constraints to achieving the vision..

2. IDENTIFICATION OF COMMON CONSTRAINTS TO THE VISION

The TFC process described in the previous section resulted in the following list of common problems for each vision category perceived as limitations to achieving the vision. These problems were the starting point of the Transportation Options Evaluation Matrix described in the next section.

- **Provides choices and alternatives**

  Three groups mentioned:
  -Lack of alternatives to the automobile (due in part to current pattern of development)

  Two groups mentioned:
  -Lack of HOV lanes

- **Enhances quality of life**

  Two groups mentioned:
  -Public right-of-way is not attractive (asphalt eliminates the green)
  -Lack of consciousness, awareness and ability to use alternatives
  -Air pollution - limited funds to address problem; perceived problem with emission standards

- **Socially, economically, and environmentally responsible**

  Two groups mentioned:
  -No direct relation between funding and specific problems
  -Problematic public attitude about public transportation and public funding
  -Pollution generators don't bear full costs

- **Efficient**

  Two groups mentioned:
  -Lack of creative use of technology
  -Efficiency of existing capacity is not maximized - too much peak hour use
  -Freeways are inconvenient and congested

- **Responsive**

  Two groups mentioned:
  -Current transportation system is not flexible enough to meet the needs of growing and more diverse community
  -Foresight is not funded - planning characterized by crisis management
  -Public planning staffs do not use progressive planning; we accept auto-dominated orientation

- **Linked to land use**

  Two groups mentioned:
  -Lack of mixed use developments
  -Existing transportation does not support projected land use

- **Safe**

  Two groups mentioned:
  -Lack of sidewalks, separation between pedestrian and cars
  -Inadequate street lighting

- **Accessible to all**

  Two groups mentioned:

-Not everyone can get van service who needs it (e.g. handicapped)

3. TRANSPORTATION OPTIONS EVALUATION MATRIX

The final step was to assess how various transportation options and policies compared the transportation vision developed by the Committee by use of a Transportation Options Evaluation Matrix designed especially for this process. The problems identified in the vision statement elements described in the previous section were reconfigured as criteria for measuring the ability of transportation options to achieve the vision as established by the Committee. A full listing of the vision elements and the associated criteria developed for the evaluation matrix is contained in Table 1.

Table 1

ELEMENTS OF THE TRANSPORTATION VISION AND EVALUATION CRITERIA

• ***Provides Choices and Alternatives***
Increases travel route options
Enhances facilities for alternative modes
Reduces legal restrictions to alternatives
Provides incentives that encourage alternatives
Improves transit service (frequency or coverage)
• ***Enhances Quality of Life***
Makes rights-of-way more attractive
May reduce stress
Limits land consumption for transportation facilities
Improves public attitudes and involvement
Improves air quality
• ***Socially, Economically, and Environmentally Responsible***
Improves relationship between funding sources and specific improvements
Increase public willingness to pay for solutions
Helps preserve the natural environment
Reduces dependence on non-renewable resources
Helps ensure that full costs are covered by users
• ***Efficient***
Facilitates creative use of technology
Helps maximize use of existing capacity at all times
Reconciles conflicts between uses and modes (e.g., freight and passenger)
Makes travel between major destinations easier
Provide rational transportation policies
• ***Responsive***
Improves ability to respond to growth and change
Reduces lag between decreases in service and needed improvements
Encourages proactive approach to planning
Reduces impacts of weather conditions
Improves convenience of public transit system

Continued . . .

Table 1 *Continued*

• ***Linked to Land Use***
Encourages mixed use developments
Strengthens relationship between land use and transportation facilities
Improves orientation and accessibility to alternative modes
Supports neighborhood businesses
• ***Safe***
Strengthens safety ethic
Enhances emergency response
Improves safety of public transit (or corrects misperception)
Incorporates specific safety improvements (e.g., lighting, separation between vehicles and pedestrians)
Reduces number of deaths and injuries and associated costs
• ***Accessible to All***
Ensures mobility for those without access to a car
Equalizes accessibility for all modes
Contributes to making public transportation accessible and more frequent

A sample page of the transportation options evaluation matrix , using the criteria from Table 1, is displayed in Figure 5. The columns in the matrix list all the options the Committee was to consider for each of the transportation issue areas in the Committee's scope of work. The rows of the matrix list the elements of the vision and the criteria used to assist in evaluating the effectiveness of each option in achieving the vision elements. This format allowed Committee members to rank the effectiveness of the various transportation options and strategies as they gathered information about them. The matrix did not dictate the results of the Committee's deliberations, but was a helpful tool in comparing transportation options during the information and analysis phase of the process.

Transportation Futures Committee
Transportation Options Evaluation Matrix

Ranking on a scale of 1 to 5
most effective 1 2 3 4 5 least effective

Elements of the Transportation Futures Committee's Vision	*Bi-State Options*								*Internal Clark County Options*				*Transit Options*					*Local Financing Options*										*Policy Issues*					
	3rd Bridge & Highway Corridor	I-5 Widening	I-5 Light Rail Transit	I-205 Light Rail Transit	Freight Movement & Bridge	Commuter Rail	High Occupancy Vehicle Lanes	Other	Road System	Freight System	Bicycle & Pedestrian	Other	Urban Service Levels	Rural Service Levels	Transit Service Boundary	Para-transit	Other	No Change	Property Tax	Gas Tax	Sales Tax	Motor Vehicle License Fee	Motor Vehicle Excise Tax	Impact Fees	Real Estate Excise Tax	Tolls	Other	Flex-time	Ride share	Private Transit	Land Use	Tele-commuting	Other
A. Provides Choices & Alternatives																																
1. Increases travel route options																																
2. Enhances facilities for alternative modes																																
3. Reduces legal restrictions to alternatives																																
4. Provides incentives that encourage alternatives																																
5. Improves transit service (frequency or coverage)																																
B. Enhances Quality of Life																																
1. Makes rights-of-way more attractive																																
2. May reduce stress																																
3. Limits land consumption for transportation facilities																																
4. Improves public attitudes and involvement																																
5. Improves air quality																																
C. Socially, economically, and environmentally responsible																																
1. Improves relationship between funding sources and specific improvements																																
2. Increase public willingness to pay for solutions																																
3. Helps preserve the natural environment																																
4. Reduces dependence on non-renewable resources																																
5. Helps ensure that full costs are covered by users																																

Figure 5

CHAPTER IV.
COMMITTEE RESOURCES AND INFORMATION

This section of the report contains a summary and overview of the information gathered by the Committee during the TFC process. Section A contains background information on population and employment and traffic growth, a bibliography of previous studies, and a description of information compiled from other sources. Section B is a summary of key facts collected by the Committee during the information gathering phase of the study and were considered by it in developing its findings.

A. SUMMARY OF BACKGROUND INFORMATION

During the first phase of the TFC process, the Committee received information from agency staff to provide a basic level of knowledge about transportation issues in Clark County. Committee members were given a Resource Book prior to the first meeting. It served as a transportation primer to familiarize the Committee with Clark County travel characteristics and growth. The Resource Book also provided information on previous transportation planning activities leading to existing transportation policies in the county. This section summarizes the information presented to the Committee during the course of the TFC process. Since that time new information has become available including data on new growth projections and additional traffic counts.

1. POPULATION AND EMPLOYMENT

a) Historic Growth

The amount and location of growth in Clark County has been a major issue throughout the 60's, 70's, 80's, 90's and will be into the next century. This growth is important to the transportation futures process, because it is one of the primary drivers in determining transportation system needs. While there are a host of other factors that also feed into travel behavior, the volume of growth in travel demand is directly in proportion to the amount of population growth.

To begin the discussion on future growth, it is helpful to first review our previous growth. Table 2 records actual population growth in Clark County from 1960 to the present.

Table 2

Population								
1960	**1970**	**1960-70**	**1980**	**1970-80**	**1990**	**1980-90**	**1995**	**1990-95**
93,809	128,454	34,645 (37%)	192,227	63,773 (50%)	238,053	45,826 (24%)	291,000	52,947 (22%)

Over the last 35 years, Clark County has averaged 5,600 additional residents each year. Over the last 5 years, Clark County has averaged 10,600 new residents per year.

Most of the population growth between 1960 and 1995 has occurred in unincorporated parts of the county. In 1960, unincorporated Clark County contained slightly more than half the county's population. In 1995, as the unincorporated areas continued to become urbanized, it had 2.5 times the population of the incorporated area.

b) Past and Future Trends

It is also meaningful to compare previous population growth forecasts to the actual growth that has occurred. Population forecasts estimated in the early 1970's were close to the actual population growth, but have generally been low compared to estimates. More recent forecasts, developed in the 1980's for the Year 2000 (310,400 people), are also likely to be low given current trends. Actual population in 1996 is over 300,000 and even if Clark County were to grow at the 35-year annual average of 5,600 people/year rather than the last 5-year average of 10,600 people/year, the County would still exceed the Year 2000 forecast.

The current Metropolitan Transportation Plan used a population 2015 forecast of 378,000, but the most recent forecast currently being used for growth management and transportation planning projects a 2017 population of 437,000, for an annual growth rate of 6,636 people/year from 1995. A graph of past growth trends and future projections to 2015 for both population and employment are shown on Figures 6 and 7.

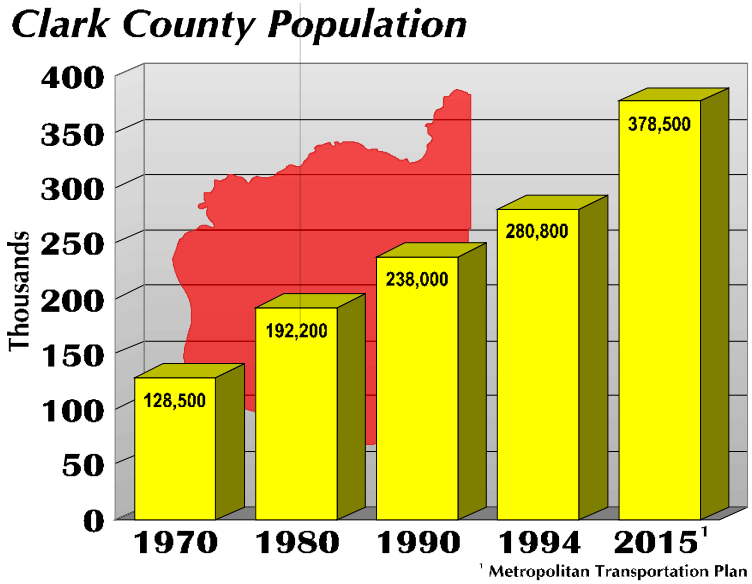


Figure 6

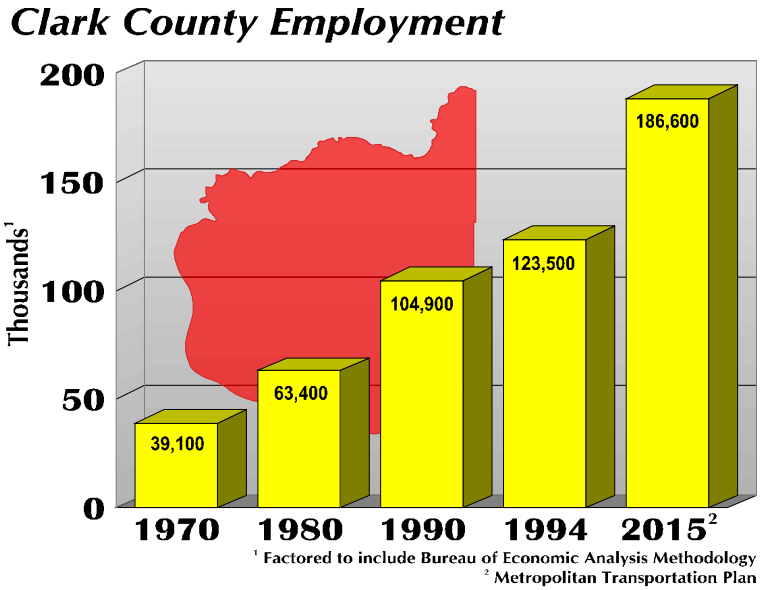


Figure 7

2. TRAVEL CHARACTERISTICS

a) Traffic Growth

A wide range of data was provided to the Committee on traffic growth in Clark County. It included information on vehicle ownership, the increase in daily traffic volumes, growth in annual transit ridership, and traffic volumes crossing the Columbia River. Some of the information provided to the Committee is summarized below.

As more people have moved to Clark County, the growth in vehicle travel has grown at a faster rate than the population. For example, the annual population growth rate in Clark County was 2.4% from 1980 to 1990. The annual traffic growth rate during the same period at the locations shown in the following tables ranged from 6.8% to 15.4%.

Table 3

Columbia River Crossings

Year	Average Weekday Traffic	Annual Traffic Growth Rate
1970	69,200	
1980	108,600	5.7%
1990	182,500	6.8%
1994	215,000	4.4%

Table 4

Downtown Vancouver (Mill Plain & "C" St.)

Year	Average Weekday Traffic	Annual Traffic Growth Rate
1980	11,800	
1990	21,500	8.2%
1994	25,200	4.3%

Table 5

Cascade Park (Mill Plain & Chkalov)

Year	Average Weekday Traffic	Annual Traffic Growth Rate
1980	27,800	
1990	46,700	6.8%
1994	54,200	4.0%

Table 6

Battle Ground (SR-503 & SR-502)

Year	Average Weekday Traffic	Annual Traffic Growth Rate
1980	3,500	
1990	8,900	15.4%
1994	11,900	8.4%

The following Figure 8 compares annual population growth in Clark County from 1960 to 1994 as compared to total passenger cars and total vehicles. Total vehicles include motorcycles, trucks, boats, and so on. Total vehicles have grown at a faster rate than the population so that by 1990, there were as many vehicles in Clark County as people.

Population vs. Vehicle Growth

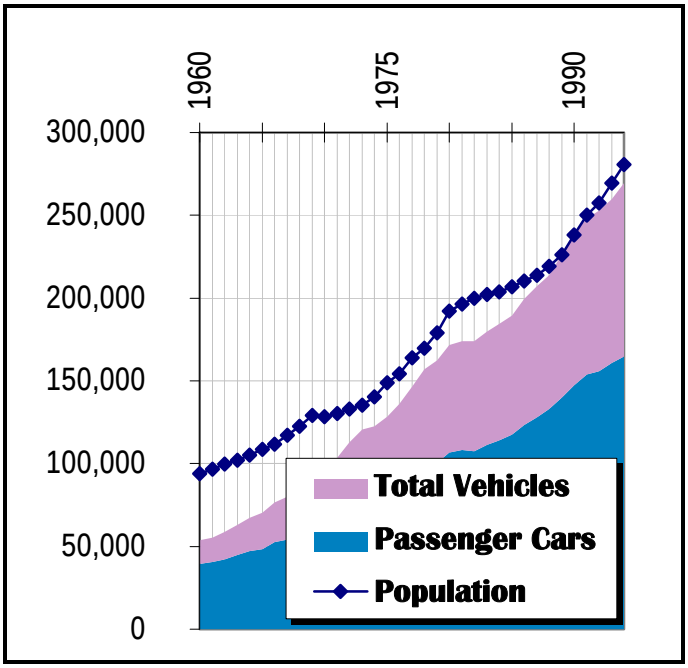


Figure 8

b) Bi-State Travel Patterns and Behavior

Figure 9 compares by district the percentage of trips that cross the I-5 or I-205 bridges for trips from Clark County. The size of the circle is proportional to the amount of total crossings from that subdistrict as compared to the other subdistricts. As expected, the I-205 bridge is used primarily by east county residents; overall however, I-5 remains the travel path of choice for most Clark County residents.

