CRITERIA RESPONSE

CRITERIA #1
MINIMIZE CONVERSION OF RURAL RESOURCE LAND TO URBAN
A) URBAN RESERVE (in acres)
B) RESOURCE LAND (in acres)
C) RURAL LAND (in acres)

GMA POLICIES:

Goal 1: Encourage development in urban areas where adequate public facilities and services exist or can be provided in an efficient manner.

Goal 2: Reduce the inappropriate conversion of undeveloped land into sprawling, low density development.

Goal 8: Maintain and enhance natural resource-based industries, including productive timber, agricultural, and fisheries industries. Encourage the conservation of productive forest lands and productive agricultural lands, and discourage incompatible uses.

COUNTY POLICIES:

2.1.1A Reduce the inappropriate conversion of undeveloped land into sprawling, low-density development;

2.1.1C Protect natural resource, environmentally sensitive and rural areas;

2.1.1D Encourage a clear distinction between urban and rural areas;

2.1.2C Lands included within UGA's shall either be already characterized by urban growth or adjacent to such lands;

2.1.2D Land within the UGA shall not contain areas designated for long-term agriculture or forestry resource use;

DESCRIPTION OF MEASUREMENTS:

The total number of acres designated urban reserve, resource (agriculture, mining and forest) and rural residential that will be added to the urban growth boundary by each alternative.

FINDINGS:

Alternative 1 adds the largest number of acres in each category to the urban growth area in contrast to Alternative 3 that has no expansion to the urban growth area. Alternative 2 would add 4,623 acres of urban reserve land to the urban area and a total expansion of 9,119 acres which is a smaller expansion than Alternatives 4 and 5 which would each add about 12,000 acres.

Criteria #1 Conversion of Urban Reserve, Resource and Rural Land

	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Urban Reserve*	6,638	4,623	0	3,798	4,291
Resource Land	8,989	2,402	0	3,443	3,782
Rural	11,931	2,094	0	4,762	4,007
Total	27,558	9,119	0	12,003	12,080

* Includes Industrial Urban Reserve
Notes: These numbers are gross acres inclusive of infrastructure.

CONCLUSION:

Alternative 3 fares the best, followed by Alternative 2. Alternatives 4 and 5 are about equal and Alternative 1 is the most expansive in each category.

CRITERIA RESPONSE

CRITERIA #2

PROVIDE MOST COST EFFICIENT DELIVERY OF PUBLIC SERVICES
(a) Lowest total cost of services as reported in DEIS
(b) Highest benefit / cost ratio for services

GMA POLICIES:
RCW 36.70A.020 states several growth management act planning goals that speak to the need to provide services in an efficient manner, namely:
"(1) Urban growth. Encourage development in urban areas where adequate public facilities and services exist or can be provided in an efficient manner…
(3) Transportation. Encourage efficient multimodal transportation systems that are based on regional priorities and coordinated with county and city comprehensive plans…
(12) Public facilities and services. Ensure that those public facilities and services necessary to support development shall be adequate to serve the development at the time the development is available for occupancy and use without decreasing current service levels below locally established minimum standards."

COUNTY POLICIES:
Countywide planning policy 6.1 states:

a. The County, State, municipalities and special districts shall work together to develop realistic levels of service for urban governmental services.

b. Plans for providing public facilities and services shall be coordinated with plans for designation of urban growth areas, rural uses, and for the transition of undeveloped land to urban uses.

c. Public facilities and services shall be planned so that service provision maximizes efficiency and cost effectiveness and ensures concurrency.

d. The County, municipalities and special districts shall, to the greatest extent possible, agree upon present and future service provision within the urban area.

e. The County, municipalities and special districts shall agree on a full range of services to meet the needs of the urban area, including sewer, water, storm drainage, transportation, police, fire, parks, etc.

f. The County, its municipalities and special districts shall work together to ensure that the provision of public facilities and services are consistent and designed to implement adopted comprehensive plans.

g. Local jurisdictions shall establish a process to re-evaluate the land use element of their comprehensive plans upon its determination that the jurisdiction lacks

the financing resources to provide necessary public facilities and services to implement their plan.

h. General and special purpose districts should consider the establishment of impact fees as a method of financing public facilities required to support new development.

i. The County, its municipalities, and special districts will work together to develop financial tools and techniques that will enable them to secure funds to achieve concurrency."

County Planning Goal 2.2 states:

GOAL 2.2: Encourage more compact and efficiently served urban forms, and reduce the inappropriate conversion of land to sprawling, low-density development.

County Planning Goal 6.1 states:

GOAL 6.1: Ensure that necessary and adequate capital facilities and services are provided to all development in Clark County in a manner consistent with the 20-Year Plan.

