Growth Targets and Mode Split Goals for Regional Centers

A PSRC Guidance Paper (July 2014)

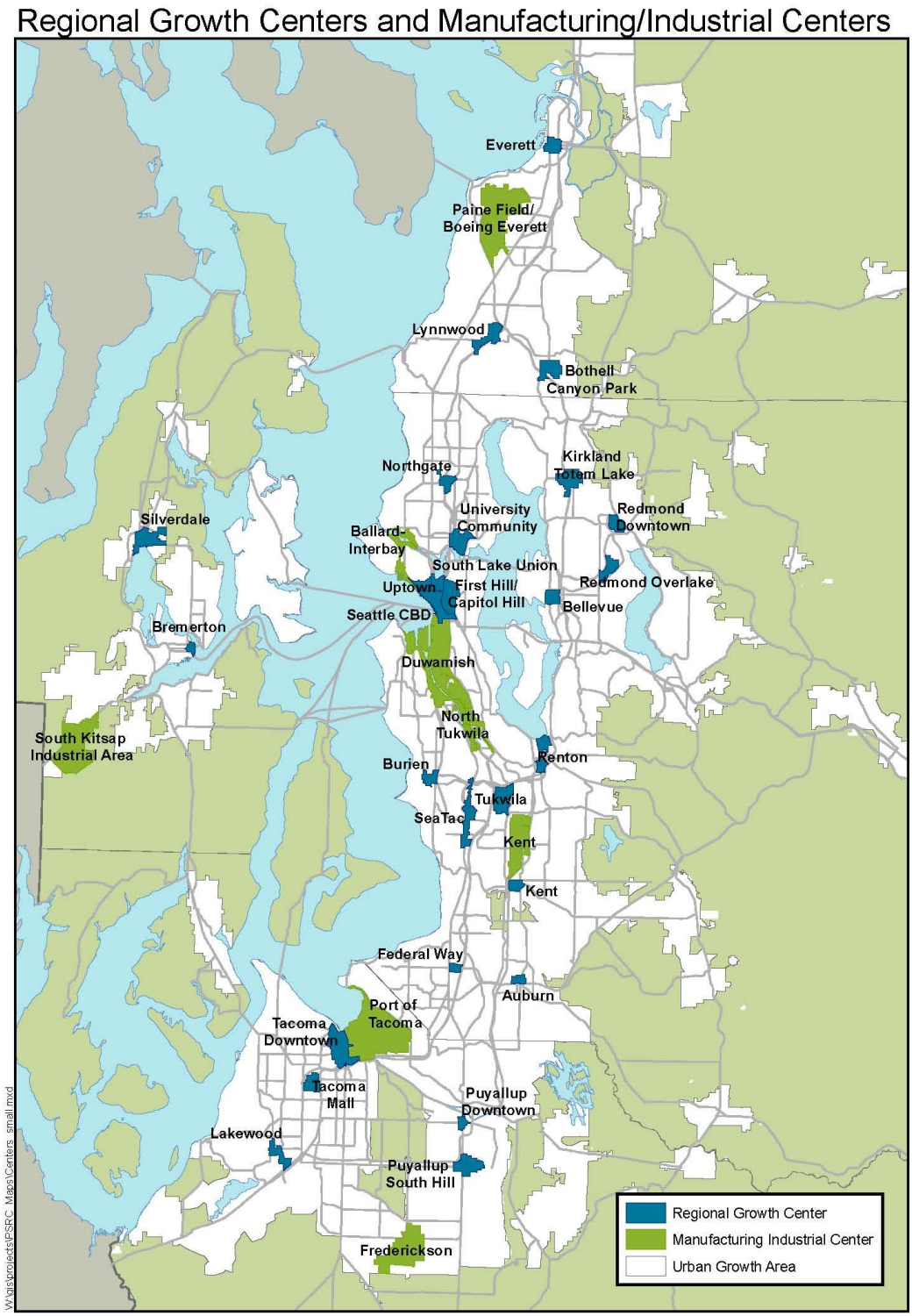
Introduction

Regionally-designated centers are a focal point of the growth management and transportation strategies for the central Puget Sound region advanced by VISION 2040 and Transportation 2040. As the region grows to approximately 5 million people and 3 million jobs by the year 2040, growth is envisioned to occur in a compact pattern that makes efficient use of land and infrastructure. To date, the Puget Sound Regional Council has designated 28 Regional Growth Centers as current and future concentrated areas of mixed housing, employment, and services, linked by a network of high capacity transit services. An additional eight Manufacturing / Industrial Centers have been designated as regionally significant locations for employment in these sectors. Individually and as a whole, regionally designated centers are intended to be vibrant urban districts with a high quality of life, thriving economy, options for local and regional mobility, and broad benefits for the region's communities. Figure 1 on the next page shows the location of the 36 regionally designated centers.

Planning for each Regional Growth Center and Manufacturing / Industrial Center is primarily the responsibility of local government: cities and, in several cases, counties. Centers are designated in each jurisdiction's comprehensive plan. As called for in VISION 2040, each jurisdiction where centers are located is expected to adopt a subarea plan for each center, which can be a stand-alone document or incorporated into the comprehensive plan. The purpose of this guidance paper is to provide information on relevant context, data, and methods to those cities and counties as they develop and update their plans.

The paper addresses two related topics—housing and employment growth targets and mode-split goals—to be included in those local plans. Guidance on each topic expands upon requirements in regional policies, actions, and checklists for local implementation of VISION 2040. Relevant data are highlighted as a basis for developing quantitative policy statements for each center that fulfill the regional vision: to accommodate and attract a significant share of the region's housing and job growth in these central places and to achieve a more sustainable mix of auto, transit, and non-motorized travel to, within, and between them.

Figure 1: Regionally-designated Centers



Part 1: Growth Targets for Regional Centers

Introduction

Growth targets are a quantitative policy statement that represents the amount of housing and employment growth that a community intends to plan for, accommodate, and substantively encourage throughout a 20-year planning period. Targets also represent agreement at the countywide level as to where growth will occur.

As part of a city or county comprehensive plan, growth targets provide context and guidance to many other aspects of the plan. Targets make clear the expected outcomes and state them in quantitative terms. Targets provide a set of benchmarks that should be used to "right size" the plan, that is determine whether the scope and scale of the policies and tools are sufficient to achieve the targets during the planning period. Finally, targets establish a quantitative measure against which to track progress during the planning period.

Under the state Growth Management Act (GMA), the Office of Financial Management (OFM) provides population projections to counties as a basis for allocations to cities and unincorporated areas within them. VISION 2040, which was adopted by the Puget Sound Regional Council (PSRC) in 2008, is the region's integrated strategy for growth management, transportation, and economic development. VISION 2040 expands upon the GMA requirement with a regional requirement that all counties and cities adopt housing and employment targets for their communities as a whole. Further, for those jurisdictions that contain designated Regional Growth Centers (RGCs), VISION 2040 also requires the adoption of housing and employment targets specifically for those centers. While not cited in the policy on centers targets, jurisdictions containing regionally designated Manufacturing/Industrial Centers (MICs) are strongly encouraged to adopt employment targets for those centers as well.

The purpose of this document is to provide guidance to those local jurisdictions that are required or encouraged to adopt centers targets as part of their state mandated comprehensive plan updates in 2015 and 2016. Regional guidance in this area will help to promote coordination and consistency in how local governments are planning for growth in regionally designated centers.

To date, most jurisdictions with centers have not undertaken this planning step and will be adopting center growth targets for the first time in the current plan update cycle. Guidance contained in this paper, therefore, is of two types. First, a discussion of the policy background that defines and gives context to centers targets within the region. Second, a review of data and methods that local governments should consider when developing the numeric targets themselves. Finally, several examples from practice illustrate how centers targets have been created and used in local jurisdictions.

Policy Background

Centers remain at the core of VISION 2040. The Overarching Goal in the Development Patterns chapter of VISION 2040 summarizes at a high level the region's approach to managing growth as follows (emphasis added in bold):

> *The region will focus growth within already urbanized areas to create walkable, compact, and transit-oriented communities that maintain unique local character.* ***Centers will continue to be a focus of development.*** *Rural and natural resource lands will continue to be permanent and vital parts of the region.*

As one of many steps to implementing this strategy, VISION 2040 requires local jurisdictions to establish housing and employment growth targets for designated RGCs, as follows (see text in bold):

MPP-DP-3: Use consistent countywide targeting processes for allocating population and employment growth consistent with the regional vision, including establishing: (a) local employment targets, (b) local housing targets based on population projections, and ***(c) local housing and employment targets for each designated regional growth center****.*

While not stated explicitly in the policy itself, the expectation that all centers will have adopted growth targets extends to MICs as well. The checklist for Manufacturing/Industrial Centers subarea plans directs local governments to:

Establish employment growth targets that accommodate a significant share of the jurisdiction's manufacturing/industrial employment growth, and demonstrate capacity to accommodate these levels of growth.

Local governments are not expected to adopt housing growth targets for MICs, and in fact should not do so as housing is generally incompatible with the intense manufacturing and industrial uses envisioned by VISION 2040 in these centers.

The targets provisions of VISION 2040 are intended to help each jurisdiction clearly define the role it would like its center(s) to play within the city and region, plan for and implement land uses and densities that achieve that role, and facilitate more coordinated provision of public facilities and services and amenities to serve the targeted growth.

Regional policy provides only very general guidance about how much housing and employment growth should be targeted to centers. MPP-DP-5 addresses the question in directing local governments to (emphasis added in bold):

Focus a ***significant share*** *of population and employment growth in designated regional growth centers.*

The plan review checklist provides similar guidance to cities regarding the amount of employment growth expected in MICs.

VISION 2040 does not define what is meant by "significant share." However, the policy implies that local governments should plan for a level of future development in their centers that moves each community individually and the region as a whole toward a more compact urban form, and that captures in each Regional Growth Center a sufficient proportion of overall growth to support and enable the other elements of the growth strategy to succeed. Pursuant to the Regional Growth Strategy, 54% of the population and 71% employment growth in the region is expected to locate in the Metropolitan and Core cities (the jurisdictions that contain Regional Growth Centers). Success in attracting and accommodating growth in those cities and especially in their centers will help to relieve pressure to develop rural and resource lands and establish a land use pattern that can be efficiently served by urban infrastructure and services, particularly transit.