3. Summary of Previous Studies

The Committee was briefed on a number of transportation studies that have been conducted over the last several years which together have formed the basis of regional transportation policies for Clark County. This section contains a summary of the most relevant studies that have helped to shape regional transportation policies. Appendix C contains abstracts of these studies, other transportation studies that have provided the technical support for other policy decisions or contain information about transportation needs within the county and a list of other transportation related documents and resources that were available to Committee members.

Columbia River Crossing Accessibility Study, December 1980

This study determined that travel demand across the Columbia River would exceed the capacity of the I-5 and I-205 bridges by the year 2010 and raised the prospect of a third bridge and freeway corridor through the region as well the potential for light rail transit.

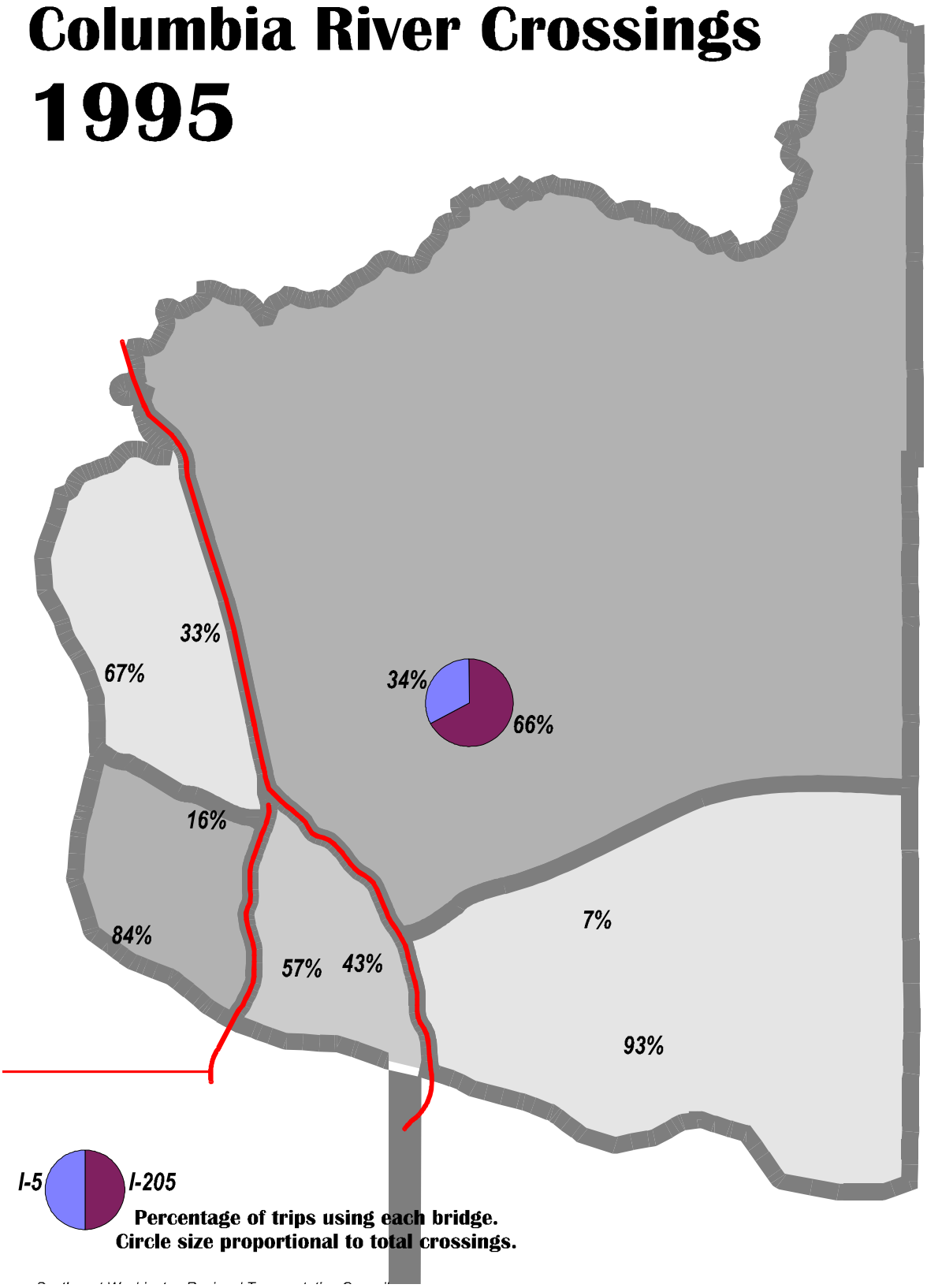

Columbia River Crossings
1995
33%
67%
34%
66%
16%
84%
57%
43%
7%
93%
I-5
I-205
Percentage of trips using each bridge.
Circle size proportional to total crossings.

Figure 9

Clark County High Capacity Transit Analysis Final Report, November 1991
The purpose of this study was to determine the most appropriate high capacity transit (HCT) options and alignments that address internal Clark County and bi-state regional travel needs.

It study examined high capacity transit in the I-5, I-205 and Fourth Plain Corridors and concluded: All HCT options, including light rail, should be evaluated further for the I-5 corridor, only HCT bus options should be evaluated further for the I-205 corridor; and the Fourth Plain corridor should not receive further consideration for light rail or other HCT options.

I-205 Glenn Jackson Bridge LRT Retrofit Study Summary Report, December 1991
This study concluded that the I-205 bridge can structurally support busway or light rail operations; I-205 light rail transit (LRT) and four travel lanes in each direction could only be accommodated by removing the current inside and outside emergency lane shoulders; with LRT and only three travel lanes, the existing emergency lane shoulders could be retained.

Bi-State Transportation Study, November 1992
This study assessed current and future transportation conditions and recommended making improvements in the I-5 corridor to balance capacity along the corridor. The analysis assumed light rail transit in the I-5 corridor but also called for additional improvements along I-5 and I-205 such as to improve traffic operations and safety, auxiliary lanes, ramp metering, and ramp improvements.

South/North Transit Corridor Study Priority Corridor Analysis, March 1993
This study was the basis for the selection of I-5 as the first priority for high capacity transit in Clark County. The analysis determined that construction costs for high capacity transit on I-5 are higher than for I-205, although these costs are more than offset by higher ridership. Additionally, the I-5 corridor was found to have a higher number of current and projected households and employment, higher LRT ridership, and a higher level of roadway congestion.

Tier I Technical Summary Report, September 1994
This report contained technical information developed to determine the South/North Tier I alignment and terminus choices and formed the basis of the bi-state policy recommendation to pursue the South/North project in two study phases: Phase I, consider a light rail project between the Clackamas Town Center area and the 99th Street area in Clark County; Phase II, consider an extension of Phase I light rail south to Oregon City and north to the 134th Street/Washington State University area.

Tier I Final Report - Final Recommendations, November 1994
This report identified the South/North Light Rail Transit terminus and alignment alternatives to be advanced into the Draft Environmental Impact Statement. It also addressed policies and actions related to other aspects of the South/North Transit Corridor Study.

It contained the bi-state policy recommendation to pursue the South/North project in two study phases as described in the previous summary.

4. DESCRIPTION OF INFORMATION FROM OTHER SOURCES

In addition to the growth and transportation information described earlier in this chapter, the Committee was also provided with information developed by staff in response to requests by the full Committee or individual Committee members. The Committee was also provided with copies of documents, articles, or communications from other Committee members and members of the public.

a) Committee Requests

As the Committee meetings were underway, Committee discussion resulted in a number of questions by TFC members on other transportation issues. Some questions related to the history of transportation issues in the county, others referred to transit ridership, land use, air quality, and to the cost of the transportation system and the automobile. The following is a short summary of other information given to the Committee by staff.

Chronology of I-205 and Other Proposed Bi-State Highway Corridors, 1957-1982, October 1995
This memorandum highlighted the key plans that relate to I-205 and other bi-state highway corridors including I-5 and the history of the third highway corridor and bridge.

I-5 Corridor and Interstate Bridge Improvement Costs, October 1995
This memo summarized the Oregon Department of Transportation estimated costs (1995 dollars) for improvements in the I-5 corridor planned during the next twenty years and also for the repair, maintenance, and seismic retrofit of the I-5 Interstate Bridge spans.

Transportation Related Votes Affecting the Vancouver/Portland Region, October 1995
Summarized the history of votes in the bi-state region affecting the transportation system, including the formation of C-TRAN, LRT votes in the Portland region and Clark County, and local area gas tax measures.

Transportation Information on the Internet, October 1995
Contained a partial list of transportation related information available through the internet. It included web addresses for local, state, and federal transportation agencies and professional transportation organizations.

Parking at Vancouver Urban Area High Schools, October 1995
Documented the number of staff and students at area high schools and the cost of parking and the number of spaces for each group.

College Parking, November 1995
Same as above. Documented the number of staff and students at Clark College and the old Washington State University campus and the cost of parking and the number of spaces for each group.

Clark County LRT February Election Results, November 1995
Provided more detailed information on the February 1995 LRT election in Clark County, including voter turnout, number of people voting, and the percentage of yes/no votes.

Transportation Futures Committee Information Request, November 1995
This is a compilation of transportation related information assembled at the request of Committee members. It included the following sections: Cost of Living Comparison Between Clark and Washington Counties, Clark County Air Shed Emissions and Sources, Traffic Accident and Cost Data, Handicapped and Dependent Population, Eligibility Requirements for Paratransit Service, Cost-Effectiveness of Large versus Small Buses, and Timeliness of Bus Service.

Traffic and Parking Enforcement Costs, November 1995
Summarized the cost of traffic and parking enforcement for the City of Vancouver including the cost of police devoted specifically to traffic enforcement and staff devoted to parking enforcement.

Transportation Revenues and Expenditures for Clark County, November 1995
Summarized State and Federal transportation revenues received from Clark County and expenditures for Clark from 1984 though 1993.

Land Use Density and Transit Ridership, November 1995
Compared population density (people per square mile) and transit ridership for Vancouver and other west coast cities, including Seattle, Portland, and Los Angeles.

Full Cost of Automobile Transportation, May 1996
This memorandum examined "Full Cost of Automobile Transportation" and is based on the assumption that the cost of automobile use is significantly underpriced when the total public and private cost is included. It looks at factors in addition to the cost of gas, maintenance, and insurance that is normally assumed when calculating auto cost.

b) Other Sources

In addition to documents developed by the Management Team, Committee members and members of the public distributed a wide-range of other information to the Committee. Some Committee members articulated their thoughts and ideas formally at the meetings, others shared transportation related articles of interest from newspapers and periodicals such *Scientific American*, the *Whole Earth Review*, and *Access*.

Communications from the public included letters concerning issues before the Committee, transportation related articles, and proposals from individuals and transportation interest groups, such as Association of Oregon Rail Transit Advocates on other transportation issues.

B. SUMMARY OF KEY FACTS

This section is a summary of key facts and analyses presented to the Committee during the information gathering stage of the process. It consists of an overview of information on transportation issues and options the Committee received to develop their findings.

1. CURRENT TRANSPORTATION GOALS AND POLICIES

The current communitywide transportation goals and policies described in this section are based on the 20-Year Comprehensive Growth Management Plan and the Metropolitan Transportation Plan (MTP). The first is known as the GMA Plan. The MTP is the regional transportation framework plan that is coordinated across all jurisdictions (county and seven cities), WSDOT, the ports and C-TRAN.

a) Countywide Goals and Policies for Transportation

Background on the Growth Management Act

The Growth Management Act (GMA) of 1990 was passed in response to concerns statewide about rapid growth and the impacts on traffic congestion, air quality, housing costs, and quality of life. It set up a framework for a long range comprehensive planning process that addressed these growth related issues.

The Growth Management Act contains 13 statewide planning goals that each jurisdiction considered during the development and adoption of their comprehensive plans. While many of the goals impact or relate to the transportation system, in fact, there is only one overall transportation goal per se. The other goals cover a wide range of land use issues such as the preservation of open space, historical and cultural resources, maintaining economic vitality and a healthy environment. GMA goals provided the basis for the policies in the *Community Framework Plan.* The transportation goal is stated as follows: Encourage efficient multimodal

transportation systems that are based on regional priorities and coordinated with county and city comprehensive plans. (Figure 10)

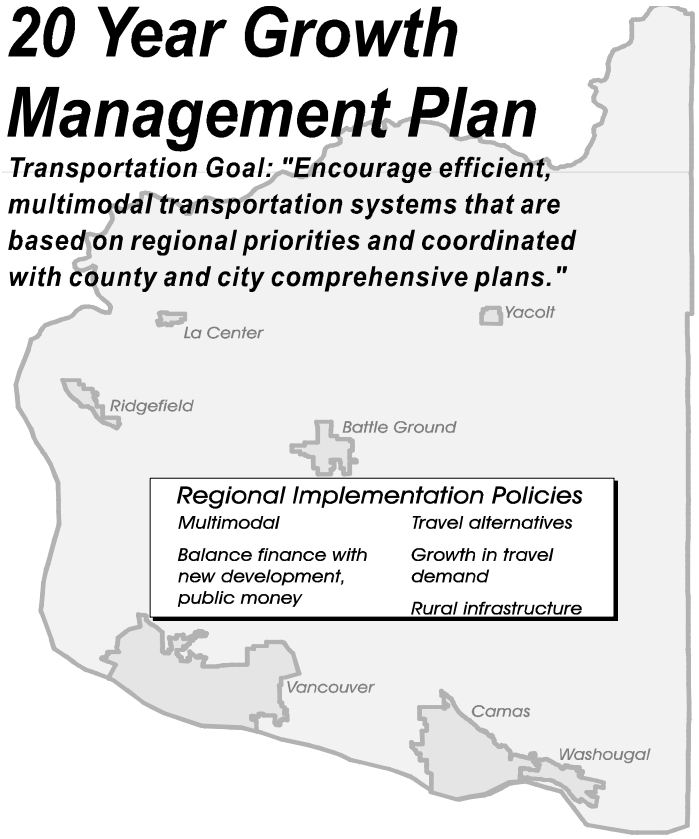


Figure 10

Countywide Transportation Policies

The countywide policies provided the framework for Clark County and the cities to develop their individual policies. This process ensured that the resulting plans had a common element which helped to implement the overall vision for the future of Clark County. The policies also emphasized cooperation and coordination among state and regional agencies and the cities and County. The nine guiding policies are listed below:

- Develop a balanced transportation system that is multimodal, encourages energy efficiency, recognizes financial constraints, and minimizes environmental impacts.
- Plan regional and bi-state facilities within the context of county and bi-state air, water, and land resources.
- Promote regional transportation facilities that maximize benefits to the region while serving local communities.
- Optimize the efficiency of the transportation system and minimize the need for roadway expansion.
- Establish consistent roadway standards, level of service standards, and functional classification throughout the region.
- Encourage alternative modes.
- Consider the development of high capacity transit corridors and the development of adjacent land uses that support them.