County Planning Goal 6.2 states:

GOAL 6.2: Provide water service to all households minimizing environmental impacts and, at least, long-term public cost.

County Planning Goal 6.3 states with respect to sewer service:

GOAL 6.3: Provide sewer service within urban growth areas efficiently and at least public cost.

County Planning Goal 6.6 states with respect to policy, file and emergency medical services:

GOAL 6.6: Provide police, fire and emergency medical services efficiently and cost effectively to residents of Clark County.

County Planning Goal 6.7 states with respect to solid waste services:

GOAL 6.7: Provide solid waste services efficiently and cost-effectively to residents of Clark County.

DESCRIPTION OF MEASUREMENTS

Two measures were proposed for this EIS Criterion: total cost of services and the cost-to-benefit ratio. Of these measures only the first one is possible to calculate with the available information in the DEIS. The criterion review team proposes a replacement measurement: cost per capita of growth / cost per new employee.

Total cost: Generally, if all of the alternatives were of equal magnitude in terms of growth, total public service cost would be a very good measurement tool – the greater the cost, the less desirable the alternative. Absent any other information, total cost would remain the best available measurement tool.

Cost-to-benefit ratio: This measure attempts to address the differences in the alternatives that would produce differences in the total cost by comparing the cost to the benefits received from the investment in public facilities. The measure of benefits was to be the expected revenue resulting to government from the growth under each alternative. Since revenue projections are not available in the DEIS, this measure has not been calculated.

Per Capita / Per Employee Growth Cost: We are proposing this measure to address that cited inability to calculate the cost-to-benefit ratio. The measure is calculated as the cost of providing public services divided by the number of new persons accommodated by each alternative and the same cost divided by the number of new employees accommodated by each alternative. It is expected that alternatives that are "better" than others using this measure will have a lower per capita or per employee cost.

FINDINGS:

Total Cost:
The attached table compares the costs cited in the DEIS for public capital facilities (roads, water and sewer). There were no costs cited for other public capital facilities (police, fire, solid waste, and parks). Based on the costs in the DEIS, alternative 3 would be the most preferred (lowest cost) while alternatives 1, 4 and 5 would be least preferred (highest cost).

Per Capita/Per Employee Cost:
The attached table also calculated the per capita and per employee cost of each alternative. On a per new person basis, alternative 1 results in the lowest cost while alternative 4 results in the highest cost. On a per new employee basis, alternative 5 results in the lowest cost while alternative 2 results in the highest cost. From an examination of the values, there are clear differences between the alternatives based on per new person and new employee cost ($3,915 difference per person between highest and lowest per person and $4,399 difference per employee).

CONCLUSION:
Based on the analysis of this criterion, alternative 3 would be preferred on a total cost basis. If the community's goal is to provide for greater population growth, alternative 1 accommodates residential growth at lower cost. If the community's goal is to provide for greater levels of employment, alternative 5 accommodates employment growth at lower cost (but alternative 4 is very close in cost per new employee).

DEIS Criterion #2 - Provide most cost efficient delivery of public services

Public Facility	Cost by Alternative (rounded to nearest $100,000)				
	1	2	3	4	5
Roads	$2,300,000,000	$2,100,000,000	$1,800,000,000	$2,200,000,000	$2,200,000,000
Water	$56,800,000	$29,700,000	$21,300,000	$32,500,000	$38,700,000
Sewer	$104,000,000	$61,000,000	$33,000,000	$67,900,000	$128,000,000
Total	$2,460,800,000	$2,190,700,000	$1,854,300,000	$2,300,400,000	$2,366,700,000
Growth					
Population	264,265	199,450	161,442	173,918	199,612
Employment	110,973	94,560	87,053	119,259	126,106
Cost per Capita	$9,312	$10,984	$11,486	$13,227	$11,857
Cost Per Employee	$22,175	$23,167	$21,301	$19,289	$18,768

CRITERIA RESPONSE

CRITERIA #3

MINIMIZE ENVIRONMENTAL IMPACTS

GMA POLICIES:

RCW 36.70A.020(9): Open Space and Recreation. Encourage the retention of open space and development of recreational opportunities, conserve fish and wildlife habitat, increase access to natural resource lands and water, and develop parks.

RCW 36.70A.020(10): Environment. Protect the environment and enhance the state's high quality of life, including air and water quality, and the availability of water.

COUNTY POLICIES:

The policies below are proposed for adoption as part of Chapter Z in the Comprehensive Plan Text update.

Goal Z.1: Protect and conserve environmentally critical areas of Clark County.

Goal Z.3: Conserve and protect anadromous fisheries within Clark County.

Goal Z.4: Require sewer service within urban growth areas, and discourage septic use.

