Review of Land Use Provisions
Related to Transportation Policy

City of Redmond Comprehensive Plan Transportation Element

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REDMOND

This Version Updated: November 14, 2003

Prepared for City of Redmond by:

Charlier Associates, Inc.

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Purpose and Summary of Recommendations:

This paper provides an assessment and critique of the manner in which transportation objectives and strategies are matched up with land use objectives and strategies in the existing Redmond Comprehensive Plan. Ideally, the transportation element of a comprehensive plan would be designed to support achievement of the plan's major objectives relating to community character, land development patterns, local economy, and quality of life.[1]

A metaphor: With respect to land use, updating Redmond's transportation element could be compared to the challenge of baking a cake. All the ingredients are known and already listed, but ingredients alone do not represent a recipe, and pouring cake ingredients into a pan (Comprehensive Plan) will not produce a cake (desired future Redmond). Recipes are strategic – they describe, not just ingredients, but what should be done, how, and in what order.

Policy recommendations made in this paper are summarized below:

Note: the final version of this will include a summary of recommendations here.

[1] For reference, the City's goals and vision adopted by Council in August (Ordinance 2177) are summarized in the Appendix.

Background – Transportation and Land Use:

Cities are complex, dynamic systems. They are always changing – "no change" is rarely an option. But, influencing the trajectory of ongoing change is difficult.

Transportation policies, programs and capital investments represent some of the most important tools in the urban toolkit. In fact, changes in an urban area's transportation system are so influential that cities whose transportation programs are out of sync with their other programs fail in their efforts to control their own destinies.

Three categories of transportation/urban form relationship are especially critical and are addressed in this Background section:

1. Streets;
2. Transit; and,
3. Pedestrian Environment.

<u>Streets and Urban Form</u>

Streets represent Redmond's largest total area of public space, with more land devoted to this use than to parks and open spaces combined. Many thousands of interactions between people occur daily on and along Redmond's streets. In Downtown, at least two thirds of the land area is devoted to motor vehicle uses – streets and parking lots.

In Redmond, as in all cities, urban character and street character are inseparable aspects of a single form. To a substantial degree, a city *is* its streets. There are no great cities with bad streets. Great cities are great, in part, because their streets are great.

When people choose destination environments – in their own communities or in other cities – they seek out places based on an intangible combination of factors: the buildings, the spaces between buildings, the people present, and the activities and amenities available there. The view of, and from, the street; the scale of the street relative to adjacent features (trees, buildings); the quality of the walk environment; the volume and speed of traffic; and the details of street design are all part of our image of a place. These street infrastructure and space details are among the fundamental building blocks of urban character.

Street planners and designers are *placemakers*, whether they realize it or not. For any given area within Redmond's urban environment – strip commercial, campus-style office park, single-family residential, mixed use urban, among many others – there is a type and scale of street appropriate to that place. And, the best street for each abutting land use is different.

When the street is inappropriate for the place, a basic discord results, and often the place morphs to reflect the street. However, when the street is appropriate for the place, the resulting coherency and harmony "feels right" in a way that people readily and intuitively understand. This coherency reinforces abutting land uses and stabilizes older built forms.

Such places – whether they are residential neighborhoods, commercial areas, employment centers, or downtowns – become inherently desirable, hold land value over time, and settle into a comfortable equilibrium that is the essence of the vision of the future that Redmond has articulated in its vision and goals for this Comprehensive Plan Update.

Where many cities – including Redmond – face a particular challenge is in balancing the critically-important function of *placemaking* with the function of carrying *traffic volume*. Both functions are important. Striking the right balance between placemaking and traffic demand on Redmond's streets and highways should be one of the primary challenges the City tackles in this Update.

The primary keys to achieving the right balance between placemaking and traffic demand are:

- Neighborhood character. If the City is to ensure that street investments do not detract unacceptably from community character, there will be a need for clearly stated descriptions of desired character outcomes at the neighborhood level.
- Street connectivity. Well-connected street networks are much more efficient than poorly-connected networks.
- Street density. Street networks with numerous smaller streets have traffic handling capability that is superior to networks with fewer, more massive streets.
- Street design. Over-built streets that favor throughput capacity over access and circulation tip the balance against abutting properties, inducing land use change and altering character.
- Major corridor alternatives. To the extent that Redmond's traffic issues are influenced by regional "pass-through" traffic, the City should consider regional corridor alternatives, such as greater reliance on SR 520 for peak traffic, or greater reliance on other regional corridors (e.g., SR 522).

Transit and Urban Form

This section uses the following terminology to describe three different, but interrelated types of transit service:

- High capacity transit (HCT) – which in the Puget Sound region includes potential rail technologies (light rail, commuter rail, monorail) as well as bus rapid transit (BRT);
- Fixed guideway transit – which includes only the rail technologies;
- Bus transit – which includes local and express bus routes operated by Metro and Sound Transit.

The relationship between transit and urban form is much discussed in the Puget Sound region, and is a theme in Redmond's current Comprehensive Plan. Generally this theme is stated in terms of the land uses required to make public transit successful. This is important, but equally important is understanding the changes that public transit could induce in urban form.