- Establish a regional transportation system is that balanced and compatible with planned land uses and recognizes the link between transportation and land use that provides mobility for the movement of goods and people.
- Locate major facilities that generate substantial travel demand along or near major transportation and/or public transportation corridors.

Individual jurisdictions have also developed implementation policies in relation to the countywide goals listed above. Implementation policy levels are summarized in the following table.

Table 7

Regional Implementation Policies	Urban Implementation Policies	Rural Implementation Policies
Apply county wide, applicable to both urban and rural areas. City and county comprehensive plans must be consistent with them.	Urban policies apply within the defined urban areas. Each city has developed its own urban policies consistent with the countywide transportation policies. Clark County and the City of Vancouver have developed a common set of policies for the Vancouver Urban Area.	Apply to areas outside the urban areas and focus on the transportation system that connects rural areas to urban areas.

Regional Implementation Policies - Focus on developing the existing transportation infrastructure into an efficient multimodal transportation system and a balanced finance program and provide seamless interconnections among travel modes, viable travel alternatives to the single occupant vehicle, and the transportation infrastructure to meet continued growth in travel demand.

Urban Implementation Policies - Clark County and the City of Vancouver worked cooperatively to develop policies for a single Mobility Management Plan for the Vancouver urban area. The policies were developed in cooperation with a citizen process that identified issues and opportunities relating to transportation.

The Mobility Management Plan policies connect a public transportation system to specific land use strategies. The policies also support multimodal transportation facilities for the movement of people and goods including high capacity transit, encourage transit friendly development and design, and promote growth in urban corridors. They also support actions to encourage the use of alternative modes, protect neighborhoods from through traffic, optimize roadway efficiency, promote safety, provide for road maintenance, and support transportation demand management strategies.

The small cities have also developed implementation policies that are consistent with countywide goals and include support for a multimodal transportation system.

Rural Implementation Policies - Provide strong connections between the rural arterial and the regional transportation system, minor collector service to rural towns and centers to serve commercial markets, and safe and secure walkways within towns and rural centers and support public transportation connections between rural and urban centers.

b) Metropolitan Transportation Plan Goals

The Southwest Washington Regional Transportation Council is responsible for developing the MTP for Clark County which is the region's principle transportation planning document. It

represents a 20 year regional transportation plan for Clark County and was developed through a coordinated process between local jurisdictions in order to develop regional solutions to transportation needs. It is a collective effort to develop a regional transportation system which will facilitate planned economic growth and maintain the region's quality of life. The MTP goals and policies guide the jurisdictions and agencies involved in transportation planning and programming throughout Clark County.

The MTP outlines a long-range plan which will provide for the highest level of transportation services at the most cost-effective price and with the least environmental impact. Specifically, the goals of the MTP are to maintain and improve the transportation system to:

- ensure mobility in and through the region,
- provide accessibility to locations within the region,
- select cost-effective and affordable alternatives,
- minimize environmental impacts,
- improve air quality,
- preserve community values, and
- sustain neighborhood structure.

2. INTERNAL CLARK COUNTY TRANSPORTATION SYSTEM

An all day Saturday workshop held on April 20 focused on a discussion of the internal Clark County transportation system. It included information about current and future capacity deficiencies on the regional transportation system, locations with high accident rates, the 6 and 20 year local road needs for Clark County, and a description of the ongoing traffic management programs for the city of Vancouver and Clark County. This section summarizes the local road issues discussed at the workshop.

a) Transportation System Deficiencies

Pedestrian and Bicycle Needs - The current Clark County arterial standards policy incorporates bicycle and pedestrian improvements on future roadway projects. Existing bicycle facilities are limited at this time. An extensive network of improvements to support these modes has been identified to add sidewalks, bike lanes, and street lighting to transportation facilities.

Potential Safety Concerns - Locations within Clark County where there have been ten or more accidents per year during 1994 or 1995 were identified as potential safety concerns. Safety needs are often determined using accident data averaged over a three-year period and weighted by the amount of vehicle miles traveled occurring at that location. Rankings of safety can include an assessment of the severity of the accident. This analysis indicated areas where a more detailed study may be needed to determine if a safety deficiency exists. Specific areas where there appeared to be potential safety issues were along 78th Street, 112th Avenue, and SR-500.

1995 Peak Hour Deficiencies - Information on traffic volumes and roadway capacity was compiled to identify existing congestion locations on the regional roadway system. This information was developed from peak hour traffic counts compared to vehicle capacity of roadway intersections and roadway segments. The existing transportation system was defined by all roadway projects completed in 1994. Deficient segments included portions of SR-14, I-5, SR-500, Fourth Plain, 78th Street, and 164th Avenue, as well as Mill Plain Blvd. and I-205.

2015 Peak Hour Volume to Capacity Comparisons - Future potential roadway deficiencies were also identified for a 2015 forecast year. These areas can be considered indicators of where congestion problems are likely to occur based on the travel model forecast. It was developed using the RTC travel forecasting model, the new population and employment forecasts for Clark

County and the resulting increase in vehicle travel. The new population forecast is 437,000. The travel forecast assumed no change to the existing transportation system, except for road projects under construction or completed in 1995 resulting in potential deficiencies that were extensive throughout the urbanzied area of the county. Projects contained in the currently adopted MTP (for example, I-5 widening from Main Street to 134th Street and the Main Street and 78th Street Interchanges) would address some of these deficiencies.

b) Local Road Needs by Traffic Impact Fee Subareas

The Committee was given a tabulation of programmed and planned transportation improvements for both the 6-year and 20-year horizons, stratified by traffic impact fee subarea. The local road needs identified by the Washington State Department of Transportation, Clark County, and the City of Vancouver were based on the currently adopted GMA land use plans and growth forecasts (361,000 population). These needs are currently being reassessed to reflect new growth assumptions for population (437,000) and employment in Clark County. In addition, the concurrency process requires that transportation improvements occur in-step with land uses within a specific time frame. The summary did not include transportation improvements identified by the smaller cities (Camas, Washougal, Ridgefield, Battle Ground, La Center, and Yacolt). A full description of the planned and programmed transportation improvements is contained in Appendix D.

c) Neighborhood Traffic Management Programs

The City of Vancouver and Clark County have both implemented neighborhood traffic management programs. They are intended to improve neighborhood livability by reducing the infiltration of regional traffic on local streets and limiting excessive travel speeds through neighborhoods by the use of various traffic devices and street treatments. This can include speed bumps and curb extensions to reduce speeds and traffic devices that prohibit specific turning movements at intersections to prevent cut-through traffic.

Both jurisdictions have developed a process to work with neighborhood associations and the public to assess needs and evaluate strategies for effective neighborhood traffic management. To date, the programs are considered effective approaches for addressing neighborhood traffic concerns.

3. PUBLIC MASS TRANSIT OPTIONS

As the public transit agency of Clark County, C-TRAN is responsible for providing fixed-route bus transportation and curb-to-curb paratransit service. In addition, local government entities have given priority to the promotion of alternative transportation modes and a multi-modal system that meets the mobility needs of the community. C-TRAN operates a broad mix of services designed to meet the transportation needs of citizens who are dependent upon transit and those who choose to use alternatives to driving alone. Among the alternative mode services C-TRAN provides are:

Fixed Route Bus Transportation - C-TRAN currently operates 29 bus routes including service to both the urban and rural areas of Clark County and commuter service to Portland. In 1995, C-TRAN carried 4.3 million passengers.

C-VAN Paratransit Service - C-TRAN provides curb-to-curb paratransit service for citizens with disabilities who are unable to use the fixed-route transportation system. Federal law requires that C-VAN service be provided to qualified people who live within 3/4 of a mile of C-TRAN's fixed-route bus system. There are currently 27 C-VAN vehicles. C-VAN passengers made 114,200 trips on C-VAN in 1995.

Vanpools - C-TRAN provides vanpools for groups of 7 to 15 commuters who want to share rides to and from work on a regular basis. Six vanpools are currently in service. The vanpools are operated by vanpool participants and owned and maintained by C-TRAN.

Commute Match Services - C-TRAN provides a free, computerized matching service for people who would like to carpool or vanpool to their destination. The computer matches applicants who have similar departure points, destinations and schedules. More than 200 citizens have used the service since it was started in late 1995.

Bicycle Programs - All C-TRAN buses are equipped with bicycle racks. Use of these racks is available to anyone 14 or older who attends a brief training class and receives certification. In addition, free bicycle lockers are provided at four locations in Clark County, providing direct transfers to C-TRAN buses. C-TRAN has issued more than 1,600 bicycle permits since the program was started in May 1994.

Telecommute Program - C-TRAN provides advice to employers that want to offer telecommuting as an option for employees. The agency provides advice on employer benefits and policies and procedures required for telecommuting programs. The State of Washington also provides consultation on telecommuting matters.

Transit Service to Special Events - To help ease traffic congestion, C-TRAN provides free bus service to major regional special events. These events include: the Clark County Fair, the Fort Vancouver 4th of July celebration, the Rose Festival and Grand Floral Parade and the Home & Garden Idea Fair.

Commute Trip Reduction Services - C-TRAN provides assistance to employers affected by the Commute Trip Reduction Law. The law applies to major employers with 100 or more employees who report to work between 6 a.m. to 9 a.m. Monday through Friday throughout the year. Employers must work toward reducing the drive alone rate by 15% in 1995, 25% in 1997 and 35% in 1999. Thirty-seven Clark County employers with 20,000 employees are currently participating in the program. C-TRAN provides marketing assistance, technical support, and training to employers to develop programs and meet the goals.

C-PASS - C-TRAN supports bus service for students at Clark College and Washington State University through its C-PASS program. Regular student identification cards, purchased at a cost of five dollars per quarter, also serve as bus passes for the C-TRAN system. The identification allow students to use public bus service at no additional cost. The C-PASS program offers a simple and convenient way for college students to use the C-TRAN system. It is in its third year at Clark College and its first year at Washington State University as a demonstration program. C-PASS is gradually becoming widely used among students. Clark College students used C-TRAN for more than 90,000 trips during the 1995-96 school year.

4. BI-STATE TRANSPORTATION FACILITIES

Information was presented to the Committee regarding transportation improvement concepts to address bi-state mobility between Oregon and Washington. The primary options under consideration by the Committee and identified in their scope of work are addressed in Part a). Analysis of a Commuter Rail concept, a new option raised during Committee discussion, is contained in Part b). Part c) summarizes analysis for other bi-state options that were either previously studied or were brought up by the Committee.

a) Bi-State Improvement Concepts

Background

The bi-state options examined as a part of the Committee's work plan included the following: expanding the number of lanes along with a new Columbia River bridge in the I-5 corridor, a new third highway corridor and Columbia River bridge west of I-5 or east of I-205, and light rail transit in the I-205 or in the I-5 corridor.

The comparison of bi-state options were intended to address corridor level bi-state travel demand and were intended to provide an order of magnitude comparison of costs and transportation impacts.

Description of Options

Highway Improvement Concepts are displayed in Figure 11
Transit improvement Concepts are displayed in Figure 12