Goal Z.5: Provide a long-range stormwater management program to minimize impacts form stormwater discharge from existing and new development.

Goal Z.6 Conduct mineral operations in a manner that meets or exceeds all water quality, critical areas, and salmonid recovery objectives.

Goal Z.7 Protect the shorelines of Clark County.

Goal Z.8 Manage the parks and open space of Clark County consistent with protecting water quality and critical areas, and with enhancing the recovery of listed species.

Goal Z.9 Achieve and maintain clean, healthy air in Clark County.

Goal Z.10 Minimize property damage from geological hazards and flooding.

DESCRIPTION OF MEASUREMENTS

1) Wetlands added to UGAs.
2) Amount of additional impervious surface area expected.
3) Air quality impacts.
4) Added wellhead protection areas.
5) Miles of streams added to UGAs

FINDINGS: (List each measurement separately with findings under each measurement)

Criterion	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Wetlands added[1]	1,195	329	0	749	729
Impervious surface added[1]	7,800	3,200	0	3,098	3,355
Air quality-VMT[2]	1,077,000	963,000	923,000	974,000	976,000
Wellhead protection areas[1]	28,841	9,745	0	12,552	12,300
Stream miles	100	28	0	33	32
Stream miles, salmon	34	23	0	34	8

[1]numbers of acres
[2]vehicle miles traveled

CONCLUSION:

It is assumed in the analysis that environmental development regulations will be consistently applied to the area within the existing Urban Area and throughout the expansion areas. It is clear from the data presented in the table above that Alternative 1 has the potential to create the greatest amount of environmental impact. There is not much difference between Alternatives 4 and 5 except in numbers of miles of salmon-bearing streams that would be added. If boundary movement were needed Alternative 2 would be the preferred choice. However, Alternative 3 has the least environmental impact.

CRITERIA RESPONSE

CRITERIA #4

ENCOURAGES ECONOMIC DEVELOPMENT

GMA POLICIES:

Consistent with Goal 5 of the Growth Management Act (GMA): Encourage economic development throughout the state that is consistent with adopted comprehensive plans, promote economic opportunity for all citizens of this state, especially for unemployed and disadvantaged persons, and encourage growth in areas experiencing insufficient economic growth, all within the capacities of the state's natural resources, public services and public facilities.

COUNTY POLICIES:

Goal 2.1: Adopt urban growth areas (UGA) boundaries to accommodate residential and employment increases projected within the boundaries over the next 20 years. Policy 2.1.1(h) Include sufficient vacant and buildable land.

CWPP 10.1 (b) The County and the municipalities will demonstrate their commitment to the retention of those enterprises which have created the economic base of the County, and promote their continued growth in a predictable environment, which encourages investment and job growth.
CWPP 10.1 (h) The County and the municipalities will provide for orderly long-term commercial and industrial growth and an adequate supply of land suitable for compatible commercial and industrial development.
CWPP 10.1 (i) The County and the municipalities will encourage the recruitment of new business employers to absorb the increasing labor force, and to supply long-term employment to a portion of the County's residents who are currently employed outside of the County.

Goal 7.2: Assure an adequate supply of prime industrial sites to meet market demands for industrial development over the planning horizon to create an environment conducive for the startup, growth, and expansion of "high-technology" industries.

Goal 7.3: Provide commercial sites adequate to meet a diversity of needs for retail, service, and institutional developments in Clark County.

DESCRIPTION OF MEASUREMENTS?

1. a. Commercial and Industrial land (in acres) added
   b. Parcel sizes (in parcels by acreage classification)
   c. Ratio of commercial/industrial to residential (in percentage terms)
2. Acreage consistent with prioritized Focus Public Investment Areas (in # of FPIA's impacted)

FINDINGS:

Commercial and Industrial land (in acres) added

Alternative 4 has the largest increase in commercial and industrial acres at 8848 acres. Alternatives 1 and 5 have the next largest expansion at 5000 acres. Alternative 2 has 1787 acres of expansion for commercial and industrial acres. Alternative 3 has no expansion for commercial and industrial lands.

Range of Parcel sizes (in parcels by acreage classification)

Each of the alternatives has a range of parcel sizes. However, alternative 1 has more parcels that are 10 acres or larger. Alternatives 4 and 5 each have the same number of parcels greater than 10 acres. Alternatives 2 and 3 have the similar number of parcels greater than 10 acres but it is less than half of those found in Alternative 4 and 5.

Ratio of commercial/industrial to residential (in percentage terms)

Alternative 3 reflects the current ratio of employment land to residential. Alternatives 4 and 5 exceed the current employment ratio and alternatives 1 and 2 have ratios that are below the ratio of alternative 3.