As a related effort, the Growing Transit Communities (GTC) Partnership recently developed a set of goals and recommended strategies intended to implement successful transit oriented development and equitable community building around high capacity transit stations and corridors. A key goal of the GTC Strategy is to capture an increasing share of the region's growth within walking distance of such transit, specifically, *at least* 25% of the region's housing and 35% of the region's employment growth. Most of the area within Regional Growth Centers can be characterized as an existing or planned transit community.

The policies and actions contained in VISION 2040 are reinforced through the PSRC's plan review process. The *Regional Center Plans Checklist (updated 2014)* includes among the criteria used to review and certify the transportation element of comprehensive plans an expectation that local governments will adopt housing and

employment growth targets. PSRC staff will assess how responsive those targets are to the policies and measures discussed in this guidance paper.

Data and Methods

There is no single approach, technical methodology, or set of data used to determine appropriate housing and employment growth target for every center and every community. Communities and the centers within them are sufficiently unique to warrant individual analysis and policy setting that reflects the community's local opportunities, challenges, and vision for the future. However, each jurisdiction that contains one or more regionally designated center should consider each of the factors discussed below when developing 20-year housing and/or employment targets for the Regional Growth Centers and Manufacturing / Industrial Centers. Where appropriate, "guiding principles" are stated below which set parameters for targets that implement the policy direction in VISION 2040.

Jurisdictional Growth Targets

In anticipation of the upcoming round of comprehensive plan updates, the countywide planning groups in all of the four central Puget Sound region counties have adopted, or will soon be adopting, housing and employment growth targets for their cities and unincorporated areas. Collectively, the amount of growth region-wide that the counties are planning for as a basis for the targets is consistent with population projections from the state Office of Financial Management (OFM) and the regional economic forecast of employment growth produced by the PSRC. The development of local growth targets within each county has been consistent with MPP-DP-3. New to the targeting process in this latest phase of countywide planning is regional consistency in adoption of employment targets along with consistency in setting targets explicitly for numbers of housing units planned for in each jurisdiction.

Target allocations have also been guided by the Regional Growth Strategy (RGS) contained in VISION 2040. The RGS provides quantitative guidance to this process by establishing a role for each county and for each of several "regional geographies" in accommodating a prescribed share of the region's growth. The regional geographies include Metropolitan Cities, Core Cities, Larger Cities, Small Cities, Urban Unincorporated, and Rural and Resource Lands.

Each of the Metropolitan and Core cities contains one or more designated Regional Growth Centers. The Metropolitan Cities are expected to accommodate 32% of the region's population growth and 42% of the region's employment growth anticipated by 2040. The Core Cities also have a substantial role, and are expected to accommodate 22% of the region's population growth and 29% of the region's employment growth. The five Metropolitan Cities and 13 Core Cities are expected to be able to attract and accommodate such ambitious shares of the region's growth by focusing new investment and development in their designated regional centers.

GUIDING PRINCIPLE: In order to maintain consistency with state, regional, and countywide requirements for growth targets, the housing and employment targets for RGCs and employment targets for MICs must represent a significant portion of the jurisdictions' overall housing and employment growth targets for the 20-year planning period.

Existing Land Use and Recent Development Trends

The PSRC recently completed the *Regional Centers Monitoring Report – 2013 Edition*. The report is a source of comprehensive data on all of the Regional Growth Centers and Manufacturing / Industrial Centers, including data on land use and development. The report is particularly valuable in providing a comprehensive snapshot of each center's key characteristics, compiled and presented in such a way as to enable comparison among different centers and averages for the region. Most data represent conditions in year 2010. Where feasible and appropriate for the comprehensive planning process, jurisdictions are encouraged to update key data to reflect more recent conditions. PSRC maintains several detailed data sets that are useful for land use estimates for small areas, such as centers. These include the Covered Employment Database, Residential Permits Database, and OFM population estimates.

The report finds that, as a whole, Regional Growth Centers are already attracting an increasing share of their jurisdiction's population and housing. Collectively, RGCs contain 10% of the population of cities that contain them and 14% of the housing. From 2000 – 2010 the RGCs captured approximately 22% of the population growth and 33% of the housing growth that occurred in the cities that contain centers.

Centers also contain a significant share of the region's jobs. Collectively, Regional Growth Centers contain about 39% of total jobs in the cities that have centers. Collectively, Manufacturing / Industrial Centers contain about 20% of the jobs in their cities. Trend data is less instructive. Due to broad employment declines that occurred during the last recession, a comparison of employment growth in centers vs. cities is not meaningful. For example, from 2000 – 2010, a total of 14 of 27 RGCs lost jobs and 11 of the cities that contain RGCs experienced a net loss of jobs.

Figures 2, 3, and 4 on the following pages show the relevant data for each center. These data are also available in the Centers Monitoring Report.

Figure 2: Centers Population and Shares of City Population

	Existing Population (2010)			Population Change (2000-2010)		
	Center Population	City Population	% of City	Center Population	City Population	% of City
Regional Growth Center						
Auburn	1,366	70,180	1.9%	10	14,477	0.1%
Bellevue Downtown	7,147	122,363	5.8%	4,559	9,519	47.9%
Bothell Canyon Park	1,847	33,505	5.5%	698	3,348	20.8%
Bremerton	1,821	37,833	4.8%	191	104	183.7%
Burien	2,945	33,313	8.8%	228	1,440	15.8%
Everett	5,960	103,019	5.8%	1,047	7,308	14.3%
Federal Way	0	89,306	0.0%	0	4,105	0.0%
Kent	1,486	92,411	1.6%	602	12,319	4.9%
Kirkland Totem Lake	5,487	48,787	11.2%	852	3,581	23.8%
Lakewood	3,159	58,211	5.4%	249	48	518.8%
Lynnwood	2,767	35,836	7.7%	-346	1,724	-
Puyallup Downtown	1,245	37,022	3.4%	67	2,608	2.6%
Puyallup South Hill	3,771	37,022	10.2%	679	2,608	26.0%
Redmond Downtown	3,124	54,144	5.8%	1,460	8,239	17.7%
Redmond Overlake	2,139	54,144	4.0%	1,511	8,239	18.3%
Renton	3,122	90,927	3.4%	1,292	20,073	6.4%
SeaTac	10,038	26,909	37.3%	-871	1,413	-
Seattle Downtown	25,920	608,660	4.3%	6,117	45,286	13.5%
Seattle First Hill/ Capitol Hill	36,502	608,660	6.0%	1,920	45,286	4.2%
Seattle Northgate	7,049	608,660	1.2%	740	45,286	1.6%
Seattle South Lake Union	4,234	608,660	0.7%	1,911	45,286	4.2%
Seattle University Community	23,198	608,660	3.8%	3,265	45,286	7.2%
Seattle Uptown	7,641	608,660	1.3%	2,242	45,286	5.0%
Silverdale	4,168	-	-	1,080	-	-
Tacoma Downtown	13,360	198,397	6.7%	2,308	4,841	47.7%
Tacoma Mall	3,761	198,397	1.9%	739	4,841	15.3%
Tukwila	9	19,107	0.0%	-13	1,912	n/a
Manufacturing/Industrial Center						
Ballard-Interbay	1,846	608,660	0.3%	467	45,286	1.0%
Duwamish	1,376	608,660	0.2%	-513	45,286	-
Frederickson	961	-	-	584	-	-
Kent MIC	442	92,411	0.5%	272	12,319	2.2%
North Tukwila MIC	339	19,107	1.8%	134	1,912	7.0%
Paine Field / Boeing Everett	1,690	-	-	-1,370	-	-
Port of Tacoma	1,300	198,397	0.7%	698	4,841	14.4%
South Kitsap Industrial Area	260	37,729	0.3%	-219	-	-

Source: Regional Centers Monitoring Report—2013 Edition, Figure 17

Figure 3: Centers Housing and Shares of City Housing

	Existing Housing Units (2010)			Housing Change (2000-2010)		
	Center Units	City Units	% of City	Center Units	City Units	% of City
Regional Growth Center						
Auburn	725	27,834	2.6%	23	5,761	0.4%
Bellevue	7,151	55,551	12.9%	4,921	5,820	84.6%
Bothell Canyon Park	787	14,255	5.5%	416	1,948	21.4%
Bremerton	1,096	17,273	6.3%	89	400	22.3%
Burien	1,705	14,322	11.9%	163	427	38.2%
Everett	2,999	44,609	6.7%	237	4,554	5.2%
Federal Way	0	35,444	0.0%	0	2,120	0.0%
Kent	600	36,424	1.6%	-42	3,730	-
Kirkland Totem Lake	3,115	24,345	12.8%	641	2,464	26.0%
Lakewood	1,574	26,548	5.9%	197	1,152	17.1%
Lynnwood	1,334	14,939	8.9%	-122	1,041	-
Puyallup Downtown	669	16,171	4.1%	74	2,136	3.5%
Puyallup South Hill	1,982	16,171	12.3%	360	2,136	16.9%
Redmond Downtown	2,040	24,177	8.4%	985	3,669	26.8%
Redmond Overlake	1,193	24,177	4.9%	850	3,669	23.2%
Renton	2,617	38,930	6.7%	1,541	7,951	19.4%
SeaTac	4,130	10,360	39.9%	-493	184	-
Seattle Downtown	19,185	308,516	6.2%	7,461	37,992	19.6%
Seattle First Hill / Capitol Hill	25,972	308,516	8.4%	2,998	37,992	7.9%
Seattle Northgate	4,569	308,516	1.5%	828	37,992	2.2%
Seattle South Lake Union	3,107	308,516	1.0%	1,915	37,992	5.0%
Seattle University Community	8,431	308,516	2.7%	1,378	37,992	3.6%
Seattle Uptown	6,110	308,516	2.0%	1,545	37,992	4.1%
Silverdale	2,260	-	-	765	-	-
Tacoma Downtown	7,990	85,786	9.3%	1,600	4,684	34.2%
Tacoma Mall	1,916	85,786	2.2%	605	4,684	12.9%
Tukwila	4	7,755	0.1%	2	22	9.1%
Manufacturing/Industrial Center						
Ballard-Interbay	780	308,516	0.3%	199	37,992	0.5%
Duwamish	523	308,516	0.2%	-143	37,992	-
Frederickson	344	-	-	215	-	-
Kent MIC	199	36,424	0.5%	139	3,730	3.7%
North Tukwila MIC	157	7,755	2.0%	54	22	245.5%
Paine Field / Boeing Everett	582	-	-	-551	-	-
Port of Tacoma	25	85,786	0.0%	-22	4,684	-
South Kitsap Industrial Area	127	17,273	0.4%	-69	400	-