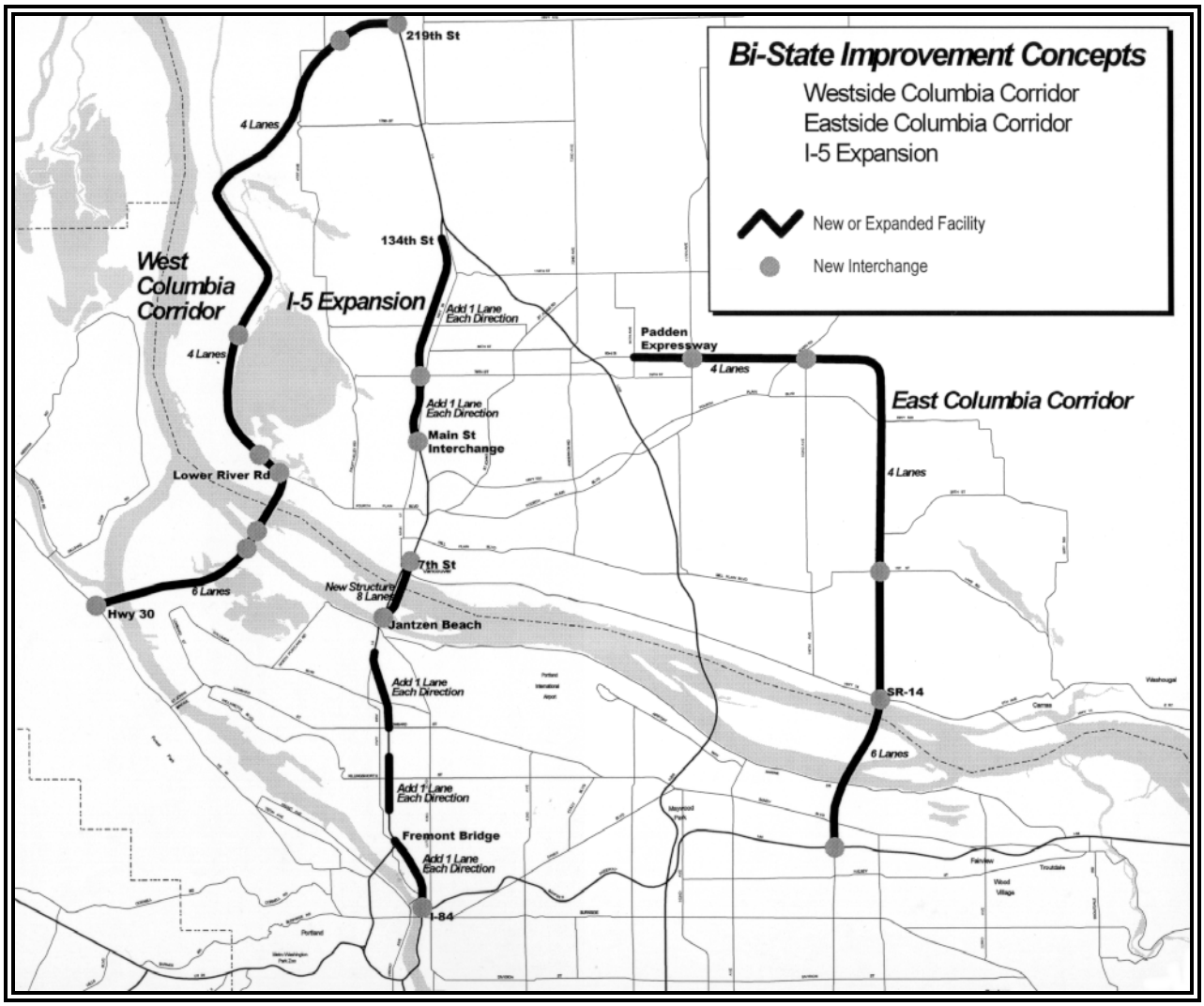


Figure 11

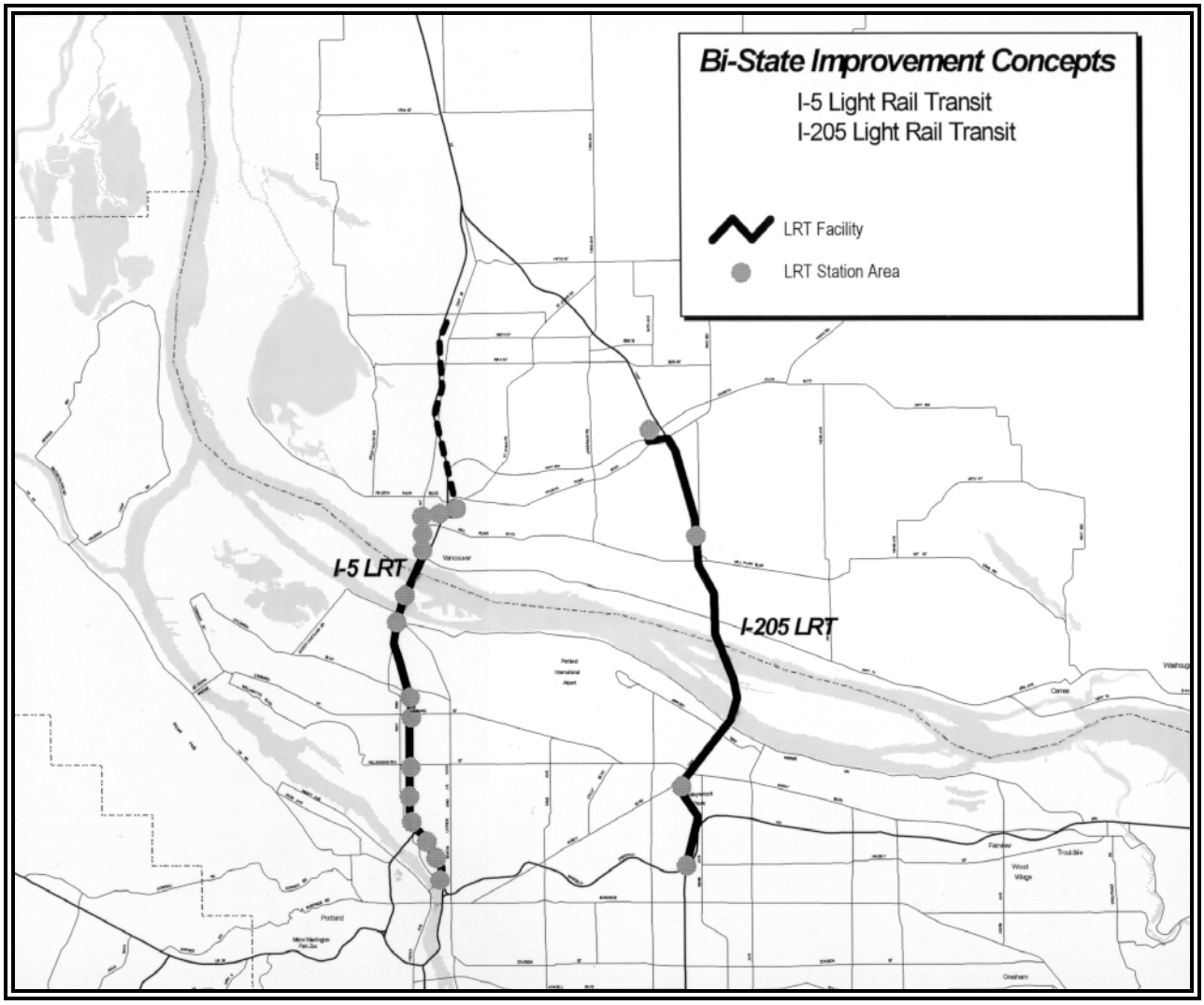


Figure 12

I-5 Corridor Expansion - Provides three travel lanes by adding one new through lane where needed in each direction. I-5 is widened between I-84 (Banfield) and 134th Street in Clark County.

- A new bridge with four travel lanes in each direction would be constructed over the Columbia River, replacing the existing Interstate Bridge spans.
- Additional collector/distributor lanes and ramp improvements would be provided at existing interchanges to provide the capacity to support the I-5 improvements.

New West Columbia River Crossing - Provides a new roadway from Oregon Highway 30 north to I-5 at the 219th Street interchange, following an alignment around the west side of Vancouver Lake.

- Includes a six lane facility with major structures over the Willamette River, North Portland Harbor, and the Columbia River between Highway 30 and Lower River Road.
- A grade separated four lane limited access roadway from Lower River Road to 219th Street.

New East Columbia River Crossing - Provides a new roadway from I-84 near the 181st Street interchange north to the Padden Expressway interchange (83rd Street) in Clark County, following an alignment to the north parallel with 192nd Street.

- Includes a new six lane bridge over the Columbia River from I-84 to SR-14.
- A grade separated four lane limited access roadway from SR-14 to Padden Expressway.

I-205 LRT - Provides a dual track LRT facility from existing Gateway Transit Center north to a terminus west of I-205 at Vancouver Mall in Clark County.

- The LRT would be retrofit onto the existing Glenn Jackson Bridge and would require either the reduction in the number of traffic lanes (4 to 3) or a reduction in the widths of shoulders (10' to 3').
- No improvements to the existing Banfield LRT line are included in this alternative. However, capacity constraints on the existing Banfield LRT line would have to be addressed through a major capital investment if this additional LRT line was connected at Gateway.

I-5 LRT - Provides a dual track LRT facility from the Rose Quarter Transit Center at the east end of the Steel Bridge to the current interim northern terminus at VA/Clark College based on South/North Draft Environmental Impact Statement analysis.

- Includes LRT bridges across the North Harbor and Columbia River crossing west of I-5.

Transportation Impacts

The bi-state improvement concepts compared capacity, demand, and transportation impacts of each option. All of the improvement concepts provide new capacity for travel across the Columbia River and within the travel corridor. At the Columbia River, the new highway corridor crossings expand peak hour, peak direction, capacity by 6,000 vehicles. The new highway facilities have three new travel lanes in each direction at the river. Both LRT options have similar capacity benefits and can carry 6,000 transit riders per hour. The I-5 expansion improvement concept results in the lowest level of new capacity because only one additional travel lane is being added to the I-5 corridor in each direction.

Table 8 describes the forecast (2015) transportation impacts for each improvement including transportation improvements on nearby facilities, traffic patterns, and functional use. In addition, there is a subheading that identifies specific implementation issues which would be associated to that particular option.

Table 8

BI-STATE IMPROVEMENT CONCEPTS: TRANSPORTATION IMPACTS AND IMPLEMENTATION ISSUES

I-5 Expansion

Transportation Impacts

- Vehicle travel across the river increases significantly compared to no build due to increased capacity in this high demand corridor.
- Corridor remains congested, but carries higher traffic volumes.
- Improves traffic operations on Interstate Avenue, Martin Luther King Boulevard, Highway 99, and Hazel Dell Avenue.
- Diverts traffic from I-205, but I-205 volumes still increase because of higher cross-river demand.
- Localized congestion occurs at access points along the improved facility.

Implementation Issues

- The new expanded Columbia River Bridge is required in order to accommodate the capacity expansion in the rest of the corridor.
- The Improvement is within the urban growth boundary and is consistent with land use plans.

West Columbia River Crossing

Transportation Impacts

- Vehicle travel across the river increases slightly due to increased capacity provided on the western urban fringe.
- Reduces traffic on I-5 and I-205 at the Columbia River and north in Clark County, but both corridors remain congested.
- Traffic is partially diverted to new facility; I-205 traffic shifts to I-5 filling available capacity.
- Localized impacts occur at Highway 30 and 219th Street; traffic volumes increase on Marine Drive, Mill Plain Boulevard, and Fourth Plain Boulevard and other facilities.

Implementation Issues

- Improvement is located outside the urban growth boundary and is not consistent with land use plans.

East Columbia River Crossing

Transportation Impacts

- Vehicle travel across the river increases moderately due to increased capacity connecting southeast Clark County with east Multnomah County, both growing urbanized areas.
- Reduces traffic primarily on I-205; some I-5 traffic shifts to I-205, filling some of the capacity opened on I-205.
- Localized impacts occur on I-84 and Padden Expressway; traffic volumes increase on SE 1st Street, Brady Road, and in the vicinity of Ward Road.
- Reduces traffic on I-205 between SR-14 and Vancouver Mall.

Implementation Issues

- A portion of the improvement is located outside the urban growth boundary and is not consistent with land use plans.

Continued . .

Table 8 Continued

I-205 LRT
Transportation Impacts • Provides an alternative to auto congestion in the congested I-205 corridor. • Ridership levels for Clark County are only slightly lower than I-5 LRT. • Small proportion of ridership are Oregon riders. • Total corridor ridership is significantly lower compared to I-5 LRT. • Could result in increased congestion or safety problems due to the loss of a travel lane or reduction in shoulder width. **Implementation Issues** • Will lead to operational and capacity issues on the existing Banfield MAX line and could require siggificant capital expenditures in the Banfield corridor to accommodate I-205 riders. • Does not include direct rail connection to Portland International Airport. • Improvement is contained within the urban growth boundary and is consistent with land use plans.
I-5 LRT
Transportation Impacts • Provides an alternative to auto congestion in the congested I-5 corridor. • Slightly higher ridership for Clark County riders compared to I-205 LRT. • Total corridor ridership is significantly higher compared to I-205 LRT. • More than a third of the ridership is from Oregon. **Implementation Issues** • Part of the planned south/north transportation improvements in the I-5 corridor. • Improvement is contained within the urban growth boundary and is consistent with land use plans.

Clark County Overview - Table 9 summarizes cost and travel data from a Clark County perspective. Costs shown in this table relate only to the Clark County portion of the full bi-state concept and are defined as the minimum project segment crossing the Columbia River that would be required to connect to the Oregon transportation system. For example, they do not include costs that would be incurred in North Portland for I-5 expansion or I-5 LRT, or for the Banfield LRT improvements required by the I-205 LRT. The change in river crossings show the overall travel impact for each of the improvement concepts and provide an initial measure of the improvement in accessibility between Oregon and Washington.

Table 9

BI-STATE IMPROVEMENT CONCEPTS: CLARK COUNTY RELATED COSTS AND BI-STATE ACCESS		
	YOE Cost in Millions	**Change In All Day 2015 River Crossings***
I-5 Expansion Jantzen Beach to 134th	$668.3	27,900 vehicles
West Columbia River Crossing Hwy 30 to Lower River Road	$1,083.4	5,500 vehicles
East Columbia River Crossing I-84 to Padden Expressway	$756.4	16,800 vehicles
I-205 LRT Gateway to VanMall	$679.4	18,600 LRT riders
I-5 LRT Expo Center to VA/Clark	$384.3	19,100 LRT riders

**Net increase compared to 'no bi-state improvement' river crossings of 302,600.*

Cost Approach

The capital cost information developed for the full length improvement concepts and for the Clark County costs shown in the previous table were prepared to compare new bi-state concepts with each other and with the existing I-5 LRT. Estimates were prepared in 1995 dollars and converted to year of expenditure dollars for this analysis to match the previous estimates for I-5 LRT developed for the South/North Transit Corridor Study. Extensive coordination occurred with the Oregon and Washington Departments of Transportation, C-TRAN, and Tri-Met to ensure that unit costs and cost elements were consistent with agency procedures and the previous I-5 LRT estimates.

Comparisons in this analysis are only for the improvement concepts described in the previous section and do not include the full range of additional costs needed to develop a project. For example, they do not include other system level improvements and services to support the corridor improvement. All three highway improvement concepts, for example, will have localized impacts at the access points and the arterials that feed into them. In addition, detailed environmental analysis would identify specific impacts, potential mitigation and the accompanying costs that would be incurred.

The additional ridership on the Banfield LRT resulting from an I-205 Light Rail will require a range of capital costs to expand the existing facility to accommodate the additional transit demand from I-205 north. They are significant and include such improvements as a new signal system, reconstruction/lengthening of LRT station platforms and replacing the Steel Bridge crossing. These also are not a part of this cost estimate.

The capital cost report, *New Bi-State Facilities - Capital Cost Comparisons, October 1996*, contains a detailed description of the methodology and information on capital cost, length, structure, and cost per mile of the improvement for the full corridor and by segment.

b) Commuter Rail Concept

The Expanded Commuter Rail concept summarized in this section utilizes the east/west Burlington-Northern railroad line between I-5 and I-205. It was proposed originally by the Association of Oregon Railway Transit Advocates (AORTA) and has been discussed by the TFC. Previous analysis was conducted of a north/south commuter line connecting Vancouver and Portland and is described in Part c). The commuter rail concept discussed in this section addresses: a description of commuter rail characteristics, an assessment of potential costs and ridership, service objectives, and land use issues. Other issues that would need to be considered in assessing commuter rail include reliability: due to conflicts with rail and marine freight needs; and accessibility, between commuter rail stations, surrounding land use and park and ride sites. Institutional issues include: right-of-way access, the host railroad allowing access by the transit provider; access fees, the cost of allowing that use; and insurance/indemnification, to protect the host railroad against liability in case of accidents.

Description of Commuter Rail Option

This option provided peak period commuter rail service between the Camas/Washougal area and Union Station in Downtown Portland (Figure 13). The line would primarily serve work trips from parts of Clark County to Downtown Portland and home again, operating for approximately two hours during the morning and evening peak-hour commute. Access to the system would occur at three new park and ride lots, at rail stations and via shuttle buses operating from four existing C-TRAN transit facilities. In downtown Portland, direct shuttle service would connect passengers arriving and leaving Union Station with the downtown office and commercial core.