This relationship is complicated by the fact that the nature of the tie between transit and land development patterns varies by mode. Research over the past several decades has failed to uncover an instance in North America where high levels of bus service have shaped land development patterns in any significant way. High levels of bus transit can make dense development and especially dense, mixed use development work better. But high levels of bus transit will not induce dense development to occur. At the same time, dense development patterns are required to justify high levels of bus transit.

So, for bus transit, Redmond's current Transportation Element takes the right approach, by addressing the kind of land use patterns that will be required to support high levels of bus transit service.

Fixed guideway (rail) transit has demonstrated in numerous North American cities that it does influence land values and development patterns in profound ways. The same could be said of HCT if it weren't for the inclusion of BRT in the Puget Sound definition. It remains to be seen whether BRT systems are more rail-like or more bus-like in their impacts on land use. The answer may be a matter of degree, with BRT investments spurring more modest land use response and at a slower rate than rail.

In any event, fixed guideway transit offers several, potential interrelated benefits for Redmond's urban form. It would positively influence private sector investment, land values and the pace of development and redevelopment. It would provide a basic mobility service in support of the continued economic vitality and livability of Redmond's neighborhoods and commercial areas. Finally, fixed guideway transit systems bring a cachet to their cities that is important to image and important to attracting investment and employment.

Good transit service can be (and in Redmond's case is) a worthy objective in itself. However, fixed guideway transit also shapes land development patterns in and around station areas. These changes may occur rapidly (examples: San Diego in the 80s or Portland in the 90s), or with weak

regional economies may take a long time (examples: Miami and Atlanta in the 70s). But, inevitably, they do occur.

The "direct" land use impacts of fixed guideway transit occur primarily within a relatively small area around transit stations. The strongest direct relationship between land use and transit capacity occurs within a *core area* of about ¼ mile radius around stations. Additional, but weaker, direct land use responses occur within an *influence area* of about ½ mile radius. Finally, as land uses in the station area respond, secondary and spin-off effects range more widely over the urban landscape.

As is the case with large streets, fixed guideway transit induces changes in nearby land uses and urban character that should be carefully considered and anticipated.

Redmond's Comprehensive Plan should acknowledge and describe the interrelationship between development patterns and future high capacity transit. However, Redmond should also keep transit in perspective. Good transit is potentially important to placemaking, but not as important, citywide, as good streets. There are many "great places" in North America with little or no transit service. At the same time, in a major metropolitan market like the Seattle region, good transit service will be essential to supporting economic growth and sustaining robust employment.

Over the long term, those places in the Puget Sound region with high speed, high capacity fixed guideway transit connections to the rest of the region will attract more investment and will thrive economically more than areas without such connections. So, full realization of the vision, goals and growth targets set for Redmond in this Update will require attention both to good transit service and to good streets.

High density, mixed use development can be *allowed* or *encouraged* through zoning and land development regulations. However, it cannot be *induced* in the absence of an interested market. One of the strongest forces available to Redmond for influencing and shaping land development patterns is transportation, including fixed guideway transit.

Transit represents a particular challenge because it is the mode that sits atop the transportation cost pyramid. Fixed guideway transit is expensive, and is viable only where there are good streets and good pedestrian environments, in addition to higher density, mixed use land development patterns. A dense grid of well-connected streets and a high-quality pedestrian environment are necessary not only for providing access to transit, but also for supporting the land uses that will be attracted by fixed guideway transit, and to ensuring feasibility of transit capital investments.

Planning for successful high capacity public transit service will require Redmond to address its streets and pedestrian environments as critical elements of urban form, and as inseparable from transit system development. This is essential to ensure that high capacity (fixed guideway?) transit comes to Redmond, and to ensure it is successful.

Walking Environments and Urban Form

The terms "pedestrian supportive," "pedestrian-friendly" and "pedestrian oriented" recur throughout the Redmond Comprehensive Plan. This emphasis is appropriate given Redmond's vision and goals, but is not yet focused tightly enough to guide transportation planners and designers in determining what is meant and how it is to be accomplished.

Walking environments cannot be described – or prescribed – using a single descriptor like "pedestrian-friendly," because there are many different types of walking environments, just as there are many different kinds of walkers and reasons for walking.

Walking environments, however, can be arrayed along a continuum based on measurable characteristics that are specific enough to be used in planning a public works investment program and compelling enough to attract public support for that program.

First, there are at least three primary types of pedestrians in cities[2]:

- People ramble as a recreational activity. They walk the dog or push a baby carriage. They jog or speed walk for exercise.
- People walk for utilitarian purposes (to get to school or to shop). All auto and transit trips involve at least some utilitarian walking.
- Finally, in certain settings, people stroll and linger. They stand on the sidewalk and talk with others they meet. They sit on a bench and eat ice cream while watching people. They let children walk with them.

Keeping the varieties of pedestrians in mind, Redmond's current and future pedestrian environments should be classified in four categories[3]:

- *Pedestrian friendly*. These would be districts of limited extent, with mixed use land development, high densities, good transit service, good streets and extensive pedestrian accommodation in the form of sidewalks, crosswalks and other facilities. Here people will stroll and linger, and will walk for utilitarian and recreational purposes. The acid test for qualifying a place as pedestrian friendly is the actual ongoing presence of significant numbers of people.
- *Pedestrian supportive*. These should include most residential neighborhoods and most commercial areas, employment centers, parks and recreational areas. These are safe environments for

[2] This pedestrian classification is based on research by Susan Handy at University of Texas. There is overlap between these types. A utilitarian trip downtown to shop can become a strolling, lingering trip upon arrival.