Source: Regional Centers Monitoring Report—2013 Edition, Figure 25

Figure 4: Centers Employment and Shares of City Employment

	Existing Employment (2010)			Employment Change (2000-2010)		
	Center	City	% of City	Center	City	% of City
Regional Growth Center						
Auburn	2,888	37,918	8%	-77	-2,457	-
Bellevue	38,856	119,892	32%	8,858	1,196	741%
Bothell Canyon Park	8,214	24,579	33%	1,427	3,871	37%
Bremerton	1,946	28,361	7%	-57	489	-
Burien	3,404	10,438	33%	-907	-1,315	-
Everett	11,135	81,996	14%	283	9,046	3%
Federal Way	3,183	28,720	11%	-801	-926	87%
Kent	4,242	60,322	7%	188	-486	-
Kirkland Totem Lake	11,782	30,942	38%	-1,625	-3,413	-
Lakewood	6,025	23,327	26%	755	-257	-
Lynnwood	10,553	22,889	46%	-141	640	-
Puyallup Downtown	2,219	20,582	11%	207	2,567	8%
Puyallup South Hill	5,764	20,582	28%	980	2,567	38%
Redmond Downtown	9,468	76,876	12%	-1,570	3,356	-
Redmond Overlake	23,925	76,876	31%	-2,574	3,356	-
Renton	13,465	53,960	25%	-3,680	-4,960	-
SeaTac	12,886	24,641	52%	4,642	-7,136	-
Seattle Downtown	135,284	462,180	29%	-30,641	-40,715	-
Seattle First Hill / Capitol Hill	41,645	462,180	9%	3,798	-40,715	-
Seattle Northgate	11,431	462,180	2%	425	-40,715	-
Seattle South Lake Union	20,058	462,180	4%	-3,150	-40,715	-
Seattle University Community	33,226	462,180	7%	-244	-40,715	-
Seattle Uptown	13,910	462,180	3%	-2,251	-40,715	-
Silverdale	8,443	-	-	944	-	-
Tacoma Downtown	31,502	97,223	32%	101	-2,752	-
Tacoma Mall	7,171	97,223	7%	-559	-2,752	-
Tukwila	17,399	43,126	40%	-2,548	-5,173	-
Manufacturing/Industrial Center						
Ballard-Interbay	14,237	462,180	3%	-398	-40,715	-
Duwamish	58,771	462,180	13%	-9,050	-40,715	-
Frederickson	3,330	-	-	1,580	-	-
Kent MIC	15,046	60,322	25%	-1,127	-486	-
North Tukwila MIC	13,499	43,126	31%	93	-5,173	-
Paine Field / Boeing Everett	42,413	-	-	7,831	-	-
Port of Tacoma	9,250	97,223	10%	-2,653	-2,752	-
South Kitsap Industrial Area	876	28,361	3%	221	489	45%

Source: Regional Centers Monitoring Report—2013 Edition, Figure 37

GUIDING PRINCIPLE: MPP-DP-5 and the Centers Plan Checklist, which call for a "significant" share of growth in centers, strongly suggest that the targets established for Regional Growth Centers and Manufacturing / Industrial Centers result in an increased share of the jurisdiction's overall employment and (for RGCs) housing locating in the centers. Consequently, the housing and/or employment targets for each center should *exceed* the center's shares of existing housing and/or jobs AND exceed the center's shares of recent growth in housing and/or jobs.

Existing Development Capacity

Development capacity refers to the ability of a community, or part of a community such as a designated center, to accommodate additional housing and jobs within the limits imposed by the adopted land use plan and implementing regulations, including zoning, parking requirements, and critical areas ordinances. Capacity for housing and jobs is provided through permitted land uses, such as residential, commercial, and mixed use development, and may occur on vacant land or through redevelopment of existing uses.

All four central Puget Sound region counties are completing their state mandated Buildable Lands evaluations in 2014/15. The evaluation reports include estimates of development capacity that can be subtotaled for specific subareas of a city or county, such as designated Regional Growth Centers and Manufacturing / Industrial Centers. Capital facilities provision is also a factor in development potential, although it is not addressed through the Buildable Lands Report.

Existing housing and employment capacity for each center along with capacity for the jurisdiction as a whole are important, but not determinant, data points to consider when setting centers targets. The starting point for many cities may be close alignment between land use capacity and targeted growth in centers. However, targeted (i.e., planned) growth is not the same as capacity, although they are related. The new target may not use all of the existing capacity for housing and/or employment growth in the center. Conversely, the new target may exceed the current capacity for additional growth in the center and suggest the need for a change in regulations to increase the capacity. In either case, factors other than development capacity should be considered in setting growth targets.

Some caution should be taken when using the Buildable Lands capacity estimates for setting long-range future growth targets. Because the capacity estimates are based in part on historical development outcomes, specifically the densities achieved in the past 5 to 10 years, actual future densities and resulting capacity may be somewhat higher due to increased investment in dense development anticipated over the 20-year planning period. In addition, capacity for growth in centers may be further increased with zoning changes that allow more density and some jurisdictions will be considering upzones *in response* to their growth targets.

The proportion of a jurisdiction's overall housing and employment capacity located inside an RGC (or employment capacity in the case of MICs) is one useful guidepost for setting an appropriate target. Findings from previous rounds of Buildable Lands analysis indicated that a large percentage of the capacity for both housing and jobs in cities with centers was located in the centers themselves. This factor alone will justify many cities setting ambitious growth targets for centers. Some cities will find, as a result of the Buildable Lands evaluations, the need to adopt "reasonable measures" that provide sufficient capacity to meet their jurisdiction-wide growth targets. Measures to optimize the growth potential of RGCs and MICs are an option for those cities. Increases in zoned densities, economic development incentives, infrastructure investments, and other means would put the city in a better position to accommodate housing and jobs, would support the Regional Growth Strategy, and should be reflected in any growth targets adopted for the centers themselves.

As a final note, a regional industrial lands analysis is expected to be published in September 2014 and will include data and findings on capacity and other factors that can inform target setting for MICs. The purpose of the study is to understand the importance of industrial lands to the regional economy, to assess whether the region has an adequate and appropriate supply of industrial land for the future, and to identify industrial land planning issues that should be addressed. The study can be a resource for understanding where industrial lands are located, what levels of industrial employment are found on and off industrial land, the amount and type of future industrial growth, and where additional industrial jobs and activities can be accommodated in the region.

GUIDING PRINCIPLE: Growth targets for centers may reflect and be informed by existing development capacity, but are not determined or limited by it. Local comprehensive plans, once revised, must provide for sufficient development capacity in each center to accommodate its growth targets.

PSRC Criteria for New Center Designation

PSRC's *Designation Procedures for New Regional Growth and Manufacturing Industrial Centers*, first adopted in 2002 and updated in 2011, established thresholds for existing and planned activity level within centers. Different criteria are articulated for RGCs and MICs respectively.

Countywide Planning Policies (CPPs) provide a framework and criteria for countywide designation of centers as a precursor to regional designation. Each of the four county's CPPs establishes a different framework for its centers. CPPs for King and Pierce counties set quantitative housing and employment growth or density criteria for centers; Snohomish County CPPs include employment criteria for MICs only. The criteria in each of the CPPs are an additional yardstick against which local governments should achieve consistency in the targets they adopt for their centers.

Regional Growth Center Designation Criteria

Regional Growth Centers designated pursuant to the procedures are required to meet several criteria, including the following:

Required Activity Levels : Population + Employment Thresholds.

I. *Must have a minimum existing activity level (population + employment) of at least 18 activity units per gross acre. The required existing activity level must be met before regional designation can be pursued.*

II. *Must have a minimum target activity level of 45 activity units per gross acre. The required target activity level is based in the jurisdiction's adopted growth target and the allocated portion to the center.*

III. *Must have sufficient zoned development capacity to adequately accommodate targeted levels of growth. Because it is not time-bound, zoned capacity can allow levels of development that are higher than the 45 activity unit target. This allows a jurisdiction to support long-term higher levels of density that achieves the regional vision for a more compact, complete and mature urban form in regional centers.*

These criteria suggest the following **GUIDING PRINCIPLES** for development of Regional Growth Center targets:

- The activity unit threshold criterion should guide target development for all RGCs. For centers that are designated under the *Procedures*, the housing and employment growth targets must *at a minimum* be sufficient to reach the 45 AU / acre threshold. For the remainder of the centers that were designated prior

to the adoption of the *Procedures*, considering growth targets for centers sufficient to reach 45 AU / acre is *strongly recommended*.

- In either case the activity unit threshold should be considered a floor for the growth targets. A number of RGCs have already exceeded or are approaching 45 AUs per acre in their existing conditions. Regional policy and the principles described in this paper provide a framework for setting a much higher set of targets that result in even more concentrated activity in those centers.

Several hypothetical examples, shown in Figure 5 below, help to illustrate these relationships and the policy implications regarding target setting for centers.

Figure 5: Illustrative Centers Scenarios, Activity Units per Acre

Jurisdiction	Regional Growth Center	Acres	Population (2010)	Jobs (2010)	Activity Units	Activity Units per Acre	AUs necessary to reach 45/acre
City X	Center X (designated 2009)	847	9	17,815	17,824	21	20,291
City Y	Center Y (designated 1999)	433	3124	9,735	12,859	30	6,626
City Z	Center Z (designated 1995)	409	7049	11,808	18,857	46	na

As shown in Figure 5, City X is planning for newly designated Center X, with an existing density of activity units that is less than half the planning target of 45 AUs / acre contained in the Designation Criteria. Regional designation in this case requires City X to set its combined housing and employment targets for Center X at least large enough to accommodate 20,291 additional activity units (population + jobs).

There is one caveat to this example. The gap between existing AUs / acre and 45 AUs / acre may be so large that any set of targets that achieves that threshold will also exceed the jurisdiction's overall growth targets. In this situation, which appears to occur in several jurisdictions, one of two options is recommended. One, the jurisdiction may consider a boundary change to reduce the acreage of the designated center, thus rendering the activity unit / acre gap smaller. Two, the comprehensive plan may provide sufficient land use capacity in the designated center to reach 45 AUs / acre, include a 20-year target for the center that falls below that level of growth, while explicitly acknowledging the long-range densities planned for consistent with the regional centers designation criteria.