Characteristics

Commuter rail typically operates on existing freight railroad rights-of-way on lines radiating from central business districts to suburban areas. Train speeds vary widely from 15-45 miles per

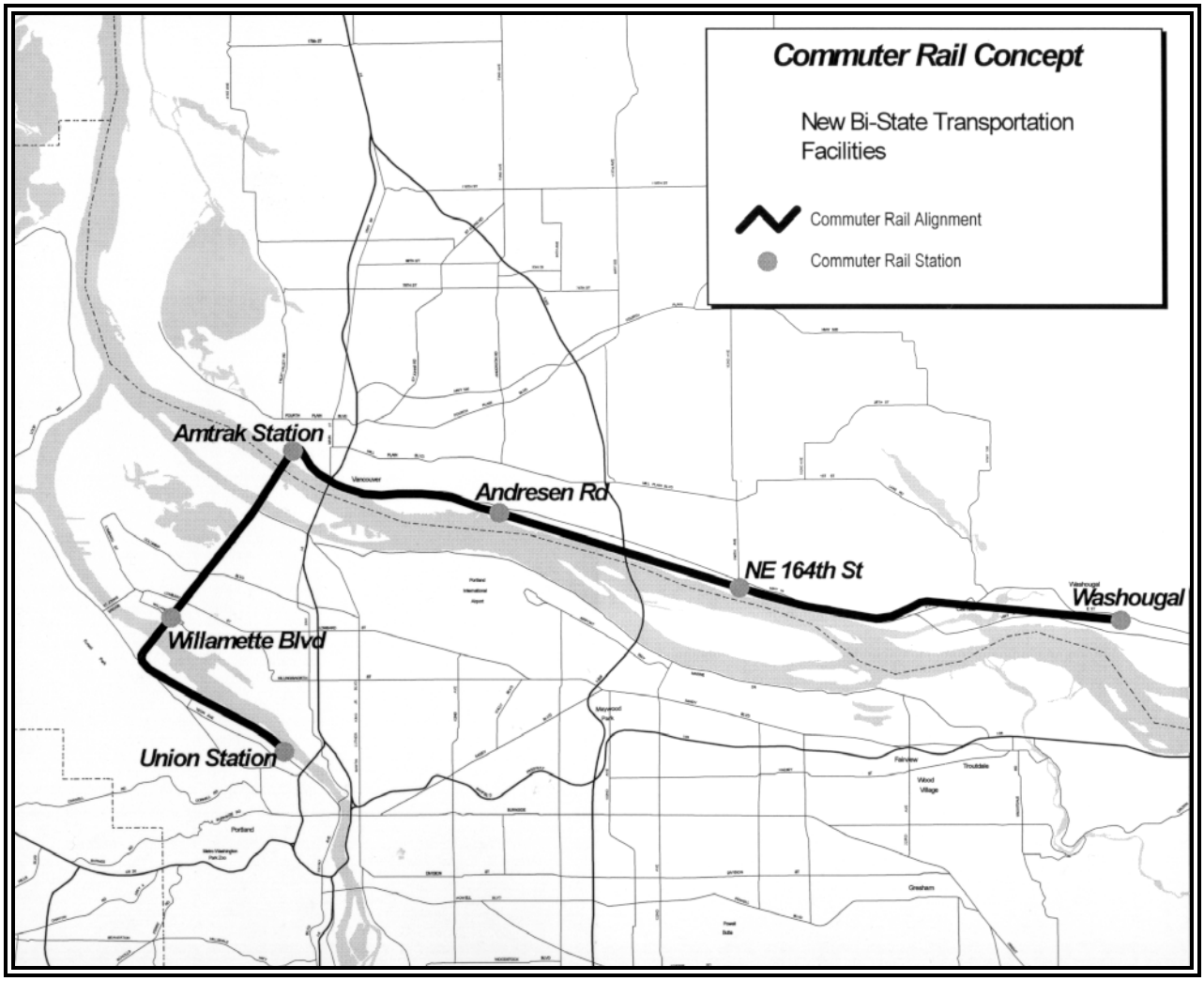


Figure 13

hour in urbanized areas to top speeds of up to 100 mph. The service may be operated by public transit agencies or private contractors. The attractiveness of commuter rail is most pronounced 20-50 miles from large urban centers. In contrast, Fisher's Landing is 14 miles from downtown Portland and downtown Camas is 18.7 miles from Portland.

Commuter rail cars may be propelled by locomotives or self-propelled and may be powered by diesel or electricity. The capacity of single level cars ranges from 80-120 seats. Newer bi-level cars carry 160-300 passengers.

Commuter rail relies largely on existing facilities and usually requires little if any purchase of right-of-way (excluding park-and-rides), per mile capital costs for commuter rail are usually less than those for other high capacity transit facilities. For similar reasons, environmental and construction impacts of commuter rail are usually lower.

Costs

The Association of Oregon Railway Transit Advocates (AORTA) estimated the capital cost of the Commuter Rail at $5 million a mile in 1994 dollars and a length of 25 miles for a total of $125 million. Their cost estimates are not based on specific improvements that may be needed for this proposal. A detailed capital cost estimate should include specific cost elements such as: the amount of track upgrade, double tracking east of Wintler Park, additional rail sidings, the number of train sets and cars, storage facilities in Vancouver and Portland during midday and evening non-use, and maintenance facilities. Cost estimates also do not include access fees. Once all of costs are estimated for commuter rail, it is likely that total capital costs would increase over the $125 million.

Ridership

Among factors such as cost, frequency, access and time, transit ridership is also related to its ability to fulfill a number of trip purposes, e.g. work, shopping or recreation. Commuter rail, by definition, attempts to serve primarily work-oriented trips to major activity centers.

The commuter rail ridership estimates used for this comparison consist of a high and low range based on estimates developed by AORTA and RTC, respectively.

AORTA has estimated mature ridership of 5,000 riders per day. RTC estimates that about 2,000 peak period transit riders would use commuter rail. This estimate is based on the service period of commuter rail operation, the park and ride emphasis of commuter rail, and the assumption that the Clark County park and ride demand generated by previous LRT estimates in the corridor could all be captured as commuter rail riders.

Table 10 is a comparison of capital cost per rider between commuter rail and LRT.

Table 10

COMPARISON OF CAPITAL COST PER RIDER

Option	Daily Riders	Cost (YOE) (In Millions)	Capital Cost per Rider (In Thousands)
Commuter Rail (low)	2,000	$198[1]	$100
Commuter Rail (high)	5,000[1]	$198[1]	$40
Clark County LRT	19,100[3]	$384[2]	$20
Full North Corridor	37,000[3]	$862[2]	$23

[1]*Estimates developed by AORTA*
[2]*Estimate from Capital Cost Report*
[3]*Estimate from previous LRT Ridership Forecasts*

Service Objectives

Commuter rail in the peak period would serve primarily park and ride trips. In order to serve walk-on and transit transfers during the a.m. and p.m. peak periods, bus service would need to be maintained to downtown Portland. In addition, midday bus service in the I-5 corridor would continue. By comparison, an LRT option in the I-5 corridor would replace existing and planned C-TRAN peak period commuter bus service to downtown Portland and would provide high quality peak period and midday service to destinations along the corridor for park and ride walk-on and bus transfer passengers.

Because of the high operating costs of commuter rail in relation the number of passengers it carries, it is likely to result either in higher fares or higher operating subsidies than the rest of the public transit system.

Land Use

Commuter rail is reliant on park and ride facilities for ridership. Because existing rail tracks are being utilized, the proposed stations are not located near any activity center identified in the Comprehensive Plans. In addition, three of the commuter rail stations will have park and ride facilities which could also have a negative impact on adjacent land use.

c) Other Bi-State Options

The Committee also discussed other bi-state options. Serveral options had been analyzed during previous studies. Others were brought up during the Committee process and received a reconnaissance level of analysis. This section contains a brief summary of the other bi-state options considered by the Committee.

Options Previously Studied

Three other transit modes, in addition to LRT, were evaluated previously as part of the South/North Transit Corridor Study. The mode analysis led to the bi-state policy decision to select LRT as the preferred high capacity transit mode in the I-5 corridor. The full analysis of all four modes is contained in the *Scoping Process Narrowing Report, Appendix I.* The Committee was presented with the analysis results for river transit, busway and commuter rail, which is summarized in this section.

River Transit - River transit would run from the vicinity of the Red Lion at the Quay landing dock up the Columbia and Willamette Rivers to the Clackamas Park boat launch in Oregon City. Ten potential stations including Vancouver, Swan Island, Downtown Portland, Sellwood, Milwaukie and Oregon City were identified. The river transit alternative was assumed to operate at 15 minute peak-hour and 30-minute off-peak frequencies.

The analysis found that river transit was characterized by poor transfer connections, marginal or unknown reliability, comparatively low ridership, restricted capacity, incompatibility with regional growth and land use policies, and potentially significant environmental impacts. This alternative provided little opportunity to address regional growth and access issues and would not serve overall transit needs adequately.

Busway - The busway alignment analyzed extended from 179th Street in Clark County to Clackamas Town Center using the Interstate-5, McLoughlin Boulevard and Highway 224 corridors. Buses would operate primarily on at-grade exclusive right-of-way. Busway stations on the 27.5 mile long alignment include: 179th, 134th, 78th, downtown Vancouver, Jantzen Beach, Lombard, Killingsworth, Coliseum Transit Center, Downtown Portland, OMSI and the Milwaukie Transit Center. Service would consist of express and local bus routes operating at frequencies consistent with the Regional Transportation Plan.

The busway alternative could serve a relatively large number of residences and employment destinations, provide generally good reliability and convenient transfers, could accommodate future growth and would provide generally good reliability. A bus-only roadway would not provide an optimal focus for redevelopment and its cost effectiveness based on capacity and ridership potential was moderate.

Commuter Rail - This alignment, unlike the option analyzed in the previous section, was fully contained in the I-5 corridor. It was 47 miles long and traversed the BN and Southern Pacific railroad rights-of-way from Ridgefield in north Clark County to Canby, Oregon. Between Ridgefield and Canby, stations were envisioned at Ridgefield, Vancouver Junction, Vancouver/Amtrak, East St. Johns, Willbridge, Portland Union Station in NW downtown Portland, OMSI, Brooklyn, Milwaukie, Clackamas, Oregon City, and Canby.

Commuter rail was assumed to operate at 20 minute headways during the peak hour and 60 minutes headways during the off-peak hour. Because the station locations were largely determined by the alignment of the existing rail line there was poor passenger walk access to the stations. Due to the limited walk access, the commuter bus service in the corridor was assumed to be continued, but with less frequent service. The commuter rail was also assumed to have a connection to C-TRAN shuttle service from the Amtrak station to downtown Vancouver and from the Portland Union Station to the Portland transit mall buses.

The basic finding of the commuter rail analysis was that it had relatively low ridership, was not compatible with regional land use policies and planned growth, and that expansion of service would be limited because of the increasing freight rail service in the corridor.

Additional Options

During the TFC meeting other alternatives were suggested by the public as potential high capacity transit options. The Committee responded by requesting that the following information be prepared about helicopters for passenger transport, monorail technology, and HOV lanes.

Helicopters - Helicopters are not widely used as passenger transportation in the United States. In major cities with significant congestion problems such as New York, helicopter service is available between major airports and downtown. Fares paid by passengers of this service are typically very high relative to ground transportation options.

Depending on size and capacity, the capital cost ranges from $1 million to $15 million per helicopter. Standard helicopters, such as the standard Bell Jet Ranger, can carry up to 6 passengers. The largest, the Chinook, can carry 35 to 40 passengers. The operating and maintenance costs range from $500 to $7,000 per hour.

For comparison, a 40' bus carries 45 people, costs about $245,000 to purchase new, and has an operating cost of $67 per hour. To transport the current number of commuters that ride C-TRAN between Vancouver and Portland would require a fleet of 15-20 of the largest helicopters, or 60-100 of the smaller helicopters.

Weather can severely impact the reliability of passenger helicopter service. The flight path for the Portland International Airport also creates a constant opportunity for conflict and delay between Vancouver and Portland. The largest helicopters such as the Boeing or the Chinook cause significant local impacts including noise and wind produced at ground level by the rotating blades and would impact the ability to locate park and ride sites in Clark County. A landing area outside of the central business district would probably have to be selected, with shuttle buses used to transport passengers to downtown Portland.

Monorail Technology - Monorail technology relies on rubber-tired cars riding on a narrow guideway. The cars are self propelled by electric motors with power pickup via distribution bars mounted on the side of the guideway and utilize some type of elevated fixed guideway. Some are publicly owned and operated, but many are financed, built and operated by private companies or through a public-private partnership.

Monorail systems in use around the world have somewhat specific uses. Monorails are often used between two destinations where many people can be moved with limited stops, i.e. between airports and hotels, airports and transit centers or airports and parking facilities. Monorails are also used to link several related destinations, such as tourist sites or between business sites. Monorails in Disneyland, Seattle, Sydney, Australia, Orange County and Las Vegas have been or are being built for such linkages. There are several issues a community faces in considering monorail.

The small "footprint" of monorail systems is cited by proponents as the major benefit of monorail technology over other transit technology. The small "footprint" of the piers elevating the monorail means less disruption to the natural and built environment at grade. The monolithic nature of monorail elevated tracks and stations can be very imposing to nearby uses, particularly in suburban or rural areas. The visual dominance of an elevated structure may also not be desirable in some urban areas.

Generally, monorail system construction costs are between $40-60 million/mile, in 1992 dollars. Freeway construction costs are between $25-100 million/mile, in 1992 dollars. For comparison sake, monorail system construction costs are similar to the more costly light rail systems. In 1995 dollars, the Portland East-side MAX line cost $20 million/mile while the West-side MAX line cost $60 million/mile. The higher westside MAX line costs are primarily due to extensive tunneling and elevated stations.

HOV Lanes - Review of HOV lanes by the Committee focused on the potential of HOV within existing freeway right of way. In this context, a review was conducted of the issues associated with implementing HOV on outside emergency lanes. HOV lanes on the freeway shoulder in the Vancouver region would need further evaluation. At a minimum, it would require new pavement to upgrade the shoulder and possibly to widen or lengthen bridges. Even with an outside HOV lane, a new shoulder would eventually need to be added in the future to meet federal standards for freeway operations. Because of this standard, HOV lanes on the shoulder are usually considered temporary measures.

Traffic operations needs may also require on and off ramps be rebuilt to minimize weaving between the HOV lane and the general purpose traffic lanes. An outside HOV lane, on the right of the general purpose lane, can end up being the slow lane because of these weaving movements. Other expenses to widening a shoulder would be rebuilding drainage, illumination, and noise walls as well as the cost of widening and grading the embankment.

Standard shoulder width is 10 feet. Standard width for a general purpose traffic lane, including an HOV lane, is 12 feet. Current pavement standards for emergency lanes do not meet pavement standards needed for an outside HOV lane. The use of the shoulder for HOV use would result in the loss of the lane for emergency use such as a flat tire, emergency vehicle bypass, roadway maintenance personnel, and an enforcement area for the Washington State Patrol.