Acreage consistent with prioritized Focus Public Investment Areas (in # of FPIA's impacted)

FPIA's ranked by cost per job indicate that the top eight locations: Downtown Vancouver, Vancouver Mall, Fisher Swale, 164th/ Columbia Tech Center, Columbia Shores, Port of Vancouver, Burnt Bridge Creek and St. John's Corridor are mostly contained in the existing UGA. A threshold of 3,000 and 4,000 acres was used as a guide.

The number of jobs that can be accommodated in these areas make up 68% to 83% of the 70,000 total jobs planned for in Alternatives 4 and 5.

CONCLUSION:

The results are mixed, Alternative 4 does well in the composite ranking of parcel size, ratio of employment lands and employment acres added but the Focused Public Investment Alternative's analysis indicates that the most cost efficient locations to provide employment are within or adjacent to the existing UGA. Alternative 3 would accommodate the top eight focused public investment areas and rates as good. Alternatives 1,2 and 5 would rate as fair.

Commercial and Industrial Land and Percent of land dedicated to employment

	Alt. 1	Alt. 2	Alt. 3*	Alt. 4**	Alt. 5
Residential	21165	6519	18627	2134	6155
Com/Ind/BP	5046	1787	11455	8848	4979
Total	26211	8306	30082	10982	11134
% of Acres dedicated to employment	19%	22%	38%	81%	45%

* Alternative 3 represents the existing inventory, and is included as a point of comparison. The four other alternatives represent the additions to be made to this base.

**Note: The acres of land dedicated to support the residential population in alternative 4 are insufficient to accommodate the projected population. However, if the acreage were increased to accommodate the projected population (the equivalent of Alt. 5) it would still have a higher percentage of land (59%) dedicated to employment than any of the other alternatives.

Number of Parcels by Acreage Classification*

	Less than 2 acres	2 to 5 acres	5 to 10 acres	10 to 50 acres	greater than 50 acres
Alternative 1					
Com	266	154	48	125	8
Business Park	181	173	39	49	5
Industrial	158	81	40	26	4
Total	605	408	127	200	17
Alternative 2					
Commercial	12	10	4	1	0
Business Park	552	157	62	63	6
Total	564	167	66	64	6
Alternative 3					
Commercial	1459	128	34	6	0
Industrial	1351	208	113	62	1
Total	2810	336	147	68	1
Alternative 4					
Commercial	876	440	175	45	5
Industrial	335	354	100	85	13
Total	1211	794	275	130	18
Alternative 5					
Commercial	101	69	55	37	11
Business Park	141	146	61	82	7
Industrial	46	6	6	9	2
Total	288	221	122	128	20

* Alternative 3 represents the existing inventory, and is included as a point of comparison. The four other alternatives represent the additions to be made to this base.

Focused Public Investment Areas – Ranked by Cost per job

FPIA	Estimated Cost per Job	Rank Based on Estimated Costs per job	Parcels	Acres	Jobs
Downtown Vancouver	1,672	1	115	39.763	3,495
Vancouver Mall	3,568	2	135	163.051	3,261
Fisher Swale	4,372	3	72	796.426	15,929
164th/ CTC	7,718	4	67	530.506	10,017
Columbia Shores	9,527	5	46	133.47	1,261
Port of Vancouver	10,401	6	NA	676.303	6,087
Burnt Bridge Cr.	12,196	7	122	800.57	7,329
3000 Acre Break Point				3140.089	47379
St. Johns Corridor	12,450	8	398	1162.05	10,545
4000 Acre Break Point				4302.139	57,924
Discovery Corridor	13,526	9	281	1464.49	27,989
WSU Industrial Park	14,435	10	24	368.6	7,372
117th	15,233	11	162	675.91	6,265
Ridgefield Junction	17,421	12	139	1627.5	15425
Battle Ground	17,807	13	152	1755.73	17740
Fruit Valley	17,961	14	92	219.502	1981
Port of Camas-Washougal	18,344	15	117	425.63	3886
La Center Junction	18,604	16	30	421.23	3864
136th	20,047	17	96	148.898	1839
Totals			**1093**	**11409.63**	**144,285**

CRITERIA RESPONSE

CRITERIA #5

MAXIMIZE TRANSPORTATION SYSTEM AND LAND USE ACCESSIBILITY

GMA POLICIES:

RCW 36.70A.020
(3) Transportation. Encourage efficient multimodal transportation systems that are based on regional priorities and coordinated with county and city comprehensive plans.

(12) Public facilities and services. Ensure that those public facilities and services necessary to support development shall be adequate to serve the development at the time the development is available for occupancy and use without decreasing current service levels below locally established minimum standards.