[3] This classification is based on work by Charlier Associates over the past couple of decades beginning with Downtown Orlando and the International Drive area of Orange County, Florida, and continuing through a number of downtown planning projects for large and medium-size cities, and also including extensive work in ski resorts and other western tourist markets.

walking, where sidewalks are continuous and separated from streets and where good street crossings have been provided. Land uses are either dense enough to both generate and attract utilitarian walking trips of reasonably short lengths (a half mile or less), or are of the sort that will attract recreational walkers, joggers and bicyclists (e.g., areas along the Sammamish Trail).

- *Pedestrian tolerant*. These are areas and corridors where walking is technically safe (there are continuous sidewalks and some kind of reasonably safe street crossings), but the land use patterns are such that little walking activity is likely to be generated or attracted. These would include some arterial street corridors, remote or rural streets and certain light industrial or warehousing areas. Such places will only attract limited amounts of utilitarian walking, and will not appeal to recreational walkers or strollers.

- *Pedestrian intolerant*. This is a polite term for areas where walking is unsafe and unattractive. Examples include freeway corridors, certain industrial or extraction land uses, land fills, and so forth.[4]

A recurring element in these descriptions is adjacent and nearby land use. Sidewalks alone cannot make a place *pedestrian friendly*. To generate a significant pedestrian presence, land uses must be highly mixed and reasonably dense. Residential uses, lodging, retail, restaurant, service, civic and employment uses should all be present within a half mile radius. Street walls (building fronts) should be coherent but porous (numerous doorways and continuous windows). The scale of the street relative to adjacent buildings should be between 1:1 and 3:1 (street width to height). The street grid should be fine-grained (less than 300 feet on a side). Traffic volumes on adjacent streets should be less than 20,000 vehicles per day with speeds of 25 mph or less.

Where these land use conditions are not present, the environment can still be (and should be) *pedestrian supportive* or at least *pedestrian tolerant*. However, outside a limited number of *pedestrian friendly* districts, pedestrians in Redmond will not be particularly numerous. Walking can be encouraged, especially for recreational and utilitarian purposes, but the kind of pedestrian presence desired in Downtown and perhaps in Overlake is not practical or achievable across the entire cityscape.

Of overriding importance in shaping the pedestrian environment are the availability and characteristics of the other modes of transportation. Occasionally, *pedestrian friendly* districts can exist without good transit, but that is rare in large metropolitan areas. For Redmond, having *pedestrian friendly* environments at specific locations should be thought of as requiring high levels of transit service to and within those areas.

[4] These categories of pedestrian environment will be described and mapped in the Pedestrian System Plan to be completed as part of the Transportation Master Plan in 2004.

Transit produces pedestrians at far higher concentrations than is possible just with parked cars. Transit also encourages walking by extending pedestrians' mobility and feasible range of travel. The Update should document that if high capacity transit is to be attracted to Redmond, it must have *pedestrian friendly* locales in which to touch down (at stations).

It will be possible to support some limited high capacity transit service solely with park and ride capacity and local bus connections, but this does not seem consistent with the other objectives identified in Redmond's Comprehensive Plan for Downtown and Overlake.

Finally, it is critical to Redmond's transportation planning to recognize that most pedestrian environments are largely or entirely comprised of street corridors. Certainly, there are pathways in parks and along rivers, but the principal infrastructure for walking in Redmond will always be the city's streets.

Creating *pedestrian supportive* and *pedestrian tolerant* environments throughout Redmond requires careful attention to the design of streets, to the allocation of space within street rights of way, and to the allocation of time at signalized intersections.

Creating *pedestrian friendly* areas requires a complete reorientation of all of these street characteristics in favor of pedestrians. This is feasible in only a limited number of places.

Section C. Transportation and Land Use

This section in the Redmond Comprehensive Plan provides general policy direction that is generally oriented toward describing the land use measures that would support the kind of transportation system the City desires.

The introductory paragraph makes the case that:

"This Plan strengthens the transportation system's support of the local and regional land use plans. Conversely, the manner in which land uses develop at the local and regional levels greatly affects the ability of the transportation system to provide a range of mobility alternatives. The objective of providing viable alternatives to the single-occupant vehicle requires strong land use measures be put in place."

Thus, Redmond envisions its transportation system as having dual goals:

1. Providing mobility; and,
2. Supporting the City's land use objectives.

However, Section C focuses primarily on "strong land use measures" that will support the intended transportation system. While the land use shaping influence of transportation is acknowledged, the policies stating this are general in nature. Thus, the City should consider whether to redirect this emphasis. In this Update, the Transportation Element could be designed so that transportation programs and investments are *strategically targeted to achieve the land development pattern* described in the Plan. The policies in Section C do not currently describe how to accomplish this.