5. TRANSPORTATION FINANCING

Extensive information was given to the Committee about transportation financing and can be divided into three primary aspects: a general overview, issues affecting funding, and local financing options.

Overview - This included a discussion of transportation revenues in Clark County by source (federal, state, and local), improvement categories (such as mobility, maintenance and operations, and safety) for which revenue is used, and the distribution by expense categories (capital projects, maintenance, planning and administration). There was also a brief description of the funding programs under the most recent federal transportation funding act (Intermodal Surface Transportation Efficiency Act) which gives localities greater flexibility and control in determining how federal transportation dollars are utilized.

Washington State and local transportation agencies described their respective planning processes for developing their 20 year plans, 6 year programs, and their annual programming of funds. 'Identified needs' versus 'desired' projects were discussed. It was noted that, for example, 'desired' projects because they do not respond to an immediate capacity or safety need are less likely to be funded than more traditional roadway improvements when there are revenue limitations.

Funding Issues - Due to a number of factors, transportation funding has not kept pace with improvements needed to maintain the system and accommodate the increased travel resulting from population and employment growth in the region. They include the following.

The current gas tax rate has not changed since 1990 and has been outpaced by inflation. Contributing to the shortfall is the increased fuel efficiency of vehicles which reduces gas consumption per vehicle mile combined with the increase in vehicle miles traveled per capita, there is greater impact to the infrastructure with less money to pay for improvements.

Current urban arterial road standards include more stringent requirements for roadway composition, drainage, sidewalks and bikeways, landscaping, lighting, and curbs. In addition, environmental mitigation measures, such as noise walls and wetland replacement have also lead to increased construction costs. Thus, the cost of capacity improvements or new roadways per mile is more expensive than in the past.

The principal sources of state transportation funds are the gas tax and the Motor Vehicle Excise Tax (MVET). All gas tax revenues are allocated to transportation related projects. This is not the case, however, with MVET. Fully 25% of MVET revenue goes directly to the general fund and administration. In addition, Clark County has historically been a donor county compared to what it pays out in transportation taxes. From 1984 to 1993 Clark County has received only 60% of its combined federal and state transportation contributions from gas tax and MVET.

In addition to the factors described above, historically the automobile has not paid the full cost of its impacts on the infrastructure, the environment, and society. Users are not bearing the full cost of driving, but instead passing along a portion (approximately one third) of total costs to others and to society as a whole. Direct costs paid by the user include such items as vehicle purchase price, interest, fuel, and parking. Indirect costs not paid by the user include such items as air and water pollution, free parking, and road-related municipal services. Nationwide user fees, including gas taxes, excise taxes and tolls amount to less than 60% of costs associated with road construction, maintenance and repair, and do not cover the cost of mitigating the negative side effects of an automobile-based transportation system, such as environmental, land use and social equity costs.

Local Financing Options - The structure, uses, and revenue generated by various financing options that could be imposed at the local level were presented to the Committee and are summarized below:

- Vehicle license fee - May be imposed without voter approval. A maximum of $15 per vehicle is allowed. Can be used for high capacity transit and transportation planning and design. Could raise $3.5 million per year.
- Motor vehicle gas tax - May be imposed without voter approval. A maximum of 10% (2.3 cents) of the state gas tax is allowed. May be used for highway purposes only. Could raise $3.4 million per year.
- Sales Tax - Needs voter approval. A maximum of 1% is allowed. May only be used for planning, constructing, and operating high capacity transit and bus feeder systems. Could generate $20 million per year.
- Motor Vehicle Excise Tax - Needs voter approval. A maximum of .08% is allowed. May only be used for planning, constructing, and operating high capacity transit and bus feeder systems
- Employer Tax - Needs voter approval. Up to $2 a month per employee. May only be used for planning, constructing, and operating high capacity transit and bus feeder systems. Could generate up to $2.3 million a year.
- Sales Tax on Gas - There is currently no authority for this. Before a local sales tax on gasoline could be imposed, the state legislature would have to authorize this and also define how the additional revenue would be collected and used. If the sales tax were expanded to

include gasoline, it is likely the revenue would not be limited to only highway uses as is the case with the fuel tax. The 18th amendment to the Washington constitution is unclear on this matter. It is likely that the matter would ultimately be decided by the courts.

6. SUMMARY OF SURVEY OF TRANSPORTATION ATTITUDES

As part of this project, Davis & Hibbets, Inc. conducted a scientific survey to study various transportation issues affecting Clark County. The survey was a follow-up to the citizen perceptionnaire and was intended to provide an accurate picture of attitudes about growth, transportation options and transportation financing. It consisted of a random telephone survey of 500 registered voters in Clark County and was conducted during May, 1996. The sample was chosen for its representation of the electorate and its major demographic features. A brief summary of the survey results are described below.

When respondents were asked if they expected the quality of life to be better or worse in five years, worse was chosen by about a 2:1 margin. The major reasons cited for the negative views were overcrowding, traffic congestion, housing, spreading too fast, unplanned growth, and inadequate streets.

Respondents were also asked to rate how the government is doing in certain transportation service areas. Relatively poor ratings were given to the management of traffic congestion between Portland and Clark County and management of traffic within the county. Opinion was about evenly divided as to the provision of public transit services in the county.

Respondents were given a series of 14 components of a future transportation system in Clark County and asked to rate each on an importance scale. Flexible work schedules, existing highways, interstates, bridges, and local streets, plus the urban bus system, sidewalks, paths, and bike lanes all received relatively solid support. A preference for improving on or expanding the existing transportation infrastructure over embarking on major new investment seems evident in these answers.

Respondents were also given a series of scenarios that responded to future needs in Clark County with highways and streets only, alternative transportation only (e.g. mass transit, carpooling), or a mixed approach. Of the three, the mixed approach received the most favorable rating, the alternative approach received a lower but still positive rating, and the "highway only" option received a negative rating.

Although over 70% of the respondents state that they would support "some increase in taxes" to improve the county's transportation system, respondents did not support any of the five funding options they were offered. Respondents were least opposed to a local gas tax and most opposed to increased vehicle registration fees.

Questions about light rail between Clark County and Portland elicited a polarized response. The concept had the support of a majority of respondents, but the majority nonetheless admitted that they voted against the 1995 proposal. Supporters mentioned reduction of traffic congeston, light rail being better transportation than the car, and social progress. Opponents expressed cost and utilization concerns.

CHAPTER V.
TRANSPORTATION FUTURES COMMITTEE FINDINGS

A. PROCESS FOR DEVELOPING THE FINDINGS

The development of the TFC findings began with a process similar to that followed during the earlier development of the transportation vision and identification of problems and is illustrated in Figure 14. This process occurred over the four lengthy meetings in May and June and culminated with acceptance of the completed findings at the last TFC meeting on July 11th.

Process to Develop the Transportation Futures Committee Findings

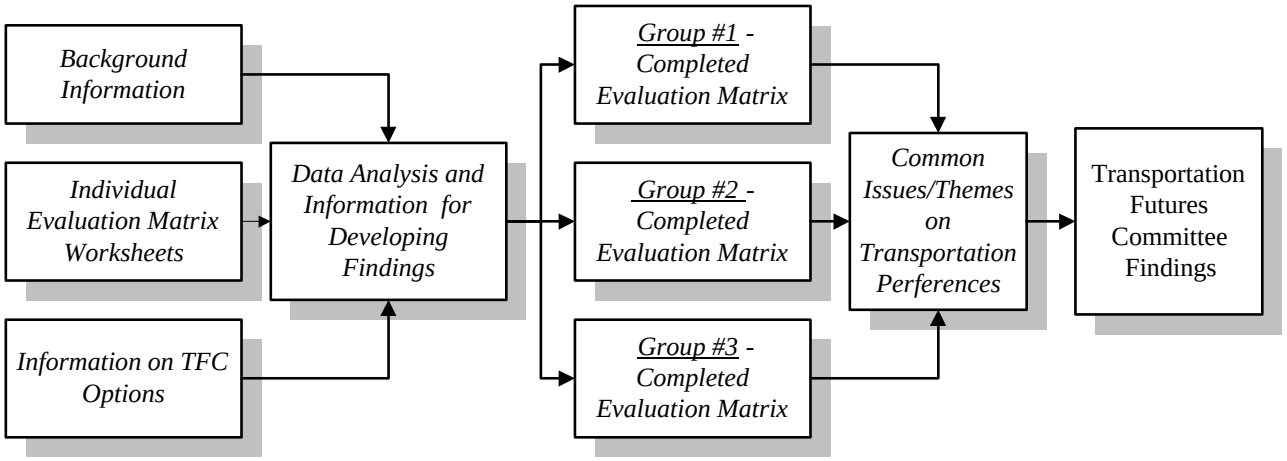


Figure 14

The initial meeting made use of the evaluation matrix as a guide to formulating the initial findings by the small groups. Many Committee members had used the matrix beforehand as a worksheet to rank options in each of the following categories: overall policy, internal Clark County transportation system, public mass transit options, bi-state transportation options, and local financing options. They brought them to the workshops as they discussed the options and worked toward consensus.

The small groups, facilitated by TFC members, reviewed the data and information and discussed how the various options and strategies met the transportation vision developed earlier. This phase in the development of findings was completed after each group reached consensus on their preferences regarding how the options help realize the various elements of the vision.

During the next phase of the process, the full Committee met in an informal round table environment to translate the small group matrices into findings. The first step involved developing agreement of the full Committee on the basic set of preferences for the options in each subject area. This provided the framework for Committee discussion that crafted descriptions of the transportation policies and priorities needed to achieve the vision. This work culminated in the initial draft findings. The final step was devoted to Committee discussion and review of the draft findings. Modifications to the language, new ideas, and final consensus resulted in the completed findings

B. FINDINGS

These findings are based on the Committee's evaluation of transportation options related to the vision previously adopted, which states:

> *To promote regional mobility of people and goods, Clark County will have a comprehensive transportation system accountable to the public that:*
>
> - *Provides choices and alternatives*
> - *Enhances quality of life*
>
> *And is:*
>
> - *Socially, environmentally and economically responsible*
> - *Efficient*
> - *Responsive*
> - *Linked to land use*
> - *Safe, and*
> - *Accessible to all.*

The following findings best attain the vision and solve or address issues and problems identified by the Committee. They are based on TFC evaluation of transportation options relative to the vision and evaluation criteria defined by the Committee, as well as review of information presented during the course of the Committee's work.

1. OVERALL

The Transportation Futures Committee finds that current and past land use and transportation planning and funding have encouraged use of the auto to the detriment of alternative modes of transportation, such as public transit, bicycle and pedestrian travel. The Committee recommends adjusting this imbalance by supporting a balanced approach to improvements, including public mass transit, bicycle, and pedestrian facilities and roads.

2. POLICIES

The Committee finds that land use decisions should not only be supported by transportation planning, but should encourage more responsible neighborhood development that supports multiple transportation alternatives. Techniques to achieve this goal include:

- Allow for appropriate commercial development in predominantly residential neighborhoods
- Reduce or eliminate minimum parking requirements in favor of maximum requirements
- Provide significant incentives for businesses to reduce parking needs and improve access for pedestrians, bicyclists and buses

The Committee finds that local government should include capacity for public mass transit and other alternative modes in overall road capacity when meeting concurrency requirements.

To reduce commuting trips, the Committee supports incentives for citizens and the private sector and requirements for government to encourage the following:

- Telecommuting
- Altered work hours (flex-time or staggered work hours)
- Ride-sharing

The Committee endorses sufficient funding for maintenance and necessary expansion of our existing road system.

The Committee strongly encourages consistent regular coordination between public and private entities engaged in transportation planning and construction.

3. INTERNAL CLARK COUNTY TRANSPORTATION SYSTEM

The Committee favors a multimodal approach (i.e., roads, bicycle, pedestrian and public mass transit facilities) to address current and future transportation problems.

The Committee finds that a grid system improves links between neighborhoods, helps decentralize traffic throughout the road system, improves access for emergency vehicles, and fosters use of alternative means of travel (such as public mass transit, bicycling and walking).

- For new development, a grid system should be encouraged or required.
- For existing development, property owners should be encouraged to provide easements for bicycle or pedestrian paths or roads that increase transportation connections.

The Committee finds that the following facilities and techniques will help attain the vision. (Not in order of priority)

- High Occupancy Vehicle lanes
- Neighborhood traffic calming strategies
- Signalization/timing improvements
- Ramp metering
- Safety improvements
- Complete network of sidewalks

The Committee encourages local government to develop and implement a rating system for the quality and safety of non-vehicular transportation facilities.

4. PUBLIC MASS TRANSIT OPTIONS

The Committee finds that public mass transit is an integral component of a multimodal transportation system that provides alternatives to driving alone.

The Committee finds that current transit service should be more flexible and efficient. Some commercial or residential areas developed at urban densities are not adequately served. In other cases, existing service to more rural areas is not cost-effective and may not be desired by area residents. Consideration should be given to decreasing service in such areas to increase coverage and frequency in urban areas.

The Committee finds that public mass transit service provides a social service function by enhancing mobility for those who are unable to use a private automobile or other means of transport. The community should continue to be committed to providing public transit service to ensure mobility for all.

The Committee finds that paratransit service should be made available for the entire area within the Clark County/transit service boundary to improve mobility for all qualified citizens in the community.

The Committee recommends the following:

- Investigate serving middle and high school students with C-TRAN service instead of the current separate school bus system to reduce overall transportation costs and improve efficiency.
- Encourage private transit service while protecting the public utility aspect of C-TRAN.

The Committee also supports continued investigation of:

- Additional express routes
- Increased service between activity centers
- Use of smaller vehicles for feeder service
- Fareless areas

5. BI-STATE TRANSPORTATION FACILITIES

The Committee supports a balanced approach to bi-state transportation issues, focusing on:

- Reducing demand for new transportation facilities and improvements in the long-term, by:
  - Encouraging economic development that supports family wage jobs in Clark County and reduces the need to commute to Oregon.
  - Promoting the use of alternative modes of transportation to driving alone (e.g. public transit, carpooling, bicycling, altered work hours and telecommuting)
- Increasing capacity to accommodate long-term population growth and continued need for bi-state transportation facilities, with first priority on the I-5 corridor. Making more effective use of existing facilities is a high priority in this order of preference.
  1) Improved and/or expanded bus service
  2) High Occupancy Vehicle lanes (using existing facilities wherever possible)
  3) Commuter rail
  4) Light rail
  5) Reversible lanes
  6) Widening I-5 (highway and bridge) for general purpose traffic
  7) Ferry system

The Committee finds that a third auto bridge and highway corridor is not an acceptable solution to bi-state congestion.