COUNTY POLICIES:

Countywide Planning Policies

- 1.1.i Coordination of land use planning and development
- Establish consistent regional criteria for urban growth area boundaries for the 20-year comprehensive plans that consider the following:…public facility and service availability, limits and extensions;…
- 5.1.c The State, MPO/RTPO, County and the municipalities shall adequately assess the impacts of regional transportation facilities to maximize the benefits to the region and local communities.
- 5.1.d The State, County and the municipalities shall strive, through transportation system management strategies, to optimize the use of and maintain existing roads to minimize the construction costs and impact associated with roadway expansion.
- 5.1.e The County, local municipalities, C-Tran and MPO/RTPO shall work together with the business community to develop a transportation demand management strategy to meet the goals of state and federal legislation relating to transportation.

- 5.1.f The State, MPO/RTPO, County, local municipalities and C-Tran shall work cooperatively to consider the development of transportation corridors for high capacity transit and adjacent land uses that support such facilities.
- 5.1.g The State, County, MPO/RTPO and local municipalities shall work together to establish a regional transportation system which is planned, balanced and compatible with planned land use densities; these agencies and local municipalities will work together to ensure coordinated transportation and land use planning to achieve adequate mobility and movement of goods and people.
- 5.1.h The State, County, MPO/RTPO and local municipalities shall work together to establish a regional transportation system which is planned, balanced and compatible with planned land use densities; theses agencies and local municipalities will work together to ensure coordinated transportation and land use planning to achieve adequate mobility of goods and people.
- 5.1.i State or regional facilities that generate substantial travel demand should be sited along or near major transportation and/or public transit corridors.

Transportation Goals (approved by the BOCC at work session)
(Note: New transportation policies will be developed upon the selection of a preferred alternative.)

Goal 1: Develop a transportation system that supports the adopted land use plan.

Goal 3: Optimize and preserve the investment in the transportation system.

DESCRIPTION OF MEASUREMENTS:

The transportation analysis provides several measures of performance of the transportation system, including vehicle hours traveled (VHT), vehicle hours of delay (VHD) and number of lane miles in failure for each alternative. While all three of these measures are closely related to mobility of travel by automobile, they are meaningful indicators of the future operation of the roadway system under each land use alternative.

A measure of accessibility has been developed by RTC staff. It shows the percentage of the total anticipated employment, retail and service uses in Clark County that could be reached by the median household within 15 minutes during the AM and PM peak hours. This seems to be an appropriate measure of accessibility that allows for some distinctions to be made between the alternatives.

FINDINGS:

Data from the Draft EIS analysis and the accessibility measures were evaluated on a five point scale. Poor (P) Poor to Fair (P/F) Fair (F) Fair to Good (F/G) Good (G)

The ratings were somewhat subjective in that there were no statistically-defined break points between F/G and G, for example. There were, however, sufficient differences in the data for each alternative to make the ratings reasonable and internally consistent. There was also a high degree of consistency between measures for each alternative.

	ALT 1	ALT 2	ALT 3	ALT 4	ALT 5
Vehicle Hrs. Traveled	37,500	27,500	25,500	27,300	27,100
	P	**F/G**	**G**	**F/G**	**F/G**
Vehicle Hrs. of Delay	9,510	2,838	2,024	2,208	2,065
	P	**F**	**G**	**F/G**	**G**
Lane Miles LOS E/F	273	127	85	124	105
	P	**F**	**G**	**F**	**F/G**
AM Accessibility	36.05%	54.29%	58.70%	60.33%	55.90%
	P	**F/G**	**G**	**G**	**F/G**
PM Accessibility	49.52%	61.64%	64.56%	61.12%	58.33%
	P	**G**	**G**	**G**	**F/G**
OVERALL	**P**	**F/G**	**G**	**F/G**	**F/G**

CONCLUSION:

For all measures, Alternative 1 rates Poor and Alternative 3 rates Good.

There is little difference between the other three alternatives in terms of accessibility and mobility. Alternatives 2, 4 & 5 all rate fair.

CRITERIA RESPONSE

CRITERIA #6
PROVIDES A VARIETY OF HOUSING TYPES

GMA POLICIES:

RCW 36.70A.020 (4)
Encourage the availability of affordable housing to all economic segments of the population of the state, promote a variety of residential densities and housing types, and encourage preservation of exiting housing stock.

COUNTY POLICIES:

2.1 County-wide Planning Policies

a. The County and each municipality shall prepare an inventory and analysis of existing and projected housing.

b. The *Comprehensive Plan* of the County and each municipality shall identify sufficient land for housing, including, but not limited to, government-assisted housing, housing for low-income families, manufactured housing, multifamily housing, and group homes and foster care facilities. All jurisdictions will cooperate to plan for a "fair share" of the region's affordable housing needs and housing for special needs population.

d. Link transportation and housing strategies to assure reasonable access to multi-model transportation systems and to encourage housing opportunities in locations that will support the development of public transportation.

c. Link housing strategies with the locations of work sites and jobs.

e. Encourage infill housing within cities and towns and urban growth areas.