Policy TR-1 states the City will deploy its transportation system in support of concentrating future growth in the existing urban area, and in particular, in Downtown and Overlake – the two urban centers. However, Section C does not identify measures or policies to achieve this.

Policy TR-2 states "Transportation plans, policies, strategies and facilities shall support local land use and urban design objectives." This is good policy, but is too broadly worded to be directive. It may be appropriate to include a more forceful and specific statement (along the lines suggested by the Planning Commission) that Redmond will not make investments, or allow investments to be made by others, that would detract from community character or lead to outcomes in conflict with community vision or the objectives of the Comprehensive Plan.

Table TR-2 puts forward three sets of performance indicators: vehicle miles of travel (VMT), arterial street volume/capacity ratio (V/C), and intersection V/C ratio. There may be a better place for this data. The VMT data belongs in the previous section (Travel Demand Forecasts) unless the City intends to actually manage traffic growth with the objective of holding VMT at the forecast level. (Some cities have set VMT ceilings or objectives, so this is within the realm of potential policy. However, if this is the intent, this should be backed up with programs and strategies to achieve this.)

The V/C data in the right half of the table may be intended to match up with the service standards set in Section E (Table TR-4), although making

this comparison raises more questions than it answers. A key land use connection may be reflected in Table TR-2, if the point is to show that the growth targets for population and employment are consistent with the service standards in Section E. However, it is not clear the columns for intersection V/C in Table TR-2 and those in Table TR-4 represent the same measures or methodology. And, the connection is not explicitly made in the text, if in fact this was the intent. This is confusing. In any event, the topic is not land use. This data may fit better in Section E – Service Standards and Concurrency.

Policy TR-3 outlines site planning and urban design measures designed to make the transportation system function better. These have been translated into the City's development code and development review practice, and represent serviceable statements of techniques for supporting pedestrian and transit travel. However, they should be fine-tuned based on a more detailed treatment of pedestrian environment types.

Policy TR-4 states the City will reduce travel demand by encouraging mixed use and by balancing jobs and population. The case for reduced vehicular travel demand associated with mixed use development is well-documented. However, the idea of reducing travel by balancing jobs and housing at the local level has not been supported by research and may not be achievable.

(Note: a recently adopted framework policy moves beyond the concept of jobs/housing balance within Redmond. TR-4 should be made consistent with that direction:
"FW- 14 Encourage a housing supply in Redmond and nearby communities that enables more people to live closer to work, reduce commuting needs, and participate more fully in the community.")

Policy TR-5 addresses inclusion of architectural, landscape and art features in transportation projects "that compliment the surrounding natural and built environment." This seems useful and practical.

Finally **Map TR-1** appears at this point in the document without reference in the text. Because of its placement, it seems intended to be part of Section C. Map TR-1 provides data on 1993 actual and 2010 forecast traffic on arterial streets across external screenlines. These are not set forth as objectives, nor is a direct link made to either Table TR-2 or Section E (Service Standards). The data may have been intended as interesting information showing forecast traffic trends.

However, it is data that many citizens will have some difficulty understanding. The concept is to add together daily traffic on all of the arterial streets crossing a line drawn across the map. This does convey some perspective, but there are enough unanswered questions in the data that it would be fair to ask whether the map can serve any purpose without explanatory text, and without making any connection to objectives and targets. If there is a relationship to the objectives and targets, that should be described.

The two primary shortcomings of Section C as it stands in the current Comprehensive Plan are:

1. It is not sufficiently directive concerning how the transportation program will be deployed to achieve the City's land use objectives; and,
2. The result is to imply that the primary relevant quantitative subject matter is traffic and congestion.

The first of these issues can be resolved by making an explicit tie between the policies contained in Section C and the specific transportation programs to be set forth in Section D (District Management), discussed below. This should include an explicit tie with the facility plan, investment plan, and performance measures.

The second of these issues – the emphasis on traffic and congestion – is more difficult to resolve and goes to the heart of the transportation challenge Redmond faces with this Update. The effect of Section C combined with Section E is to create the impression (probably unintentional) that Redmond defines the relationship between transportation and land use as a need to match demand for roadway capacity with supply of roadway capacity, mitigated somewhat by mode shift and demand management as traffic reduction measures.

This may not be a good way for Redmond to frame the issue, because it limits the City to some combination of three choices:

1. Continue to build roadway capacity in an attempt to keep up with traffic growth;
2. Shift enough travel to other modes to avoid choices 1 above or 3 below; or,
3. Raise the LOS Standard targets in Section E as needed over time to keep the City in compliance with its service standards.

Choice 2 is not practicable as a city-wide strategy for major arterials. Mode shift should be a key part of Redmond's strategic transportation program, but any congestion alleviation benefits will be limited to modest reductions during peak travel periods at specific locations. The payoff for mode shift is found in mobility enhancement, not congestion alleviation.

Choice 3 is a common enough approach in the Seattle metro area, but may not be good public policy as it postpones indefinitely the issue of street capacity vs. traffic growth, and at the same time fails to address other, perhaps more important needs. Choice 1 may not be in the City's best interests (as its primary direction) for the reasons set out below.