As another example in Figure 5, City Y is planning for Center Y, which received its regional designation prior to the adoption of the Designation Criteria. Existing conditions in this center also fall below the 45 AU / acre threshold. While not required to, City Y is strongly recommended to set its housing and employment targets for Center Y at least sufficiently high to accommodate the gap of 6,626 activity units, and most likely higher to address other criteria discussed in this paper.

Finally, City Z is planning for Center Z, designated in 1995, with a relatively mature existing concentration of employment, and already achieving the 45 AUs / acre. Since the activity unit threshold is intended to be a floor, the fact that Center Z has already attained that intensity of activity in no way suggests that City Z should set a low target for growth for the center. Other factors will come into play to shape an appropriately future-looking target for Center Z as it develops into an even more intensive mixed-use district with a balance of jobs and housing.

Note on converting future housing units to population. With the growth targets for RGCs required to be in housing units, several assumptions must be made to convert the housing target to future population gain. First, convert housing units to households with an assumed future vacancy rate. A "normal" vacancy rate is in the 3%-5% range. Methodologies for the Buildable Lands evaluation or the countywide growth targets may provide county or city benchmarks for vacancy rates that can be referenced for the centers targets.

Second, convert households to population. Assumed future persons per household may use current Census data as a starting point. Generally, the average household size for the jurisdiction as a whole is not appropriate as an assumption for households that will locate in centers. With a high proportion of multifamily units, fewer bedrooms per unit, and a high proportion of rental units expected in centers, generally smaller households will be expected. In 2010, the average persons per household for all RGCs combined was 1.6, significantly lower than the regional average of 2.5. Locally specific figures are available using Census block data. However, for centers with relatively low existing populations, use of more aggregate data, such as the regional average for centers, is recommended.

Manufacturing / Industrial Center Designation Criteria
Manufacturing / Industrial Centers designated pursuant to the regional Designation Procedures are required to meet several criteria, including the following:

Required Activity Levels - Employment Thresholds

I. *Must have a minimum existing employment level of at least 10,000 jobs. The required existing activity level must be met before regional designation can be pursued.*
II. *Must have a minimum target employment level of at least 20,000 jobs. The required target activity level is based on the jurisdiction's adopted growth target that guides the center subarea plan.*
III. *Must have sufficient zoned development capacity to adequately accommodate targeted levels of growth. Because it is not time-bound, zoned capacity can allow higher levels of development and a more compact and mature urban form in regional centers.*

These criteria suggest the following **GUIDING PRINCIPLES** for development of Manufacturing / Industrial Center employment targets.

- While this criterion has been developed for new center designations, the threshold for planned jobs can guide target development among all MICs. For centers that are designated under the *Procedures*, the employment growth targets must *at a minimum* be sufficient to reach the 20,000 jobs threshold. For the remainder of the centers that were designated prior to the adoption of the *Procedures*, considering growth targets for centers sufficient to reach 20,000 jobs is *strongly recommended*.
- As described above, the employment threshold should be considered a floor for the growth targets. Currently, two out of the eight MICs in the region contain more than 20,000 jobs. Regional policy and the principles described in this paper provide a framework for setting an employment target that not only meets the regional criterion, but points toward further investment and expansion of economic activity in all the MICs.

Additional Factors

Several additional factors provide context to the process of setting and planning for housing and jobs in centers and should be considered by local government staff and decision makers as they update their comprehensive plans.

Infrastructure and access.[1] Capacity for growth is not solely limited by land use designations and zoning densities. The types of dense mixed-use development that are envisioned for Regional Growth Centers will require investments in infrastructure, services, and amenities. Transit accessibility is particularly important. A robust manufacturing and industrial economy, as envisioned for the Manufacturing / Industrial Centers, will require strategic investments in infrastructure that supports those activities. As addressed in the comprehensive plan update, consistency between growth assumptions in the capital facilities, transportation, and land use elements is crucial. The capital facilities element should plan for adequate basic infrastructure, such as waste water, storm water, water supply, communications, and electricity, and describe a framework for a realistic financing plan to provide a level of service that meets the needs of targeted growth in the center over the 20-year planning period. The transportation element should include multimodal investments that meet the mobility needs of the targeted number of residents and employees, businesses, and other users of an RGC or MIC. Finally, the growth targets for the center set in the land use element, may account for anticipated timeline for provision of basic infrastructure and an expanded regional high capacity transit system.

Jobs-housing balance. VISION 2040 calls for an improved balance between the location of jobs and the location of housing within the region. The centers strategy, in particular, is seen as a means to enhance that balance. As mixed-use areas, Regional Growth Centers provide opportunities for households to locate near jobs. As nodes connected by a network of regional high capacity transit, they provide accessibility along transit corridors that link households with places of employment. The existing ratio of housing to jobs within individual centers may vary, but in general the RGCs are currently employment rich areas, with, on average, 4 jobs for every housing unit.

GUIDING PRINCIPLE: Regional Growth Center targets should enhance the jobs-housing balance within the jurisdiction as a whole and achieve greater jobs-housing balance within the centers individually.

Market strength. Successful implementation of the regional centers strategy is dependent on good knowledge of current and projected market conditions, market strengths, challenges, and barriers among the various regionally designated centers. The Regional Centers Monitoring Report recommends that the PSRC develop guidelines for carrying out local market assessments of all Regional Growth Centers. Recent market assessments conducted on behalf of cities and other agencies may be relevant to consideration of appropriate growth targets for centers. One regional resource that addresses market conditions in many regional centers along existing and planned light rail corridors is the *Puget Sound Region Transit-Oriented Development Market Study* (2012). Market studies for individual cities and centers within them have also been completed during the past decade. While real estate markets have experienced rapid change during the last recession and into the recovery, many of the factors identified through this work that make centers more or less attractive to development remain relevant.

However, most appropriate use of any assessment of market strength may be in implementation rather than in target setting. Targets are not forecasts, but policy statements that express both intent and relative priority for the use of tools and investments to shape market forces toward a community vision. The strategies contained in VISION 2040 for managing and shaping growth and development patterns in the region will be successful to the extent they leverage, anticipate, and shape market conditions. So, while indicators of a weak market may reasonably support more modest growth targets for some centers, they do not justify low targets that are at odds

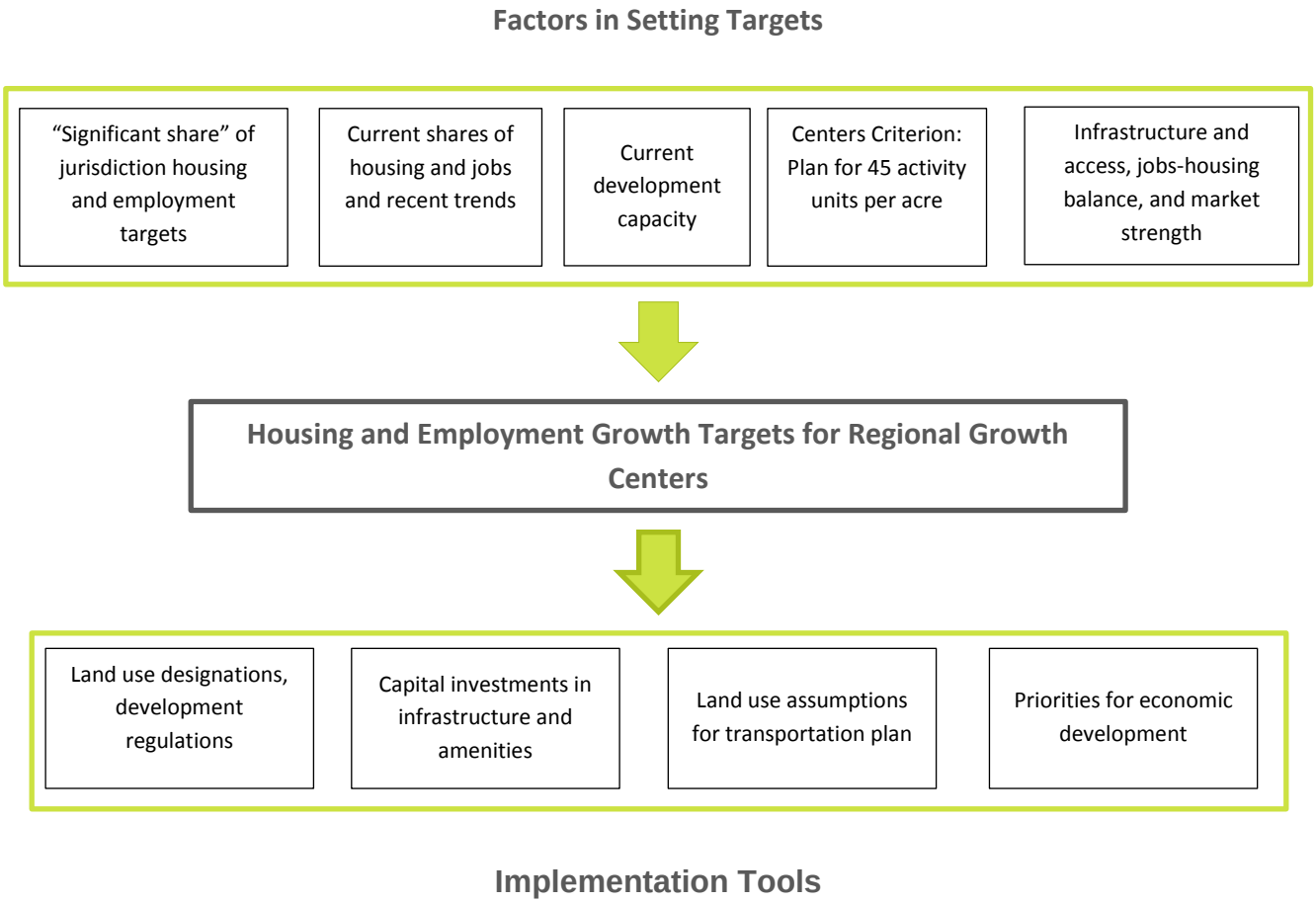
[1] The Growth Management Hearings Board has addressed capital facilities planning in response to distribution of a large portion of anticipated growth into centers. In WSDF v. Seattle (Case No. 94-3-0016), the board states that the plan analysis must include an inventory of existing capital facilities within the adopted urban centers and whether existing capital facilities located in urban centers are adequate to meet the future needs of the projected population and employment growth for these areas.

with the overall centers strategy. Rather, a gap between market capacity and targeted growth suggests additional policy support and implementation tools will be necessary to achieve the target.

Summary

The policies, analytical approaches, and planning implications described in this paper that relate to developing housing and employment targets for Regional Growth Centers are summarized in Figure 6.