The Committee finds that reducing automobile congestion and demand will free up capacity for freight highway needs. In addition, the Committee supports the practice of "piggybacking" (transporting truck containers by rail) as well as improved rail/truck/port connections (also referred to as multi-modal freight facilities).

The Committee urges local, state, and federal officials to actively represent the needs of Clark Commuters to Oregon.

6. LOCAL FINANCING

The Committee finds that the following transportation financing principles will best attain the Committee's vision:

- The cost to the user of a transportation alternative, whether collected at the point of use or through taxation, should increase in proportion to use consistent with encouraging alternatives that minimize impacts on the environment and resource consumption.
- Funding for transportation alternatives that minimize impacts on the environment and resource consumption should be encouraged.
- Financing mechanisms that retain local money (i.e., taxes and fees) within Clark County and provide for local options should be favored.
- Public awareness of the true or full costs of transportation alternatives should be enhanced.

The Committee supports the following financing options, in order of preference:

1) Sales tax on motor vehicle fuel coupled with a reduction in motor vehicle excise taxes (MVET)

2) Local option gas tax and local option sales tax
3) State funds reallocated for alternative modes
4) Mileage-based fees
5) Tolls
6) Impact fees

CHAPTER VI.
REPORT FROM MANAGEMENT TEAM

The first five chapters of this report document the TFC process up to the development of the findings. The Management Team has reviewed the public comment and has developed recommendations based on the Committee's findings and the results of the public review activities. Section A summarizes the public comment. Section B contains the recommendations from the Management Team.

A. PUBLIC COMMENT ON FINDINGS

A critical element in the TFC process was the extensive community outreach and involvement activities described in Chapter II. The purpose of these activities was to increase community awareness and inform the public of the Committee's work and its findings. There were two primary methods for receiving public comment on the Committee's findings. The first consisted of the Community Open Houses in July. The second was a self-administered questionnaire on the findings. Section 1 presents a summary of the public comment from the community open houses. Section 2 describes the questionnaire results.

1. SUMMARY OF COMMUNITY OPEN HOUSES

Staff from Cogan Owens Cogan, the City of Vancouver, Clark County, C-TRAN, the Regional Transportation Council (RTC) and the Washington State Department of Transportation (WSDOT) designed and conducted three community open houses July 23 to 25, 1996 to present the findings of the Transportation Futures Committee (TFC) and obtain public comment. These meetings were held at the following locations:

- July 23 - Center for Educational Leadership, Vancouver
- July 24 - Maple Grove Middle School, Battle Ground
- July 25 - Evergreen School District Administration Center, Vancouver

In an informal setting, participants had the opportunity to review large boards displaying the TFC's vision and findings. Participants could comment by using different colored dots to say whether they agreed, disagreed or were unsure regarding the vision and findings statements. They also were asked to add any written comments about specific findings.

Participants were given questionnaires aimed at assessing their written comments on the TFC's findings; they also were invited to participate in small group discussions facilitated by TFC members to talk about the most pressing transportation problems in Clark County and potential solutions. Finally, information about future transportation plans was provided by each agency, with staff available to answer questions.

Overall

Participants were very supportive of the TFC's work and generally agreed with the vision and findings. There was agreement on the overall findings, policies, the internal Clark County transportation system and public mass transit options. However, there was some polarization on the importance of neighborhood traffic calming strategies to ease internal Clark County transportation problems (60% agreed and 40% disagreed). Participants were not supportive of investigating fareless transit areas.

Bi-State transportation facilities

Participants generally supported the TFC's ranking of bi-state options to solve traffic congestion, but again, there were several specific differences in the participants' opinion.

- All the participants seemed to support expanded or better bus service and HOV lanes.
- Although over half voiced their support for commuter rail and reversible lanes, one third of the participants were undecided about commuter rail as a bi-state option.
- The light rail transit and I-5 widening had significant support (one third or more), but the following options were not supported by more than half of the participants: light rail, I-5 widening, and a ferry system.

Local financing options

- The level of support for the various financing options did not coincide with the TFC's rankings. Most of the participants agreed with reallocating funds for alternative modes, impact fees, and a local option sales and gas tax.
- Less than half favored tolls and mileage based fees, and about one third are not sure of either option.
- Half of the participants supported a tax on motor vehicle fuels and a reduction in MVET, while the other half disagree or are not sure.

Appendix E contains a full summary of responses for each finding.

2. Results of Survey on TFC Findings

A questionnaire on the TFC findings was included in the summer brochure described in Chapter II, Section B. It was similar in form to the self-selected survey conducted much earlier in the transportation futures process. The purpose was to obtain public comment throughout the community in regard to the specific findings of the TFC.

There were a total of 53,00 questionnaires distributed: 5,000 copies were distributed at the Clark County Fair, Chambers of Commerce, banks, City Halls, and other locations throughout the county; 48,000 direct mail brochures were sent to motivated voters (people who voted two of the last four elections). More than 4,600 (almost 9%) were returned. Respondents were asked to state their opinions about the findings by assigning values ranging from 1 (for strongly disagree) to 5 (for strongly agree) for each of the stated findings.

The questionnaire also collected information on age and gender. When compared to the 1990 Census, the response was heavily skewed toward the older and retired segments of our community. The following chart and table make this comparison.

Age: 1990 Census/Survey Results

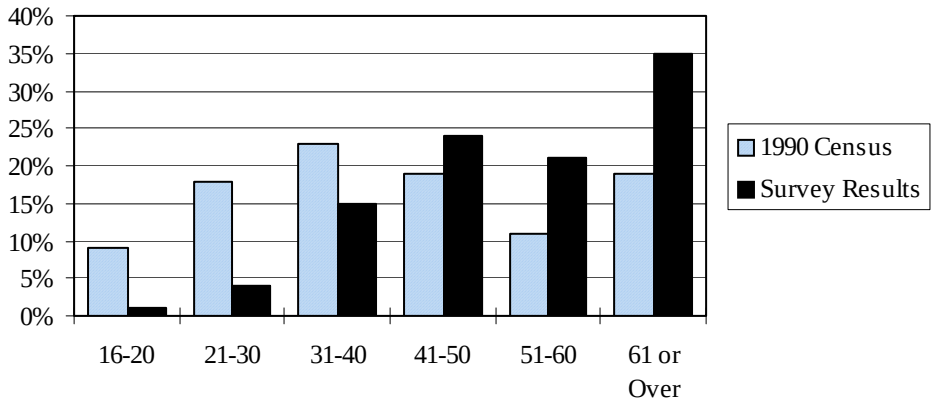


Figure 15

Respondents agreed with and confirmed the TFC findings for all categories. There was broad agreement on the overall policies, the internal Clark County transportation system, bi-state transportation facilities, and local financing. There was some disagreement and differences of opinion on certain specific findings of the Committee. A summary of the survey by category is contained below and a complete tabulation of the survey results is contained in Appendix E.

Policies

The policy findings of the Committee were strongly supported by the survey results. A large majority of the respondents somewhat or strongly agreed with policy findings that called for a more balanced approach to transportation (59%), land use decisions supporting transportation alternatives (65%), sufficient funding maintenance and necessary expansion of the road system (76%), and providing incentives for the use of alternate modes (67%). Figures 16 and 17 show the full range of responses for two of the statements regarding policy findings.

Land use decisions should encourage neighborhood developments that support transportation alternatives

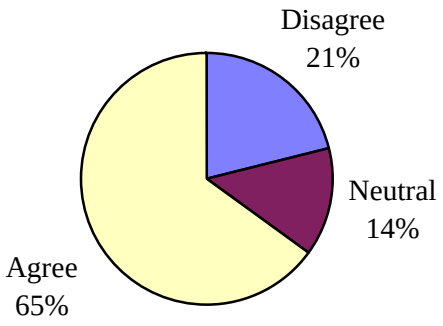


Figure 16

There should be sufficient funding for maintenance and necessary expansion of our existing road system

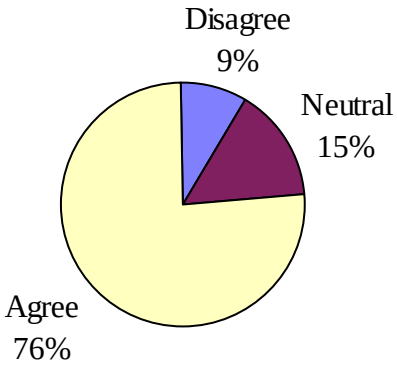


Figure 17

Internal Clark County Transportation System

There was strong support for improving transportation connections through an improved grid street system with 68% of the respondents agreeing that a better grid system should be encouraged or required in new or existing neighborhoods. Survey respondents also agreed with the Committee's support for a wide range of improvement strategies to ease traffic problems in Clark County. Improved signal timing generated the most support with 81% identifying it as more or the most important. In contrast, 27% identified traffic calming strategies as important. The following chart displays the percentage of respondents that identified the strategies as important to easing transportation problems.

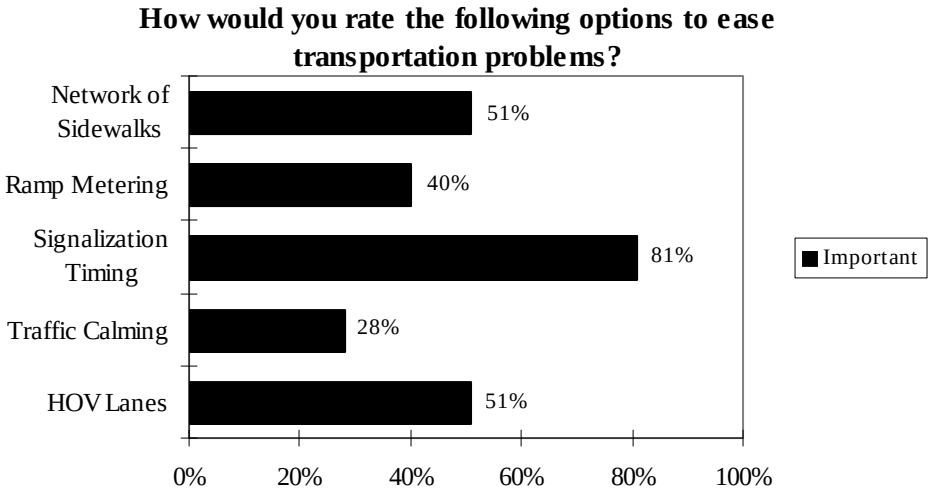


Figure 18

Public Mass Transit System

Support for the Committee's findings regarding public mass transit was very high. Respondents somewhat or strongly agreed with most of the findings by a majority of at least 58%. The following charts are indicative of the respondents general concurrence with the public mass transit options.

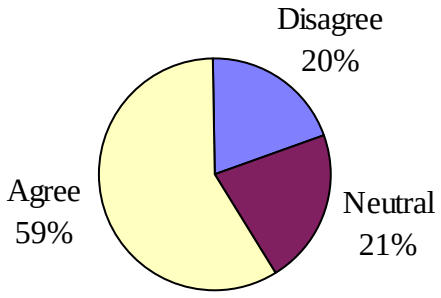


Figure 19

The community should continue to be committed to providing public transit service to ensure mobility for all

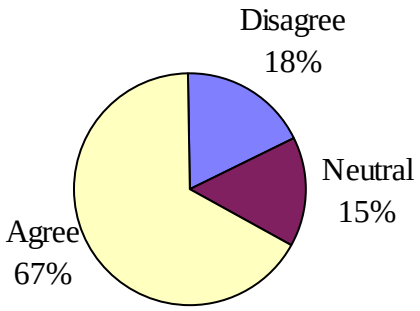


Figure 20

Three of the specific findings (C-TRAN service for public school students, private transit service, and no-fare areas) were supported by at least a plurality (53%,42%, and 47%, respectively), but there was a strong minority of respondents, between 29% and 33%, that somewhat or strongly disagreed with those findings. The following chart provides further analysis on the provision of C-TRAN service for public school students based on the age of the respondents. Those that were younger than twenty one and older than fifty were most supportive of this statement.

We should investigate providing middle/high school students with C-TRAN service

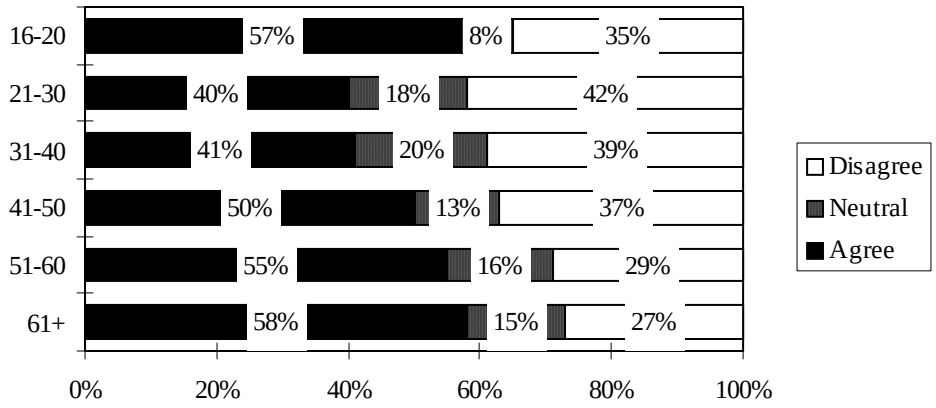


Figure 21

Bi-state Transportation Facilities

Respondents somewhat or strongly agreed with the Committee's findings regarding the need for a more balanced to addressing bi-state transportation facilities (67%), reducing demand by encouraging family wage jobs in Clark County (62%), reducing demand by promoting alternate modes (67%), and improving freight mobility (74%). On average, they also agreed that improved bus service should be the first priority for addressing I-5 corridor congestion problems. In contrast, Commuter was ranked third by the Committee and sixth by survey respondents. The left side of the following chart lists the bi-state options as prioritized by the Committee. The bars indicate the

ranked averages (on a scale of one to seven) received by each of the options from the survey results. Numbers next to the bars indicate the average value for each option based on the ranking it received from respondents. Bus service, for example, had the highest priority at a 3.42 average. I-5 widening was second at 3.48.