A street planning and investment program that is driven primarily by roadway capacity demands may lead to undesirable outcomes. Phoenix, San Jose, Orlando, Fort Lauderdale, Houston, Dallas, Kansas City and Los Angeles provide useful examples of the results of this approach. As traffic demand grows, streets are widened, access to abutting properties is reduced, and connections are eliminated – all in the service of increased rates of traffic flow. In response, adjacent residential land uses are blighted and lose value. Over time they are replaced by commercial uses.

Commercial land uses, too, shrink away from growing roadways, developing buffers such as large parking reservoirs and other physical barriers. Commercial buildings turn away from the street. As traffic in commercial corridors grows, land uses change, favoring new uses appropriate in an auto-oriented environment – gas stations, auto service businesses (tire stores, parts stores, oil and lube places) fast food restaurants, drive through bank outlets, "big box" retail, and so forth.

Such places may have some economic strength – at least for a few years – but they have little character and little intrinsic value. Buildings are inexpensive and land uses turn over quickly. As suburban roadways are expanded, commercial land uses migrate out to the new corridors, leaving behind empty buildings and lower rent uses. Over the long term, it is difficult to maintain property values along the corridors of large arterial streets.

Many major US cities have miles of decaying arterial corridors, and a few have aggressive programs underway to redesign and retrofit these streets in an attempt to spur redevelopment and reinvestment in what have become blighted areas. Some of these programs have been modestly successful (Ft. Worth, Orlando, Tempe) but they have also been expensive.

It is clear from the City's vision and goals that this is not the future to which Redmond aspires. Ordinance 2177 (see appendix), adopted by Council, describes a city that is a desirable *place* – a place people seek out, come to, linger in – a city that is a good place to live and work. Ordinance 2177 does not describe the Redmond of the future as a series of wide, high-speed roadway corridors to travel through quickly on the way to somewhere else.

Because the City's public, as well as its elected officials and staff understand this, the most likely outcome of the tension over these issues is choice 3 above: raising the LOS Standard targets in Section E as needed over the years to keep the City in compliance with its service standards.

Recommendations:

1. *Section C should be revised to remove the traffic growth and V/C data. The V/C information more properly belongs in Section E – Service Standards and Concurrency. The traffic growth trends data is more appropriate in Section B – Travel Demand Forecasts.*
2. *Section C should be rewritten to fully describe the importance of good streets, public transit (including especially high capacity transit) and pedestrian environments to the achievement of the community's land use goals and visions.*
3. *Redmond should expand the policy discussion of its streets to include the concept of "Great Streets" as a means of redirecting policy away from a capacity-driven program.*

Section D. District Management

This section of the Comprehensive Plan describes how the City will "identify mobility needs and strategies for individual areas within Redmond" through a neighborhood planning process. There are also more detailed land use treatments elsewhere in the Comprehensive Plan, including sections in the Land Use chapter for the Downtown Urban Center and Overlake mixed use area. Downtown has an entire chapter devoted to it. Land uses in Southeast Redmond are described in the Neighborhoods section of the Plan but will be in the Update.

Downtown, Overlake and Southeast Redmond are the portions of Redmond with the most capacity for growth. For this reason, recommendations are presented below for these three areas. In addition, recommendations are presented for residential areas to ensure issues specific to residential neighborhoods are covered.

- Downtown (Urban Center)
- Overlake (mixed use area)
- Southeast Redmond
- Residential areas (overview)

In the case of Downtown and Overlake, the current Plan provides significant direction for land uses and for transportation. In general, this direction seems on point and accurate.

What is missing throughout the Plan is acknowledgement that the transportation ideas put forward cannot be achieved without a concerted effort by the City. Redmond has many of the right concepts and relationships (cake ingredients) in its Comprehensive Plan for these areas, but will not achieve its objectives (cake) without a program (recipe) for actually implementing difficult and costly transportation measures. The densities and land use relationships described in the Plan do not so much make transit and walking feasible as they *require* transit and walking *to be feasible* as urban development patterns.

The text in the current Plan tends to orient the cause-effect relationship in the wrong direction. The recommendations below are designed to redirect this emphasis.

In both Downtown and Overlake, significant priority must be placed in the following four areas, or Redmond will not achieve its vision:

- Much better transit service, including arrival of High Capacity Transit within 20 years – sooner if possible, and also including internal transit circulation.
- Much more pedestrian friendly environments in core areas with pedestrian supportive environments throughout the urban centers.
- The presence of attractive, "local" streets appropriate for a destination environment.
- Comprehensive and anticipatory parking programs.

Downtown (Urban Center)
The Comprehensive Plan provides prescriptions for land uses in each of the Downtown districts. All of this is "right" in terms of the transportation/land use relationship. Densities and mixed use prescriptions are adequate to qualify as transit markets. Residential and commercial space prescriptions are sufficient to support suburban fixed guideway transit stations.

However, these development patterns are unlikely to emerge with the current transportation system in the Downtown area, so the City will have to work hard to bring about change in the four categories introduced above.