Figure 6: Overview of Housing and Employment Targets for Centers



EXAMPLES

Comprehensive Plan – Redmond 2030 sets housing and employment targets for each of two Regional Growth Centers: Downtown Redmond and Overlake. Downtown Redmond is targeted to grow by 3,870 housing units and 2,700 jobs over the 20-year planning period. The targets represent 34% of the city's overall housing target and 12% of the city's overall employment target. Overlake is targeted to grow by 4,890 housing units and 14,700 jobs over the 20-year planning period. The targets represent 43% of the city's overall housing target and 64% of the city's overall employment target. In total, Redmond is planning to accommodate approximately three quarters of both its housing and its employment growth within its two designated Regional Growth Centers. Growth targets for the RGCs in Redmond were established with consideration for a range of factors, including development capacity, market trends, regional and countywide policies, and community vision.

As part of its subarea planning and EIS process for districts within the Downtown Tacoma Regional Growth Center, the City of Tacoma has explored new approaches to allocating future growth to these areas. As documented in Appendix B of the North Downtown Subarea Plan EIS, the city has developed housing and employment growth assumptions based on regional, countywide, and local policies and reflective of the potential development capacity in downtown Tacoma. The subarea planning analysis has been the basis for growth targets currently under development for the city's comprehensive plan update to be completed in 2015.

Part 2: Mode Split Goals for Regional Centers

Introduction

Mode split (or mode share) is a measure that describes the various means of transportation used for daily trips within the region. A mode split goal is a quantitative policy statement used to plan for and encourage a shift away from travel by private automobile, in particular driving alone, in favor of alternative modes, such as transit and non-motorized travel options like walking and biking. Reducing the proportion of trips that are made by driving alone contributes to a more sustainable region by reducing congestion, decreasing greenhouse gas emissions, making more efficient use of the region's roads, and improving public health.

VISION 2040 calls for the adoption of mode split goals for designated regional centers, including both Regional Growth Centers (RGCs) and Manufacturing/Industrial Centers (MICs). Mode split goals provide direction for the programs, policies, and investments that help to shape travel options and travel choices. In particular, a mode split goal provides guidance for capital investments in transportation infrastructure and transportation demand management programs.

This guidance paper reviews the policy context as well as a range of technical considerations for local government staff to use in developing mode split goals for regional centers located in their jurisdictions as part of comprehensive plan updates due in 2015 and 2016. This guidance may also be applicable to other jurisdictions considering jurisdiction-wide or subarea mode split goals in their planning processes.

Policy Background

State

The Growth Management Act (GMA) does not specifically require adoption of mode split goals for local jurisdictions or subareas within them. However, RCW 36.70A.070 [6][e] does require that the transportation element of the comprehensive plan address coordination of land use and transportation plans, transportation demand management (TDM), including tools that encourage travel by alternative modes, and a bicycle/pedestrian component to encourage community access. Adopting mode split goals for centers would contribute to meeting that requirement.

A Washington State statute that addresses mode split more directly is the Commute Trip Reduction (CTR) law (1991, 2006). The law focuses state and local efforts on helping larger local employers reduce the share of their employees who commute to work via single-occupancy vehicle (SOV) and increase the share of employees commuting by alternative modes, such as transit, carpool, and bicycle. The state CTR Board sets performance goals for affected jurisdictions. For the current implementation cycle ending in 2014, the goals include a 10% reduction in drive-alone rate and 13% reduction in vehicle miles traveled from a 2007/2008 baseline. The CTR law also creates a framework for implementation and reporting that supports progress toward those goals. The connection between Commute Trip Reduction programs and mode split goals for centers is addressed in more detail in the methods section below.

Regional

As the strategy to shape a more sustainable future for the region, VISION 2040 contains a number of goals and policies that provide support for and are furthered by actions that result in a shift from reliance on the private automobile to other travel modes, such as transit, bicycling, and walking. Achieving a more balanced distribution

among these modes of travel would help to reduce greenhouse gas emissions, reduce congestion, reduce household transportation costs, and support a more compact and efficient development pattern.

Regionally designated centers, as current and future locations for concentrated housing and jobs, have the greatest potential to shape the relative mix of travel choices and consequently travel behavior for the greatest number of people. VISION 2040 includes policy direction on mode split, as follows:

> *MPP-T-23: Emphasize transportation investments that provide and encourage alternatives to single-occupancy vehicle travel and increase travel options, especially to and within centers and along corridors connecting centers.*
>
> *MPP-T-24: Increase the proportion of trips made by transportation modes that are alternatives to driving alone.*

As a means to implement these and other related policies, VISION 2040 calls for an important short-term action for local governments to take as part of their comprehensive plan updates:

> *DP-Action-18. Each city with a designated regional growth center and/or manufacturing/industrial center shall establish mode split goals for these centers.*

Transportation 2040, the region's Metropolitan Transportation Plan, does not specifically address mode split goals. However, the plan does emphasize the importance of transportation demand management, including implementation of state Commute Trip Reduction strategies and centers-based TDM through the Growth and Transportation Efficiency Center concept, efforts that would be strengthened by explicit policy direction on desired mode split.

The policies and actions contained in VISION 2040 are reinforced through the PSRC's plan review process. The *Regional Center Plans Checklist (2014 Update)* includes among the criteria used to review and certify the transportation element of comprehensive plans an expectation that local governments will "include mode-split goals" that are responsive to the policies and measures discussed in this guidance paper.

Step One: Define and Measure Mode Split

There are several different ways that mode split can be defined. Typically, mode split is expressed as a proportion of total trips to and from a defined geography (e.g., central city), or for a defined purpose (e.g., work trips). Mode split categories will typically include a full range of travel options, including single-occupancy vehicle, carpool or other high-occupancy vehicle, transit, bicycle, and walking.

The most important variable is the set of trips that are the basis for the mode split measure. Whether assessing existing conditions or setting long term goals to shift the share of trips by automobile to other modes, the first step is to decide which trips and which modes are included in the measure, considering:

- All trips vs. commute to work trips vs. other trip types
- Trips selected by location of origin, location of destination, or both
- Home-based work trips vs. journey to work with trip chaining
- Trips selected by time of day (e.g., peak hour) vs. by purpose
- Mode categories, including level of detail (e.g., SOV / non-SOV vs. more detailed breakdown of shares by non-SOV mode)
- Whether to count work-at-home as a "mode"

Different combinations of choices from among the factors above create different measures of mode split.

GUIDING PRINCIPLE: For the purposes of setting mode split goals for centers, local comprehensive plans should:

1. Calculate mode split based on travel to work; as a secondary measure, mode split based on all trips, including work and non-work, could be considered
2. Calculate mode split based on trips where either trip origin and/or trip destination are located within the center

There are several reasons for this way of defining mode split works best as a basis for setting goals for regional centers. The first reason is practical: the greater availability of data on journey to work, as opposed to other types of trips. Data availability is crucial not only for setting the goals, but also monitoring progress toward them over time. The second reason is more substantive. Most regionally designated centers currently function as regional or sub-regional employment centers. Many centers do not have a substantial housing base. A third reason relates to implementation. Many existing tools and programs, such as Commute Trip Reduction, specifically address commuting patterns and mode choices and the peak travel period congestion that may result. Finally, work trips, which comprise about a quarter of all trips, have an outsized impact on congestion, economic development, and infrastructure costs to meet peak demand. Roadway capacity built to accommodate the busiest hour(s) sits unused the rest of the day.

While mode split for work trips is the focus of this paper and should be the principle basis for goals for regionally designated centers, comprehensive plans may also benefit from additional quantitative goals for mode split across all trip types. Decreasing the proportion of non-work trips made driving alone can have beneficial impacts on the natural environment, health, and roadway congestion, and it also enables individuals and families to reduce or eliminate the cost of vehicle ownership. Further, as high-density, mixed-use, and connected districts, successful Regional Growth Centers can strongly influence the mode split for non-work travel.

Finally, with regard to the level of detail of the adopted mode split goal, the most important dimension is the share of all trips made by single-occupancy vehicle. At a minimum, then, the mode split goal for each center should set forth a future desired percentage of SOV vs. non-SOV work trips to and from the center. Setting a more fine-grained goal that includes future shares for each alternative mode (transit, walk, bike, carpool) is also an option, especially if tied in with policies and implementation steps that specifically expand or promote those modes individually.

Most data on mode split are obtained through or derived from survey techniques and tools. Local, employer-based surveys on journey-to-work, such as that conducted by Commute Seattle, are one source of mode split data for centers. Several other sources provide comprehensive data for areas throughout the region, as shown in Figure 7, below.

Figure 7: Sources of Mode Split Data

Source	Description	Comments
American Community Survey (ACS)	Annual survey of a sample of all households. Respondents asked to report most frequent journey to work mode over past week.	Limitation: Data linked to place of residence only, not place of work. With high margins of error, not well suited for small area analysis
Census Transportation Planning Package (CTPP)	Special Census tabulation based on ACS data and Census long-form for 2000 and earlier. Available years: 1990, 2000, and five-year estimates for 2006-2010. Available down to Traffic Analysis Zone (TAZ) level of geography.	Data on journey to work can be selected based on home location, work location, or flow between locations. With high margins of error, not well suited for small area analysis. No consistent update schedule. **Recommended data source for past trends and existing conditions at areas larger than individual centers.**
PSRC Travel Surveys: • 2006 Household Activity Survey • 2014 Puget Sound Regional Travel Study (forthcoming)	Periodic survey of sample of households within the region.	Due to small sample size, not appropriate for small area tabulations.
PSRC Travel Model (or equivalent local travel model)	Model produces baseline estimates of mode split for the year 2010. Future year forecasts are also available.	Range of inputs includes data from PSRC travel survey. Output available down to TAZ level.[2] Model improvements may present challenges for comparability over time. **Recommended data source for establishing baseline for centers for setting goals and for future monitoring.**

Existing mode splits are the starting point for developing mode split goals for any geography over the 20-year comprehensive planning period. Using PSRC travel model output, mode split estimates for each regionally designated Regional Growth Center are summarized in Figure 8 below.

[2] Note: Traffic Analysis Zones (TAZs) can be selected to approximate the boundaries of regional centers. The geographic correspondence between the selected clusters of zones and actual center boundaries is close in denser areas, such as Seattle, thus yielding a more accurate measure of mode split. Geographic correspondence of the zones to centers is less well matched in lower-density suburban settings. With a more fine-grained zone structure, newer versions of the regional travel model can achieve a closer fit with center boundaries.