Goal 5.1 Provide for a diversity in the type, density, location, and affordability of housing throughout the county and its cities. Encourage and support equal access to housing for renters and homeowners and protect public health and safety.

Policy 5.1.1 Provide all types and compositions of households, assuming adequate financial resources and personal responsibility, and opportunity to find housing throughout the county.

Goal 5.2 Plan for increasing housing needs of low-income and special needs households.

Policy 5.2.2 Assure that policies, codes, and ordinances allow for a geographic distribution of the housing continuum, with housing provided in appropriate locations and adequately served by public facilities (such as transit) and services.

Policy 5.3.6 Encourage infill as a redevelopment concept…

Policy 5.3.8 Encourage the development of multi-use neighborhoods which are a mix of housing, jobs, stores and public space all within a well-planned pedestrian environment.

Policy 5.6.1 Provide opportunities for new development to occur. There shall be no more than 75 percent of any single product type of housing in any jurisdiction. (E.g., single-family detached residential.)

DESCRIPTION OF MEASUREMENTS

Each of the alternatives studied in the DEIS distinguishes between residential districts that are low, medium, or high-density areas. It is assumed that the medium and high-density districts contain higher density and attached housing types. The low-density district is comprised of single family, detached housing. Based upon the residential districts depicted on the maps, staff was able to calculate the number of units of each type. The table below shows the results of the analysis. Additionally, the chart will show the "planned" mix of housing types in each alternative.

The Board of County Commissioners, in 2001, instructed staff to plan for a maximum of 75% of any single housing type. This was used in alternatives 2, 4, and 5 to assume no more than 75% of single-family housing, or urban low. Previously, the county used a split of 60/40 single and multi family units respectively. The reader should not assume that the maximum of 75% of a single type is the same as planning for a 75/25 split. Also, the planned mix of housing types for each alternative is not precisely reflected on the alternative maps. With the selection and revision of a preferred alternative, the discrepancy between the mapped mix of units and the planned mix of units will be corrected.

Alternatives 1, 2, 4, and 5 each have urban area expansions that are comprised of very large districts of residential uses. Because the land use districts are so large, the mix of housing types are not well integrated to create an urban form. Such a pattern tends to isolate multi-family away from the rest of the urban area. During the creation of the preferred alternative residential districts will be broken up further to better integrate housing types together, as well as integrate housing with other types of land uses.

FINDINGS:

The mix of housing types documented in the Buildable Lands Report (2001) is as follows:

	Single	Multi
All UGA's	71%	29%
Vancouver UGA	67%	33%
City of Vancouver	50%	50%
Battle Ground	88%	12%
Camas	92%	8%
La Center	98%	2%
Ridgefield	73%	27%
Washougal	73%	27%
Yacolt	96%	4%
Rural Area	100 %	0%

The mix of types derived from the maps of the alternatives is as follows:

	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5
Planned SF / MF	60/40	75/25*	71/29	75/25*	75/25*
Actual mix depicted on maps.**	52/48	53/47	61/39 ***	27/74	60/40

*As explained under "DESCRIPTION OF MEASUREMENTS" this is meant as a 75% cap on any single type, not a goal of 75% single family and 25% multi family. In fact, a jurisdiction *could* plan to build toward a goal of 75% multi family and 25% single family.
** Considers mix of units in expansion areas only
*** This is the mix in the current UGA, and would be the same for the existing urban area under each of the alternatives. However, in the Buildable lands report jurisdictions that failed to attain their desired mix of types and densities may rezone areas in order to better achieve these goals.

CONCLUSION:

1. According to the maps, no alternative exceeds the 75% cap on any single housing type.

2. Alternative 1 achieves more multi family housing than was set as the goal. Since the housing split has previously been heavy in single family units, this is often interpreted as exceeding the goal.

3. Alternatives 2,4, and 5 were simply meant to not build more than 75% of any single type, and are successful in that pursuit.

4. Alternative 3 achieves more multi family housing than was set as the goal. Since the housing split has previously been heavy in single family units, this is often interpreted as exceeding the goal.

5. Alternative 4 is the only alternative where it seems possible for the 75% cap to be exceeded. If 74% of the units will be multi family at the 20 year horizon, measurements taken before that time may reveal greater than 75% of one type of housing. This is also true for the other alternatives, but would be a less likely occurrence given the more balanced split of housing types.