Recommendations: Much Better Transit Service

4. *The Update should state a goal that high capacity transit will directly connect Downtown Redmond to the other Urban Centers in the region. (The City should consider further stating a preference that this should be fixed guideway transit.) Redmond should state it intends (in cooperation with Metro and Sound Transit) to identify and preserve corridor(s) for high capacity transit and to select and begin developing major station areas as required. This should be done through the Transit System Plan to be completed next year as part of the Transportation Master Plan.*
5. *The Update should also provide direction for ongoing improvements in regional bus transit service, recognizing that the best inducement for high capacity transit will be substantial, growing ridership on bus transit. Specifically, the Update should provide guidance for the Transit System Plan to be completed next year as part of the Transportation Master Plan, including programs and strategies for:*
   a. *Improving travel times on Sound Transit routes to other urban centers, through schedule and route changes.*
   b. *Increasing peak service frequencies for major arterial Metro routes serving Redmond.*
   c. *Travel demand management measures aimed at increasing public awareness of and interest the improving transit services.*
6. *The Update should direct the Transit System Plan to identify and describe the route(s), service levels and capital projects required to introduce internal circulation transit service in Downtown.*

Recommendations: Pedestrian Friendly Environment

7. *The Update should adopt the recommendations from the Downtown Transportation Plan (DTP) related to improving the pedestrian environment in Downtown. Policies should be included stating that pedestrian system physical improvements described in the DTP will be given high priority for funding and implementation. (This should be reinforced in Section F.)*
8. *The Update should also provide guidance for the development of a Pedestrian System Plan to be completed next year as part of the Transportation Master Plan.*

Recommendations: Attractive, "Local" Destination Streets

9. *The Update should map a grid of streets in Downtown that can be retrofitted and managed as "local" streets – designed to provide low speed auto circulation, parking and a pedestrian friendly environment, and to complement neighborhood character. This grid should be based on the Downtown Transportation Plan completed by the City in 2002.*

Recommendations: Comprehensive and Anticipatory Parking Programs

10. The Update should provide guidance for development of a long-term, phased Downtown parking development and management program. The Update should distinguish between two categories of Downtown parking:

d. Destination parking. This is the parking needed for access and support of Downtown land uses. Because the most valuable Downtown parking is on-street, the City's parking program should work to maximize the supply of on-street parking while at the same time minimizing its use by commuters. This will require a tight, well-designed enforcement program for time limits. This may also eventually require paid parking in Downtown. The Update should also describe how and to what extent off-street (surface and structured) parking will be expanded and managed.

e. Transit parking. The Downtown transit center will also serve as a park and ride facility for regional transit services. This should be anticipated and included in transit center planning. This will require that adequate transit parking supply be ensured, and that enforcement measures be identified and adopted to protect this special supply from abuse, and to protect Downtown from transit parking overflow.

Note: lack of treatment of bicycle system role. (staff)

Overlake (Mixed Use Center)
The Comprehensive Plan provides prescriptions for land uses in Overlake. Again, much of this is "right" in terms of the "ingredients" of the transportation/land use relationship. Densities and mixed use prescriptions are adequate to qualify as transit markets. Residential and commercial space prescriptions are sufficient to support suburban fixed guideway transit stations.

However, these development patterns are unlikely to emerge with the current transportation environment in Overlake. Redmond will have to work hard to bring about change in the four transportation categories.

Recommendations: Much Better Transit Service

11. *The Update should state a goal that high capacity transit will directly connect Overlake to the other Urban Centers in the region. (The City should consider further stating a preference that this should be fixed guideway transit.) Redmond should state that (working cooperatively with Bellevue, Metro and Sound Transit) it intends to identify corridor(s) for high capacity transit and to select and begin developing major station areas as required. This should be done through the Transit System Plan to be completed next year as part of the Transportation Master Plan.*
12. *The Update should also provide direction for improvements in regional bus transit service, recognizing that the best inducement for high capacity transit will be substantial, growing ridership on bus transit. Specifically, the Update should provide guidance for the Transit System Plan to be completed next year as part of the Transportation Master Plan, including programs and strategies for:*
    a. *Improving travel times on Sound Transit routes to Downtown and other urban centers, through schedule and route changes.*
    b. *Increasing peak service frequencies for major arterial Metro routes serving Overlake.*
    c. *Travel demand management measures aimed at increasing public awareness of and interest the improving transit services.*
13. *The Update should direct the Transit System Plan to identify and describe the route(s), service levels and capital projects required to introduce internal circulation transit service in Downtown.*

Recommendations: Pedestrian Friendly Environment

14. *The pedestrian environment Overlake today barely qualifies as pedestrian tolerant, and as such is a long way from pedestrian friendly. A concerted effort to change the walking environment will be required to support the objective of Overlake becoming "a focus for high technology and other employment located within a vibrant urban setting that provides opportunities to live, shop and recreate close to workplaces." This will require a combination of urban form changes as well as major improvements in pedestrian facilities.*
15. *The Update should also provide guidance for the development of a Pedestrian System Plan to be completed next year as part of the Transportation Master Plan.*

Recommendations: Attractive, "Local" Destination Streets

16. *There are no "local" streets in Overlake today. Instead, the area represents a convergence of heavily-traveled arterials. The Update*

should map at least two or three interconnected streets in Overlake that can be retrofitted and managed as "local" streets – designed to provide low speed auto circulation, parking and a pedestrian friendly environment.