Average ranking (on a scale of 1 to 7) of bi-state I-5 corridor improvement options

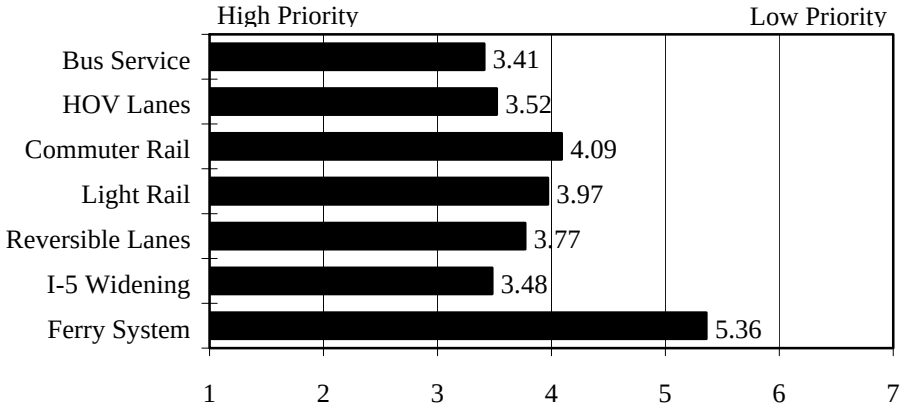


Figure 22

There was a wider range of opinion on some of the more specific findings in the bi-state category. While 50% of the respondents agreed that the I-5 corridor should be the first priority for bi-state capacity improvements, 29% disagreed with that statement. This may be, in part, due to the geographic distribution of survey respondents residences. Figure 23 shows by zip code the percentage of people who agree that I-5 should be the first priority for improvements.

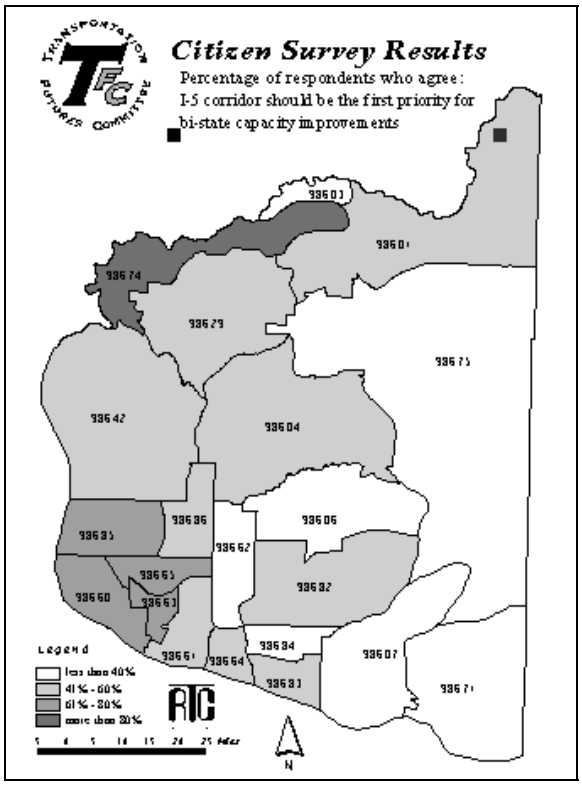


Figure 23

The most significant area where there was clearly a strong polarity of opinion on the bi-state findings was regarding the statement that a third auto bridge and corridor was not an acceptable solution to bi-state congestion. 32% of the respondents agreed while 55% disagreed. The following chart shows responses to the third corridor statement for respondents that listed the various options as their first priority.

Response to "third bridge is not an acceptable solution" by respondents first priority for I-5 improvement options

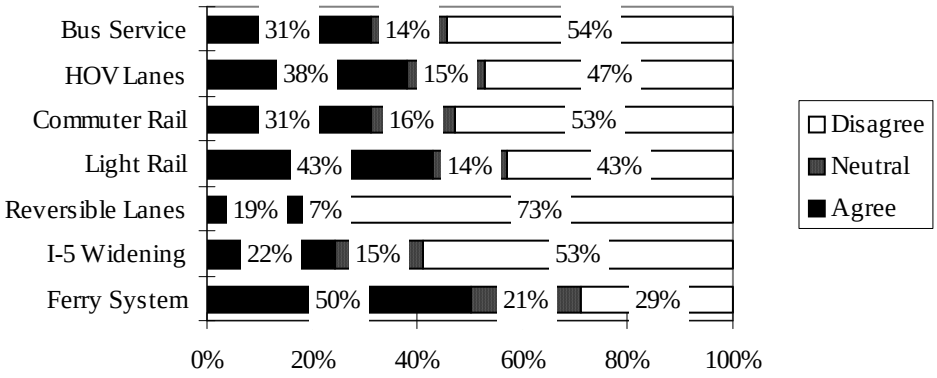


Figure 24

Local Financing

Respondents agreed with the Committee's findings that: financing mechanisms that retain local money in Clark County are preferred (61%), alternatives should be funded that minimize impacts on the environment (65%), and the public should made aware of the full costs of transportation alternatives (91%). Respondents generally supported the rankings of funding options put forth by the Committee with the exception of local option taxes and impact fees. Local options taxes were ranked second by the Committee and fifth by the survey respondents. Impact fees were ranked sixth and third by the Committee and survey respondents, respectively. It should be noted that the survey rankings were based on average value for each option from all the survey responses. The left side of the following chart lists the bi-state options as prioritized by the Committee. The bars indicate the ranked averages (on a scale of one to six) received by each of the options from the survey results. Numbers next to the bars represent the average value for each option based on the ranking it received from respondents.

Average ranking of priority for financing options

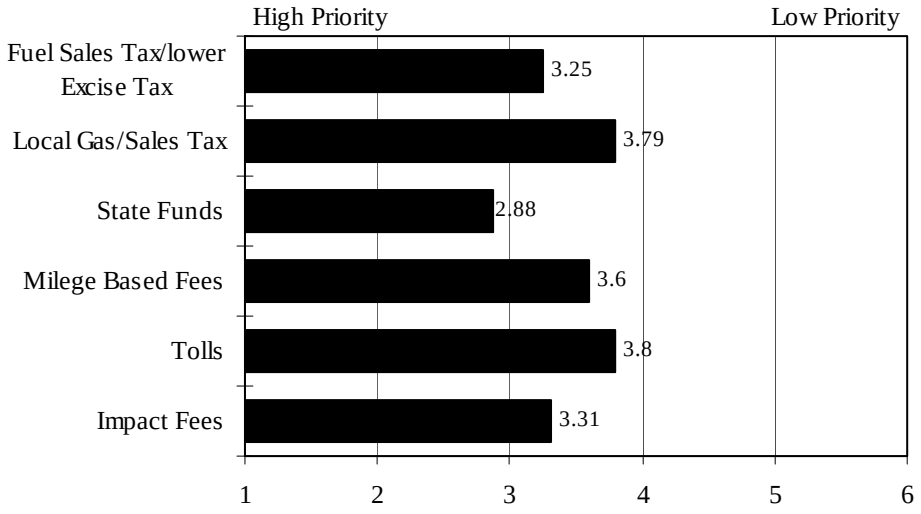


Figure 25

B. RECOMMENDATIONS

The recommendations resulting from the TFC process have been separated into three distinct levels: 1) existing policies, (recommendations that can be categorized as already occurring within existing policies); 2) new policies or actions, (recommendations that require additions or changes to existing transportation policy; and 3) new activities, (recommendations that require more comprehensive study to determine feasibility before consideration for inclusion in transportation plans or policies). The three levels of recommendations are arranged in the same transportation categories as the TFC findings.

1. TFC FINDINGS CONSISTENT WITH EXISTING TRANSPORTATION POLICIES

Policies

- Land use decisions should be supported and consistent with transportation plans.
- Continue incentives to encourage telecommuting, flex-time, and ride sharing through commute trip reduction.
- Continue sufficient funding that maintains and expands the transportation system.

Internal Clark County Transportation System

- Use a multimodal approach to address current and future transportation problems.

Public Mass Transit

- Public mass transit is an integral component of a multimodal transportation system; support more express bus service and additional all-day public transit service between activity centers.
- Public mass transit provides a social service function by enhancing mobility for those who are unable to use a private automobile or other means of transport. Continue commitment to provide public transit service to ensure mobility for all.
- Continue to assess potential for the use of smaller transit vehicles for low demand bus routes and the use of fareless areas.

Bi-state Transportation Facilities

- Support a balanced approach to bi-state transportation facilities.
- Encourage family wage jobs in Clark County.
- Promote alternatives to driving alone.

2. TFC FINDINGS THAT REQUIRE MODIFYING EXISTING TRANSPORTATION POLICIES

Policies

- Encourage mixed use neighborhood development that allows for appropriate service-oriented commercial development in residential neighborhoods.
- Consider the establishment of maximum parking requirements and provide incentives for businesses to reduce parking needs and improve access for alternate modes.
- Include public mass transit and other alternative modes in determining concurrency.
- Establish a process for regular coordination between public and private entities engaged in transportation and construction.

Internal Clark County Transportation System

- Review the following types of facilities and techniques and their effectiveness in improving the transportation system: neighborhood traffic calming strategies, signalization/timing improvements, ramp metering, safety improvements, complete network of sidewalks.

Public Mass Transit Options

- Review the cost-effectiveness of existing service in rural areas and consider decreasing service in rural areas in order to increase coverage and frequency in urban areas thereby making current transit service more flexible and efficient.
- Develop criteria to determine conditions in which private transit service within the C-TRAN service area may be appropriate.

Bi-State Transportation Facilities

- Recognize the I-5 corridor as the priority corridor for capacity improvements to bi-state transportation facilities.
- Make more effective use of existing facilities with continued commitment to improved and/or expanded bus service as the first priority for bi-state improvement.
- Incorporate a higher degree of consideration of intermodal connections in the planning process and increase coordination with freight interests to more fully address goods movement needs in the I-5 corridor.
- Identify ways to actively represent the concerns of Clark County commuters who travel into Portland daily.

Local Financing

- Consider incorporating the following transportation financing principles into existing plans and policies:
    - The cost to the user of a transportation alternative, whether collected at the point of use or through taxation, should increase in proportion to use consistent with encouraging alternatives that minimize impacts on the environment and resource consumption.
    - Funding for transportation alternatives that minimize impacts on the environment and resource consumption should be encouraged.
    - Financing mechanisms that retain local money (i.e., taxes and fees) within Clark County and provide for local options should be favored.
    - Public awareness of the true or full costs of transportation alternatives should be enhanced.

3. TFC FINDINGS THAT CALL FOR NEW STUDY ACTIVITIES

A number of new activities and/or studies have been identified within the TFC's findings. The purpose of the studies would be to provide a more comprehensive examination of the proposed transportation strategies or concepts.

HOV System/Facility Study - The TFC identified high occupancy vehicle (HOV) lanes as the second priority for improving the I-5 corridor and as a strategy to address mobility for the internal Clark County transportation system. To date, the Clark County region does not have policies or programs to develop HOV facilities. The goal of a high-occupancy-vehicle (HOV) program would be to improve overall mobility in the most congested parts of our region by increasing the people-moving efficiency and capacity of freeways and arterials. Integration of an HOV program with land use goals, transit operations and high capacity transit facilities could also provide incentives for people to choose higher occupancy modes of travel. A region-wide system plan for Clark County would define HOV policies/objectives, identify the need and benefits of HOV facilities and the location of possible corridors and/or facilities.

Commuter Rail Study - The Committee identified commuter rail as a bi-state transportation option that should be studied to make more effective use of existing facilities. A detailed study of this concept is required to better understand issues including feasibility, cost, and demand.

Development of Mobility Quotient - The Committee found that a method is needed to determine the quality, safety, completeness of non-vehicular transportation facilities that can support alternative modes such as walking and bicycling. Local jurisdictions should work cooperatively to develop and establish a mobility quotient to assess the constraints and opportunities of the transportation infrastructure for non-vehicular travel. The mobility quotient could, for example, identify areas of the transportation system where bicycle access is poor due to lack of roadway shoulders or disconnected bikeways.

Grid Street System Analysis - The Committee supported a street grid system to improve linkages between neighborhoods, decentralize traffic throughout the road system, and promote the use of alternative modes of travel. Local jurisdictions are asked to work cooperatively to review ordinances for new development, especially residential development, and modify them to limit non-through streets, circuitous streets, and cul-de-sacs. Existing developments also should be assessed to identify locations where connections between residential areas and to activity centers for non-vehicular trips can be improved.

Public Transit (C-TRAN) Service for Public School Students The Committee supported further study of a concept to bus upper-grade level school children on C-TRAN. C-TRAN, in coordination with local schools and other agencies, should investigate the cost-effectiveness, efficiency, safety, and security of serving middle and high school students.

I-5 Capacity Study - The Committee recommended that I-5 remain as the priority corridor for bi-state transportation improvements and calls for making more effective use of existing facilities with the focus on lower capital improvements before higher cost options are considered. Results of the survey also indicated that HOV improvements and I-5 widening be given consideration in the corridor A detailed analysis of I-5 capacity, including a reconnaissance of the effectiveness of a wide range of transportation modes should be undertaken to provide more balanced capacity and improved travel flows along I-5. Scope of analysis should include the full bi-state I-5 corridor from Clark County to downtown Portland.

South/North Corridor Project Involvement - Light rail transit in the I-5 corridor was identified as a viable option by the Committee based on technical findings that the Clark County segment of the South/North Corridor has significant bi-state mobility benefits. It is recommended that a strategy be undertaken which focuses on lower cost options for the corridor in the near term and leaves light rail as an option for a future community decision. Accordingly, it is recommended that the South/North Final Environment Impact Statement reflect a phased bi-state strategy which includes near term bus and park-and-ride improvements in Clark County in place of the Clark County light rail terminus option. Additional new study activities previously mentioned in this report will be coordinated with the phased bi-state strategy and will include the bi-state mobility impacts of high occupancy vehicle improvements, commuter rail, and I-5 corridor travel flow improvement options. The Clark County region should continue participation in the South/North Corridor Study to ensure a coordinated strategy for resolving bi-state mobility problems.

Third Highway Corridor and Bridge Issues - The Committee found that a third highway corridor and bridge was not an acceptable solution to address bi-state congestion, however, results from the public survey of the Committee's findings, described in the previous section, indicate a difference of opinion on this issue. In order to further community discussion, a public discussion of a third highway corridor concept is recommended. In addition to the travel and cost impacts developed for the TFC, this discussion should address the following issues: air quality, land use, historical and cultural resources, and community goals and livability.

Transportation Financing - The Committee recognized that transportation funding must be adequate to maintain the existing system and expand it where needed. A wide range of financing options that should be considered if additional funding is needed. Additional study should be conducted to determine the level of funding and the type of funding strategies and options that should be pursued to maintain the viability and growth of the transportation system.

Continuation of a Citizen Transportation Committee (CTC) - A broadly-based representative countywide Citizen Transportation Committee could provide the mechanism to better community understanding and consensus for major transportation initiatives. The CTC's responsibility would be to work together to recommend policies and solutions to our community's transportation problems, with their authority agreed to among the RTC Board and all individual member agencies. The Committee could include some members from the previous Transportation Futures Committee but also include additional members to gain new perspectives. Overall, the goal would be to establish an ongoing advisory citizen transportation input process to complement the current decision process both at the regional and local levels. An ongoing Citizen Transportation Committee could be very useful in helping to implement TFC findings that require new initiatives (e.g. commuter rail, HOV lanes, public transit for school bussed children and others). The CTC could help identify transportation project priorities, in the discussion of new transportation funding sources, and other significant transportation issues.