Each of the alternatives provides a GOOD variety of housing types. Alternative 4 provides a FAIR variety of types.

CRITERIA RESPONSE

CRITERIA #7

INCLUDES AREAS THAT ARE CHARACTERIZED BY URBAN DEVELOPMENT

GMA POLICIES:

Goal 1. Encourage development in urban areas where adequate public facilities and services exist or can be provided in an efficient manner.

Goal 2. Reduce the inappropriate conversion of undeveloped land into sprawling, low-density development.

Goal 3. Ensure that those public facilities and services necessary to support development shall be adequate to serve the development at the time the development is available for occupancy and use without decreasing current service levels below locally established minimums.

COUNTY POLICIES:

2.1.1A Reduce the inappropriate conversion of undeveloped land into sprawling, low-density development;

2.1.1C Protect natural resource, environmentally sensitive and rural areas;

2.1.1D Encourage a clear distinction between urban and rural areas;

2.1.2C Lands included within UGA's shall either be already characterized by urban growth or adjacent to such lands;

DESCRIPTION OF MEASUREMENTS

Sewer availability and level of parcelization (1/2 acre threshold). With the exception of Alternative 3, each of the alternatives includes expansion into areas not currently served by sewer. The measure used to evaluate this criterion is the cost of upgrading the sanitary sewer system. Parcelization is intended to capture the number of parcels less than one half acre that are being urbanized in each alternative.

FINDINGS:

Sewer availability

The total cost of upgrading service to each of the alternatives and a brief description of the needed upgrades is as follows:

Alternative 1 - $104 million; Expand 8 miles of interceptor sewer along Salmon Creek or construct another treatment plant, in addition a new collections system would have to be installed.
Alternative 2 - $61 million; New sewer mains around WSU and Battle Ground, minor expansion to the Salmon Creek Wastewater Treatment Plant (SCWTP).

Alternative 3 - $33 million; Sewer mains might have to be replaced to support higher intensity use, new lines needed in some areas and expanded treatment plant capacity.

Alternative 4 - $67.9 million; Expansion of the SCWTP and interceptor sewer or construction of a new treatment plant for the City of Battle Ground would be required.

Alternative 5 - $128.1 million; New facilities to carry and collect sewage from the La Center Junction, a new collection system would be required to serve the Ridgefield Junction and possibly a new treatment plant. This estimate assumes the cities of Ridgefield and La Center cooperate in the construction of a new facility.

Residential Parcels less than .5 acres

	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5
Parcels less than .5 acres	819	370	NA	167	365
Total Parcels	5,462	2,424	NA	922	2,383
% of Total less than .5 acres	14.99%	15.26%	NA	18.11%	15.32%

The number of parcels less than ½ acre corresponds with the amount of expansion. The greater the expansion the greater number of parcels less than ½ acre. In order to provide a meaningful comparison between alternatives the proportion of parcels less than 1/2 acre for each alternative was calculated. The result is no significant difference exists between alternatives in terms of parcelization, with the exception of Alternative 3 since it does not propose any expansion.

CONCLUSION:

Since the level of parcelization revealed no significant difference between alternatives. The determining factor used is the cost of upgrading the sanitary sewer system to accommodate the growth in each alternative. Alternative 3 has the least cost followed by Alternatives 2 and 4. Alternatives 1 and 5 have the highest cost.

CRITERIA RESPONSE

CRITERIA #8

SUPPORT ALTERNATIVE TRANSPORTATION MODES

GMA POLICIES:

RCW 36.70A.020 (3) Transportation. **Encourage efficient multimodal transportation systems that are based on regional priorities and coordinated with county and city comprehensive plans.**

COUNTY POLICIES:
Countywide Planning Policies

- 2.1.d Link transportation and housing strategies to assure reasonable access to multi-modal transportation systems and to encourage housing opportunities in locations that will support the development of public transportation.
- 5.1.a Clark County, Metropolitan Planning Organization (MPO) and the Regional Transportation Planning Organization (RTPO), state, bi-state, municipalities, and C-Tran shall work together to establish a truly regional transportation system which:
    1) reduces reliance on single occupancy vehicle transportation through development of a balanced transportation system which emphasizes transit, high capacity transit, bicycle and pedestrian improvements, and transportation demand management;
    2) encourages energy efficiency;
    3) recognizes financial constraints; and,
    4) minimizes environmental impacts of the transportation systems development, operation and maintenance.
- 5.1.g The State, MPO/RTPO, County, local municipalities and C-Tran shall work cooperatively to consider the development of transportation corridors for high capacity transit and adjacent land uses that support such facilities.
- 5.1.h The State, County, MPO/RTPO and local municipalities shall work together to establish a regional transportation system which is planned, balanced and compatible with planned land use densities: these agencies and local municipalities will work together to ensure coordinated transportation and land use planning to achieve adequate mobility and movement of goods and people.