Recommendations: Comprehensive and Anticipatory Parking Programs

17. The Update should provide guidance for development of a long-term, phased Overlake parking development and management program. The Update should distinguish between two categories of parking:

a. Destination parking. This is the parking needed for access and support of Overlake land uses. There is only very limited on-street parking in Overlake today and it may not be feasible to change this significantly. If "local" streets can be identified, the City's parking program should work to maximize the supply of on-street parking on those streets while at the same time minimizing its use by commuters. This will require a tight, well-designed enforcement program for time limits. This may also eventually require paid parking in Overlake. The Update should also describe how and to what extent off-street (surface and structured) parking will be expanded and managed.

b. Transit parking. Future transit centers in Overlake will also serve as a park and ride facilities for regional transit services. This should be anticipated and included in transit center planning. This will require that adequate transit parking supply be ensured, and that enforcement measures be identified and adopted to protect this special supply from abuse, and to protect Overlake from transit parking overflow.

Staff note: For Overlake, how about recommendations on what to do about traffic movement to achieve LU goals? We've discussed existing and potential transportation improvements that are not consistent with the idea of creating a more people-friendly environment in this area. This is probably the place to say that we need to reconsider how these fit.

Southeast Redmond

This part of Redmond represents an interesting challenge for transportation planning. The juxtaposition of extraction and manufacturing activities with an emerging residential and commercial area presents conflicting transportation needs.

The companies historically operating in this area require convenient access for trucks, including large and heavy vehicles. The residents of the area require safe access and circulation for personal mobility – walking, biking and automobile. Eventually the area should be transit-served as well.

Southeast Redmond land uses also share some similar transportation needs, including:

- Good access to regional roadways (SR 202, etc.);
- Good internal circulation; and,
- Redundancy of emergency service access.

The juxtaposition of different types of land uses could continue for some years, and could perhaps even be permanent. Thus, the City's transportation planning should address all of the needs listed above, and should address how to balance different needs where uses conflict.

Finally, this area includes an important gateway to the City of Redmond – the "Gateway Design District" along SR 202. Besides being located along a heavily traveled arterial roadway (> 30,000 vehicles per day along this stretch of SR 202), this represents the entry to Redmond for trips from the southeast, and the area plays an important role in shaping the City's image.

Staff Note:
Suggest including recommendations on transportation infrastructure to support Gateway concept, such as potential terminus for HCT and station

Recommendations:

18. *Street connectivity. The existing street network in Southeast Redmond is too coarse to support good residential access and circulation, and will not evolve into a dense, well-connected street network unless the City requires this as part of development approvals. This should be addressed both at subdivision (for street easements) and at plan approval (for street construction). Although some areas have already been subdivided, other areas remain in larger parcels.*
    a. *Every new public street should connect with existing public streets or with other new public streets at intervals of no more than 300' (with exceptions to 400' where needed due to topography or existing spacing).*
    b. *No dead end (public or private) streets or cul-de-sacs longer than 150' should be permitted.*
    c. *All new streets providing access to more than two homes should be dedicated as public streets and should meet public street standards.*

19. *Emergency service access.*
    a. *Homes and businesses in this area should have good emergency service access, even though the area is located at the edge of the City and is somewhat inaccessible due to highway and natural barriers.*
    b. *Each new residential and commercial address should be located no more than 150' from a public street intersection providing access from at least two connecting public streets.*
20. *Sidewalks.*
    a. *Every street in Southeast Redmond should have sidewalks along both sides of the street for its entire length.*
    b. *All sidewalks should be of adequate width with an adequate buffer (parkway) strip as required in City standards.*
    c. *ADA ramps should be provided at all intersections, and should meet modern standards (no angled ramps).*
21. *Bicycle circulation.*
    a. *The City should consider developing or requiring separated trails in this neighborhood to allow safe bike circulation and connectivity to regional trails and bicycle facilities, given conflicts with truck traffic on the streets.*
    b. *Affected corridors might include NE 180th Ave. NE, 185th Ave. NE, 178 Pl NE, NE 68th St., and NE 76th St.*
    c. *Trails or pathways would run parallel to the streets but along the backs of property lines and could also buffer emerging residential areas from adjacent manufacturing and extraction land uses.*
22. *Access management.*
    a. *The City should work cooperatively with WSDOT to manage access along SR 202 in the Gateway Design District, to protect this area from proliferation of driveways.*
    b. *The City should avoid further parcelization (subdivision) of properties fronting along SR 202 in order to avoid legal pressure to allow additional driveways.*
    c. *The City should consider similar policies for Avondale Road and Union Hill Road.*

Staff Note: How about recommendations to address pressure to move traffic from residential developments to the east through this area? Perhaps could fit with Gateway discussion above and idea of intercepting traffic from the east.

Residential Neighborhoods
To be developed.

Recommendations:
23. *To be developed. Issues to include: conflicts in traffic management near schools; lack of street connectivity in key routes; providing neighborhood pathways; and residential versions of "great streets."*

Section L. Parking Management

This section is written primarily from the perspective of reducing parking supply in the City as an extension of the demand management program. The section references King County Planning Policies which direct cities to address maximum parking, especially parking for single-occupant vehicles.