Figure 8: Work Trips by Mode Share in Regional Growth Centers (2010)

	Work Trip Mode Shares (To and From Center)			
	SOV	HOV	Walk and Bike	Transit
Regional Growth Center				
Auburn	85%	9%	3%	4%
Bellevue Downtown	53%	14%	6%	28%
Bothell Canyon Park	85%	8%	2%	6%
Bremerton	69%	9%	13%	9%
Burien	78%	9%	4%	9%
Everett	68%	10%	8%	14%
Federal Way	82%	9%	3%	6%
Kent	82%	9%	3%	6%
Kirkland Totem Lake	81%	9%	3%	7%
Lakewood	83%	8%	3%	6%
Lynnwood	81%	8%	4%	7%
Puyallup Downtown	83%	8%	3%	5%
Puyallup South Hill	83%	8%	3%	5%
Redmond Downtown	81%	8%	4%	7%
Redmond Overlake	82%	9%	3%	6%
Renton	82%	9%	3%	7%
SeaTac	79%	9%	3%	9%
Seattle Downtown	30%	9%	17%	44%
Seattle First Hill/Capitol Hill	54%	9%	18%	20%
Seattle Northgate	76%	8%	5%	11%
Seattle South Lake Union	63%	9%	11%	17%
Seattle University Community	55%	10%	12%	24%
Seattle Uptown	57%	8%	16%	18%
Silverdale	85%	8%	5%	3%
Tacoma Downtown	72%	10%	7%	10%
Tacoma Mall	83%	8%	4%	5%
Tukwila	85%	9%	1%	5%
RGC Average	**59%**	**9%**	**10%**	**22%**
Regionwide Average	**77%**	**9%**	**5%**	**10%**

Source: PSRC Regional Travel Model, 2014.
Note: Data based on home-to-work trips and work-to-home trips combined.

The data in Figure 8 reflect model improvements completed since the publication of similar mode split data in the *Regional Centers Monitoring Report—2013 Edition*. The new data should be used as a basis for setting mode split goals.

In the aggregate, mode shares for transit, bicycle, and walking are approximately twice as high in Regional Growth Centers than in the region as a whole. SOV shares in centers range from a high of about 85% of work trips in a number of suburban locations to a low of 30% for Seattle Downtown.

Step Two: Set Mode Split Goals

There is no single approach, technical methodology, or set of data used to determine an appropriate mode split goal for every center and every community. Communities and the centers within them are sufficiently unique to warrant individual analysis and policy setting that reflects the community's unique opportunities, challenges, and vision for the future. However, each jurisdiction that contains one or more regionally designated centers should consider each of the factors discussed below when developing 20-year mode split goals for regional centers. Consistent with the principle stated earlier in this guidance paper, mode split will be defined below generally based on 1) work trips, including 2) trips that either begin or end within a regional center. Each of several technical considerations, methods, and types of data are addressed in turn below.

Recommended approaches are tailored to setting mode split goals for Regional Growth Centers. A separate discussion at the end of this section addresses the distinct issues around setting mode split goals for Manufacturing/Industrial Centers.

Existing Mode Split

The overarching policy objective related to mode splits as stated in VISION 2040 is to decrease single-occupancy vehicle share for all types of trips within the region. Existing conditions are a starting point for charting future progress in shifting travel to modes other than the single-occupancy vehicle. Data from the PSRC Travel Model and shown in the table in Figure 8, above, may be used as a source for the mode split goal baseline and for comparing different centers performance on this measure.

GUIDING PRINCIPLE: Mode split goals for centers should represent a *significant decrease* in SOV travel coupled with a *significant increase* in transit and non-motorized travel over the course of the 20-year planning period. Additional factors described below will help to inform what *significant* means in shifting mode shares within any particular center.

Mode Split Trends

Historical data on mode split reveal trends in travel behavior and are one indication of how well public policies have worked in the past as well as an indication of the potential for further shifts in mode split in the future. Figure 9, below, shows mode split trends for the region as a whole and for Regional Growth Centers collectively, as a subset of the regional data.

Figure 9: Mode Split Trends in Journey to Work

	Region as a Whole				Regional Growth Centers (Workplace in Center)				Regional Growth Centers (Home in Center)			
Mode	**CTPP 2000**		**CTPP 2006-2010**		**CTPP 2000**		**CTPP 2006-2010**		**CTPP2000**		**CTPP 2006-2010**	
All	1,672,330		1,841,691		532,825		507,867		113,839		130,187	
SOV	1,194,730	**71.4%**	1,287,819	**69.9%**	346,640	**65.1%**	321,992	**63.4%**	60,573	**53.2%**	68,333	**52.5%**
Carpool	216,775	**13.0%**	213,782	**11.6%**	69,578	**13.1%**	58,741	**11.6%**	12,222	**10.7%**	12,612	**9.7%**
Transit	116,735	**7.0%**	148,787	**8.1%**	84,809	**15.9%**	87,925	**17.3%**	17,204	**15.1%**	19,614	**15.1%**
Walk	51,440	**3.1%**	64,010	**3.5%**	19,773	**3.7%**	23,814	**4.7%**	17,466	**15.3%**	21,099	**16.2%**
Bike	9,900	**0.6%**	15,359	**0.8%**	5,269	**1.0%**	7,418	**1.5%**	1,628	**1.4%**	2,145	**1.6%**
Other	13,810	**0.8%**	20,323	**1.1%**	2,906	**0.5%**	2,918	**0.6%**	896	**0.8%**	1,325	**1.0%**
Home	68,940	**4.1%**	91,611	**5.0%**	3,850	**0.7%**	5,059	**1.0%**	3,850	**3.4%**	5,059	**3.9%**

Source: CTPP. Note: SOV includes motorcycles. Transit includes streetcar, rail, and ferry. Other includes taxi and misc.

About a third of all regional journey-to-work trips begin or end in a regional center. Most of those trips are made by workers who reside outside of the center and work in the center. While these data represent only a relatively short span of time from which to deduce change in mode split, some observations can be made.

- Rates of commuting by automobile, whether SOV or HOV, are declining slightly as a share of the total
- The biggest increase in mode share is in the transit category
- Non-motorized modes are also increasing
- Working at home has increased, particularly outside of centers
- SOV shares are somewhat lower in centers than in the region as a whole, most significantly lower for workers that reside in centers
- Mode shares for transit and for walking are much higher in centers than in the region as a whole

As a whole, the data suggest that the biggest opportunity for local governments to achieve significant gains in mode split to and from centers is increasing the share of workers commuting to centers on transit instead of private automobiles. The data in Figure 9 also suggest that any mode split goals for the region or for the centers in particular would build from existing trends that show the region moving away from commuting by automobile. Conservatively, if the current rate of change were to continue, mode share for SOV to and from centers would decline by approximately 3% - 5% over a 20-year planning period. Demographic and market forces, complemented by public sector support for alternative modes, could reasonably be expected to contribute to a greater rate of change.

Similar data on mode split trends can be obtained from the CTPP for some individual centers. However, due to limited sample size and high margins of error, even where this data is available, it does not yield reliable measures of change in mode split.

GUIDING PRINCIPLE: Mode split goals for centers should achieve reductions in single-occupancy vehicle trip share that are at least consistent with and should exceed recent trends in mode share.

Predicted Future Mode Split

The PSRC travel model is one tool that can be used to predict future mode split for the region, a single jurisdiction, or subarea, such as a regionally designated center.

The mode split forecast produced by the travel model reflects the mechanics of the model in simulating future travel patterns based on a set of data inputs and assumptions. Inputs to the current version of the model include the following:

- Data on travel behavior, including mode choice, from PSRC's *2006 Household Activity Survey*
- Future land uses in the model reflect successful implementation of the Regional Growth Strategy in VISION 2040, particularly intensification of housing and employment within jurisdictions that have Regional Growth Centers
- Future travel network includes all "constrained" transportation investments identified in Transportation 2040
- The future network includes a robust expansion of transit services throughout the region
- The forecast assumes a phased implementation of tolls for auto travel on transportation facilities throughout the region, particularly along the network of corridors that connect regional centers

Figure 10, below, shows model output for the years 2010 and 2040. Mode split is shown for home-based trips to work, including 1) trips that begin or end in a Regional Growth Center, 2) trips that begin and end outside of a center, and 3) total home-based trips to work in the region.

Figure 10: Travel Model Forecast of Mode Split for Home-Based Work Trips

Mode	2010			2040		
	Centers	Other	Total	Centers	Other	Total
SOV	60.8%	84.1%	76.9%	42.4%	77.6%	64.2%
HOV	9.9%	8.6%	9.0%	9.0%	9.7%	9.4%
Transit	21.5%	4.5%	9.8%	39.0%	8.9%	20.4%
Bike	3.4%	1.2%	1.9%	4.1%	1.8%	2.7%
Walk	4.5%	1.7%	2.5%	5.5%	2.0%	3.3%

Source: PSRC Travel Model, 2014.
Note: Data based on home-to-work trips only.

The travel model predicts a decline from 61% to 42% of SOV travel for work over a thirty year period. By far the most significant increase is the share of trips by transit, which in centers nearly doubles over this period. At a regional scale, it is the mode shift in centers that drives most of the regional change in mode split.

These data suggest several important points. First, given the right mix of land use changes, transportation investments, and roadway pricing tools, a significant reduction in automobile travel as a share of work trips is within reach. Additionally, factors such as shifting demographic trends, preferences, and technology may contribute to mode shifts above and beyond what occurred in the recent past. Land use policies and implementation of Transportation 2040 strategies and infrastructure improvements, particularly those serving regional centers, are crucial for the region to be able to realize this forecast.

The regional model output does not suggest that all jurisdictions with Regional Growth Centers should strive to reduce SOV shares in their centers by 20 percentage points. First, this forecast is for a 30-year period and the comprehensive plans address 20-years. Second, centers are sufficiently different, with varying potential to make gains in mode split. However, the results do indicate the scale of improvement that is possible over time. Third, the

model results underscore why focusing on travel mode split in centers, starting with adopting ambitious goals and strong policies, is key for achieving regional desired outcomes in transportation and the environment.