New Transportation Goals (approved by the BOCC at work session)
(Note: The 1994-1997 Transportation Goals and Policies had numerous references to multi-modalism. They will be rewritten and new transportation policies will be developed upon the selection of a preferred alternative.)

Goal 2: Develop the transportation infrastructure into an efficient multi-modal system.

Goal 4: Ensure mobility throughout the transportation system.

DESCRIPTION OF MEASUREMENTS

A. Mode Split:
A standard measure of effective public transportation is the mode-split. The mode split simply uses a transportation model output to reveal how many people will "choose" transportation modes other than driving. The model determines this level of participation based upon distributions of households and jobs, transit level of service (LOS), income levels, age, etc.

B. Pedestrians:
Transportation modeling can also be used to estimate the number of people who might choose to walk or bike to their destinations. This "virtual" decision is based upon trip length, mixed land uses, availability of facilities (bike lanes and sidewalks), and more. The numbers are not very revealing in this analysis. However, if some of the major blocks of single land uses were to be better mixed across the community, the pedestrian utilization of the transportation system could be better emphasized.

C. Availability of Transit Stops:
Another key determinant of support for alternative transportation is derived from the availability of transit. This is implicit in the mode share numbers that are provided as a transportation model output. However, the possible expansion of an urban growth boundary introduces new issues of transit levels of service. Firstly, criteria number 5 examines the number of lane miles in the County that would enter into a "failing" status without significant mitigation through widening or demand management. These slow corridors will also slow buses in those corridors and result in either worsened levels of service or additional needs for funding. Secondly, the table shows the number of new acres that would be urbanized in each alternative. These areas will either have no transit service (despite it being a defining characteristic of a planned urban environment) or; these areas would be served by new routes that are currently un-funded by C-TRAN or any other agency. Currently urban areas that have inadequate transit opportunities are also an important issue, but do not differ from alternative to alternative.

FINDINGS:

A. The mode split findings are as follows:

	Alt' 1	Alt' 2	Alt' 3	Alt' 4	Alt' 5
% of population choosing alternate modes	1.1	1.2	1.3	1.1	1.1
Specific mode split for I-5 commuters	5.8	6.1	7.0	6.3	6.0

B. Pedestrian findings are as follows:

	Alt' 1	Alt' 2	Alt' 3	Alt' 4	Alt' 5
Non-motorized mode share	5.2	5.7	5.7	5.7	5.7

C. Availability of transit stops

	Alt' 1	Alt' 2	Alt' 3	Alt' 4	Alt' 5
New acres without transit stops	28,845	9,749	0	12,554	12,303

CONCLUSION:

The discussion of support for alternative transportation modes is only generalized in this analysis. The transportation model used to simulate the 5 alternative futures examined differing land use maps with the same transportation network. It is somewhat self-evident that the shortcomings of the transit and non-motorized infrastructure are worse in the newly urbanized areas where transit (a defining urban provision) is non-existent. For example, C-TRAN no longer provides bus service north to Ridgefield. With the possibility of an I-5 development corridor and job nodes at Ridgefield and La Center, transit would need to be introduced. Funding will have to be found to bring transit and pedestrian amenities into these areas. It is possible, however, that direct and indirect benefits of a successful economic development plan could yield the necessary funding.

This analysis did not exhaustively explore the use of high capacity transit (HCT) or, more specifically, light rail. These studies are yet to come. The cities, regional entities, and the County all envision light rail in the 20-year planning horizons. As expected, preliminary modeling revealed that the introduction of light rail does cause a significant increase in support of alternative modes. In addition to capital-intensive projects such as light rail, area jurisdictions can use transportation demand management (TDM) techniques to lessen the dependence on single occupancy vehicle (SOV) trips. TDM

measures include promotion of vanpools, carpools, biking, telecommuting, flex schedules etc.

Alternative One was given a "poor" rating as it greatly expands into an area unserved by transit and increases the congestion on the existing transportation system.
Alternative Three was given a "good" rating as it does not urbanize areas outside of the current urban growth area, and has quantifiably better integrated land uses.
Alternatives 2, 4, and 5 have scored a "fair" rating as they are requiring transit and pedestrian facilities in hundreds of currently, unserved acres. Yet, the extent of the unserved areas and the worsened congestion levels are not as severe as those under alternative one.

H:\LONG RANGE PLANNING\PROJECTS\CPT 99.003 Five Year Update\E I S\E I S - WORK\Reports\CRITERIA RESPONSES\Summary Report of CRITERIA RESPONSE.doc