Finally, new and improved tools for predicting future mode split are forthcoming. PSRC has developed a new travel model called SoundCast that will be in use beginning in 2015-2016. SoundCast uses detailed geographic parcel-level household and employment data. It also relies upon personal data like age, income, work status, and gender. Because SoundCast operates with fine-grained inputs, it is sensitive to neighborhood- and person-level effects on mode choice, such as parcel-based variation in the walking distance from home to a transit stop and the impacts of an aging population on walking rates. Future mode split studies should consider using SoundCast as one tool to understand localized travel behavior.

Commute Trip Reduction Goals and Data

Mode split goals should support and be informed by goals and actions taken pursuant to the Washington State Commute Trip Reduction law. The law includes a mode share goal for affected employers, as described below in the administrative code:

> *WAC 468-63-030 2(a) The first state goal is to reduce drive-alone travel by CTR commuters in each affected urban growth area. This will help urban areas to add employment and population without adding drive-alone commute traffic. The first state target based on this goal is a ten percent reduction from the jurisdiction's base year measurement in the proportion of single-occupant vehicle commute trips (also known as drive-alone commute trips) by CTR commuters by 2011.*

Implications for affected jurisdictions are as follows, again as described in the WAC:

> *(3) Local program goals and targets. Local jurisdictions shall establish goals and targets that meet or exceed the minimum program targets established by the state. The goals and targets shall be set for the affected urban growth area in the city or county's official jurisdiction, and shall be targets for the year 2011 based on the base year measurement for the urban growth area.*
>
> *(a) Each local jurisdiction shall implement a plan designed to meet the urban growth area targets. Progress will be determined every two years based on the jurisdiction's performance in meeting its established drive-alone commute trips and VMT targets.*

As noted earlier, the state CTR board has adopted a goal of reducing SOV commuting in affected jurisdictions by 10% over the next several years. Those jurisdictions collect and report data on changes in journey to work mode on an annual basis. CTR data should be considered in developing mode split goals for centers. The data can indicate progress toward changing mode choices by workers and also potential areas for future gains.
Figure 11, below, shows reported results for CTR affected workplaces for two recent time periods. The data are based on surveys completed by employers.

Figure 11: CTR Data Trends for Region

	2007/2008	2011/2012
# of Worksites	696	672
Total Employees	445,774	512,901
Response Rate	69.9%	54.5%
VMT	11	10.3
Drive Alone	62.5%	58.4%
Carpool/Vanpool	13.5%	12.8%
Transit	15.4%	16.9%
Bike	1.6%	2.1%
Walk	1.8%	2.7%
Telework	3.9%	4.1%
Other	1.4%	3.1%

Source: WSDOT Commute Trip Reduction Program, 2013

These data are consistent with trends revealed in analysis of CTPP data which show a modest decline in commuting by private automobile over time. Similar reporting data are available through the CTR program for a number of jurisdictions, individually, that contain regional centers. These include Auburn, Bellevue, Bothell, Bremerton, Burien, Everett, Federal Way, Kent, Kirkland, Lakewood, Lynnwood, Puyallup, Redmond, Renton, SeaTac, Seattle, Tacoma, and Tukwila. Many, but not all, of the employers for which data are collected in those cities are located in their designated centers.

Existing and Anticipated Land Use and Transportation Conditions

A final set of factors are less quantitative, but relate substantially to the potential to reduce SOV mode share through land use changes and public investments, particularly in transit. When developing mode split goals for centers, local governments should catalogue and consider the impact on mode split of the following:

- Existing land uses and densities
- Planned land uses and densities
- Existing infrastructure and levels of service
- Anticipated future transit capital investments and levels of service

Data tables and centers profiles in the *Regional Centers Monitoring Report, 2013 Edition* are useful resources for compiling and contrasting key data points for each center.

A Note About Mode Split in Manufacturing / Industrial Centers

Much of the discussion thus far in this guidance paper has focused on mode split in Regional Growth Centers. However, VISION 2040 also calls for mode split goals to be adopted for Manufacturing / Industrial Centers. Figure 12, below, shows estimated current mode split in each MIC and the region as a whole. These data are an update of estimates from the PSRC travel demand model published in the *Regional Centers Monitoring Report—2013 Edition.*

Figure 12: Mode Split in Manufacturing/Industrial Centers

Manufacturing-Industrial Centers	Work Mode Shares: Trips To and From a Center			
	SOV	HOV	Walk and Bike	Transit
Ballard-Interbay	76%	8%	7%	9%
Duwamish	81%	9%	2%	8%
Frederickson	86%	8%	2%	3%
Kent	87%	8%	2%	3%
North Tukwila	84%	9%	2%	4%
Paine Field / Boeing Everett	86%	8%	2%	4%
Port of Tacoma	87%	8%	1%	3%
South Kitsap Industrial Area	89%	9%	1%	1%
Regionwide Average	76%	9%	5%	10%

Source: PSRC Regional Travel Model, 2014.

In nearly every Manufacturing / Industrial Center, the share of commute trips made by driving alone exceeds the regional average of 76%. At the same time, relatively fewer workers are getting to their jobs in those centers via transit, walking, and biking than do in the region as a whole. These data are consistent with the conditions typical of MICs as they relate to drivers of mode split. The density of employment in these areas is much lower than it is in mature Regional Growth Centers. Uses such as manufacturing, warehousing, utilities, and transportation are the dominant land uses, occurring at densities that do not support high transit ridership. Several MICs have very limited or no existing transit routes. With relatively little or no housing, workplaces are out of reach for many who might want to walk or bike to their jobs. Finally, parking is free for employees and customers throughout much of the MICs in the region.

Considering the data in Figure 12 and the factors highlighted above, the best opportunities for decreasing the single occupancy share of work trips in Manufacturing / Industrial Centers is through targeted investments in transit facilities, routes that serve major employment clusters, vanpools and other similar services, and more frequent service. Site planning (e.g. orienting new facilities to be walkable from major nearby roads) can help make transit more viable for employees in MICs. Transportation demand measures, such as providing amenities like showers, parking for carpools and bicycles, and financial incentives can also improve mode share in MICs. Compared with Regional Growth Centers, however, the potential mode shift in Manufacturing / Industrial Centers is small due to land use constraints and impediments to providing efficient transit service.

GUIDING PRINCIPLE: Mode split goals for Manufacturing / Industrial Centers should envision a modest decrease in single-occupancy vehicle trips for work, consistent with existing conditions, past trends, and limited factors in play to shift mode choice in the future.

Factors that Contribute to Mode Split

Several key factors influence travel mode choice. They include travel time and cost, vehicle ownership, parking availability and cost, access to alternative modes, transit service level, land uses and densities, and household income. Each of these factors is discussed briefly below, along with implications for policy and implementation.

Travel Time

The time it takes to complete a trip from point A to point B will vary significantly depending on the mode of travel, speed, and delay caused by congestion. Roadway congestion can slow auto travel, particularly for single-occupancy vehicles that do not have access to HOV lanes. Time lost to congestion will motivate some travelers to choose a mode with a shorter travel time, such as carpooling and transit.

There are a number of measures local governments can take to influence travel time for alternative modes, particularly transit. Investments in transit service, it's span and frequency, along with prioritization of transit through a corridor can increase speed and reliability and thus help to make transit a more attractive alternative to auto travel. Wait time and difficulty of transfer to, from, or between transit segments and modes are also potential barriers to increased ridership. Investments in the transit corridor, transit centers and stations, and connectivity to transit access points can also make transit a more competitive mode.

Travel Costs

Another cost of trip making is the monetary cost associated with different modes of transportation. The average annual cost of owning and operating a car is approximately $9,000.[3] Costs include not only fuel, but also maintenance, insurance, and the cost of the vehicle itself in the form of sales price, car loan payments, or lease amount. Gas price is an external variable that fluctuates in amount and is generally outside of the influence of local or even regional and state government. Increases in gas price have a strong effect on the share of trips that are made by driving alone vs. other modes. Low and moderate income households are most acutely affected by the costs of automobile transportation. For many low-income households, the cost of car ownership is prohibitive, thus rendering those households transit dependent.

There is a relationship between transit fares and transit ridership. If fares are set too high, ridership will decline, with impacts on both low-income households and higher income households who may choose to take transit less frequently. Commute Trip Reduction strategies such as employer subsidies for transit passes can substantially address cost barriers to using transit for work trips, including for moderate and middle income workers.
Finally, tolling can have a significant impact on many aspects of travel behavior, including mode choice. The financial strategy contained in Transportation 2040 calls for the phased adoption of variable tolling on regional transportation facilities as a means to finance the transportation system and to manage demand for use of the system. Roadway pricing will affect when, where, and how people travel within the region, and will likely cause a significant proportion of travelers to take transit over driving alone, particularly in high capacity transit corridors that link the region's centers.

Vehicle Ownership

By choice or circumstance, many households may have limited access to a private automobile. The costs of auto ownership limits travel options for low-income households. Even households that can afford a single car can be

[3] "Your Driving Costs", American Automobile Association, 2014, available at http://publicaffairsresources.aaa.biz/wp-content/uploads/2014/05/Your-Driving-Costs-2014.pdf.

partially transit dependent where there are multiple household members whose daily travel needs can't be met through carpooling.

Transit dependency is not driven by income alone. Young people under 16 generally can't drive. Some seniors are no longer able to drive. Some disabled individuals also cannot drive. Children attending school may be transit dependent where schools are not within walking or biking distance, bus service is not provided, and families are not able to drive the child to school.

Finally, some households choose not to own a vehicle, even though they may be able to afford one. Whether for reasons of economy, lifestyle, or the environment, voluntarily carless households are a factor in mode choice, particularly and most significantly in urban settings where diverse land uses and travel alternatives make this a viable choice.

While outside of local government control, the factor of vehicle ownership and transit dependency should be recognized in setting transportation goals and policies, including land use and housing policies and other means to access major transit investments in regional centers.

Parking Availability and Costs

Every trip made by private automobile begins and ends at a parking space. A combination of market forces and public policy has created an expectation that parking will be free and freely available throughout most of our urban areas. Free parking encourages and enables higher levels of SOV travel than would otherwise occur if markets alone set the supply and price of parking. Meanwhile, the cost of providing parking facilities is passed along to local governments and to developers, resulting in higher costs for goods, services, and housing. Excessive parking also costs the community by creating an urban environment that creates barriers to pedestrian and bicycle travel and a use of land that sacrifices efficiency, density, and support for transit ridership.

Many tools are available to manage the supply of parking within Regional Growth Centers and, where appropriate, establish pricing for that parking that balances supply and demand. Tools include variable pricing for on-street parking, flexible parking regulations for new development, and partnerships between public and private uses regarding the co-use of parking facilities. Successful implementation of these tools can influence mode share by making transit and other alternative modes more competitive on cost and convenience.

Access to and Attractiveness of Alternative Modes of Travel

Centers will vary in the current and anticipated level of access to modes of travel other than the private automobile. Clearly, the timing of providing new and expanded services and the level of service in any given center are key requirements for being able to shift significant numbers of drivers to other modes.

Transit is the most important factor. Regional Growth Centers vary considerably in levels of current available transit service, but include the best-served areas in the region, especially in peak periods. The region is in the process of building the second phase of a new regional high capacity transit system. Sound Transit light rail, commuter rail, and express buses already provide service to many communities. An expansion of light rail north, south, and east from the original Central Link line is ongoing. Significant investments in bus rapid transit have also recently been implemented in both King and Snohomish counties. These services provide new and expanded travel options for regional centers.

Non-motorized infrastructure, such as sidewalks, bike lanes and trails, and many other types of improvements, is also a prerequisite for significant gains in mode share, not only as a means to enable non-motorized travel, but also to provide safe and convenient connectivity to transit. Improvements in non-motorized infrastructure are needed throughout the region. Existing conditions in regional centers vary considerably from relatively well-served centers that developed to accommodate multiple modes to centers with significant gaps in bicycle and pedestrian infrastructure that developed as primarily auto-oriented commercial areas.

When the infrastructure is in place, and the level of service sufficient to get people where they want to go when they want to go, more travelers will choose alternative modes. In addition, there are qualitative factors as well that can make transit, walking, and biking more attractive choices than the automobile. Distance, facility type, connectivity, availability of bike parking and other facilities, and perception of safety are all important. For transit, the ability to relax, read, or multi-task while traveling attracts riders. Exercise and stress reduction are added benefits of biking and walking.

Land Uses and Densities

All Regional Growth Centers are expected to accommodate and achieve growth in both housing and employment. The intensity and mix of uses envisioned for those centers is anticipated to provide and encourage ridership on an expanded network of high-capacity transit services linking the centers. Designation criteria for new Regional Growth Centers call for existing land use to comprise at least 18 activity units (population + jobs) per gross acre and planned land use to achieve at least 45 activity units per acre. Many of the centers will be planning for much higher densities.

Manufacturing/Industrial Centers are also expected to grow in employment. In support of both existing and new workers in the MICs, access to multiple modes of transportation is a priority.

Local governments are required to set growth targets for regional centers that make transparent how much growth of what type is planned for and will be accommodated through ongoing local and regional actions and investments. Increased density improves mode split by bringing origins and destinations closer together (i.e. within walking/biking distance) and increases viability and efficiency of transit by increasing the number of potential riders per stop/station.

Income

Finally, income has a significant impact on the mode choices of households. Higher income households are better able to bear the costs of commuting by automobile. Even where ample transit service is available, higher income household may continue to travel primarily by automobile for work and other trip purposes.
At the other end of the income spectrum, lower income households are more likely to be partly or entirely transit dependent. As such, they are more reliable riders on transit. Policies that preserve and expand the ability of low and even moderate income households to live in or easily access the transit facilities located in centers will achieve greater ridership dividends from those transit investments.

Implementation and Monitoring Progress

There are many tools that local governments, in coordination with other public agencies, can use to reduce the proportional share of single-occupancy vehicle travel in regionally designated centers. These tools include:

- Transit supportive densities and mix of land uses
- Transit and non-motorized infrastructure and system investments

- Providing transit access to transit-dependent populations
- Transportation demand management techniques

Mode split goals for centers should be accompanied by explicit policies stating the types of approaches and actions that the local government will take to implement the goals.

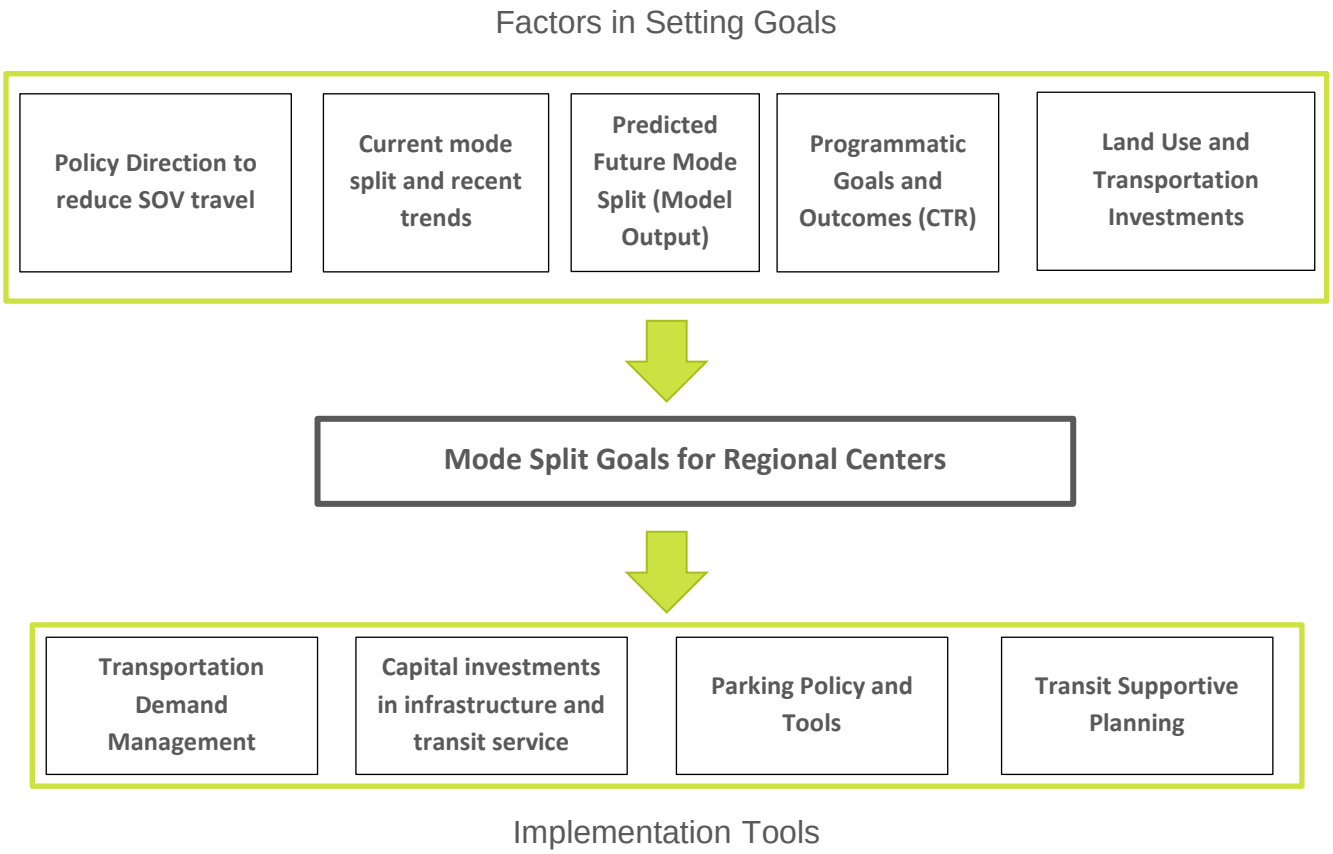
Specifically, the plan should identify those policies and programs that will focus on travel demand and mode choice within, to, and between centers. Some of the ingredients necessary to achieve the desired shift in travel choices and behavior are within the control or influence of local governments, some are not. As highlighted in the previous section, there are a range of factors that influence mode share and no single approach to shaping those factors is sufficient. A balanced and comprehensive approach to mode share in centers should consider many factors and tools contributing to future change.

The success of a single jurisdiction's policies in shifting mode share is not achieved in isolation. Trips do not begin and end solely within a single jurisdiction. Successfully achieving mode split goals is going to depend on highly coordinated implementation by multiple jurisdictions throughout the transit corridors that connect the region's centers. An additional purpose of this document, therefore, is to further the adoption of more coordinated and consistent mode split goals among all cities and counties that have one or more regionally designated center. Finally, mode split in regional centers should be among the key indicators included in a local comprehensive plan performance measures program. The specific data indicator used should meet several requirements. The data indicator should define mode split in the same way that mode split is defined in setting the center goals. The data source should be reliable and available for multiple time periods in the future. Reporting outcomes should be frequent, with 5-year change a recommended threshold for measuring change. Annual reporting could be misleading due to year to year changes that may reflect data issues and not actual mode split change. Reporting change over periods much longer than 5 years will miss opportunities to provide feedback to decision makers and the public, with less opportunity to adjust and make more effective the local policies and tools for reducing single-occupancy automobile travel.

Summary

The policies, analytical approaches, and planning implications described in this paper that relate to developing mode split goals for regional centers are summarized in Figure 13.

Figure 13: Overview of Mode Split Goals for Centers



Examples

City of Seattle sets mode split goals for its Regional Growth Centers and for the city as a whole. The most recent version of the goals is contained in the city's existing comprehensive plan, adopted in 2004. Policy TG11 sets goals for 5 separate regionally designated centers. Goals are phased over the long-range planning period with both a 10-year goal and a 20-year goal for each center. Seattle also elected to set two sets of goals, one for work trips only and one for all trips. For work trips, the city established goals for an increase in non-SOV travel that ranged from about 15% - 20% over the base year of 2000. The goals are accompanied by discussion and policies that address actions on the part of the city to provide a range of transportation alternatives, with a focus on centers. City of Seattle will be updating these goals as part of the next major update to the comprehensive plan in 2015.

Redmond 2030, the updated comprehensive plan for the City of Redmond, sets policy goals for future mode split for its two Regional Growth Centers. Policy UC-27 states:

> *Strive to achieve by 2030 a non-single-occupancy vehicle (transit, bicycling, walking, car/vanpooling, telecommuting, or other "virtual" commute) mode split of 40 percent for peak-period trips in the urban centers. Do this by providing a pedestrian- and transit-supportive environment, developing supportive land uses, working with regional transit agencies to provide expanded transit options, including light rail and*

bus rapid transit, enhancing transportation demand management strategies, and implementing a parking development and management plan.

The mode split goal for Redmond's centers has a strong basis in the city's participation in the state Commute Trip Reduction program including the status of Overlake as a Growth and Transportation Efficiency Center. The goals build on recent success of CTR implementation and anticipate further shift away from SOV work trips in the future.

Contacts

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