Policies **TR-55** through **TR-59** are all parking reduction or limitation measures. Policy **TR-60** addresses two different issues under the general umbrella of assuring "parking availability for commercial needs." The first of these two issues – limiting parking on arterial roadways – should be revisited in light of the Downtown Transportation Plan recommendations, given that both Cleveland Street and Redmond Way are Principal Arterials.

The second issue listed under **TR-60** – encouraging joint parking facilities – seems like another ingredient thrown in the bowl without much direction for how it will be used. The stated objective, again, is to reduce parking supply in commercial areas.

(Section L is silent on the issue of parking supply in residential areas.)

It is in Redmond's interests to avoid oversupply of parking, especially off-street parking in commercial areas. Too much off-street parking means too much land area taken out of productive use – a major drain on economic vitality. Parking construction and maintenance costs takes money away from more productive uses. Surface parking represents negative space from an urban design point of view, breaking the continuity of the street wall and creating dead zones in the urban fabric.

However, Redmond's parking challenge will be more complex than this and will require a strategic approach. Adequate parking is essential to the health and viability of most commercial land uses. Meeting Redmond's objectives for its downtown will be possible only with adequate parking, especially on-street parking, to support storefront retail. Overlake, too, probably cannot evolve into the kind of place the City envisions, without the introduction of at least some on-street parking to support storefront retail environments on "local" streets.

As mode shifts occur, and more trips are made by transit, walking and bicycling, fewer parking spaces may be needed – at least theoretically. But, inadequate parking supply will reduce commercial viability about as rapidly as it encourages mode shift.

On the other hand, extremely desirable destination environments and large employment concentrations can thrive in spite of inadequate parking if high levels of transit service are available. In these cases, limiting parking supply can indeed discourage travel by single-occupant vehicle and encourage mode shift toward transit.

So, whether forcing parking shortages through regulation is good policy, or whether ensuring adequate parking to support economic development is good policy, may depend on the area in question and the point in time.

Recommendations:

24. *Commercial area parking. Section L should be revised to address parking policy separately for Downtown, Overlake, and other commercial areas.*
25. *Downtown. The recommendations of the Downtown Transportation Plan should be used as a starting point for parking policies for Downtown. Specific strategies that should be covered include:*
    a. *Shared parking.*
    b. *Transit parking.*
    c. *On-street parking.*
    d. *Time limit enforcement.*
26. *Overlake. Specific strategies that should be covered include:*
    a. *Shared parking.*
    b. *Transit parking.*
    c. *On-street parking.*
    d. *Time limit enforcement.*
27. *Residential areas. This should be addressed in the Comprehensive Plan. Is on-street parking good or bad? Should new residential streets have on-street parking? Will the City need a residential parking permit program?*

Section O. Neighborhood Traffic Protection

This section is currently written from the point of view of protecting neighborhoods from the "environmental impacts" of motor vehicle traffic, especially cut-through traffic. This is a subject that will be addressed as part of the Motor Vehicle System Plan in the Transportation Master Plan.

Redmond's neighborhood traffic protection program is mature, with numerous completed projects and an ongoing system of evaluation and prioritization of new projects. The current policy section may be substantially on target as written.

From the point of view of transit service improvements, this section could represent a policy barrier to transit improvements at the neighborhood level. Many cities and transit agencies are battling their own citizens over planned transit service additions or improvements that are perceived as introducing noise and air pollution into neighborhoods.

(Excerpted from Ordinance 2177)

Goals:

- *To conserve agricultural lands and rural areas, and to protect and enhance the quality of the natural environment.*
- *To retain and enhance Redmond's distinctive character and high quality of life, including an abundance of parks, open space, good schools and recreational facilities.*
- *To emphasize choices in housing, transportation, stores and services.*
- *To support vibrant concentrations of retail, office, service, residential, and recreational activity in Downtown and Overlake.*
- *To maintain a strong and diverse economy, and to provide a business climate that retains and attracts locally-owned companies as well as internationally recognized corporations.*
- *To promote a variety of community gathering places and diverse cultural opportunities.*
- *To provide convenient, safe and environmentally friendly transportation connections within Redmond, and between Redmond and other communities for people and goods.*
- *To remain a community of good neighbors, working together and with others in the region to implement a common vision for Redmond's future.*

Vision (first sentence of each item):

- *Downtown is an outstanding place to work, shop, live and recreate and is a destination for many in Redmond and in the region.*
- *Old Town thrives as focus for retail activity that attracts pedestrians, providing a distinctive selection of stores, restaurants, galleries, and entertainment, as well as housing opportunities.*
- *Overlake has become recognized as a regional urban center that is the location of internationally known companies, corporate headquarters, high technology research and development companies, and many other businesses.*
- *Residential neighborhoods are treasured for their attractiveness, friendliness, diversity, safety and quietness.*
- *Redmond has maintained a strong economy and a diverse job base.*
- *Neighborhood and community parks contribute to a high quality of life in Redmond by providing a full range of opportunities ranging from active recreation, such as sports and games, to more restful and reflective activities, such as walking and viewing wildlife.*
- *Redmond has embraced energy efficient and environmentally sound transportation systems.*
- *People spend less time traveling and more time where they want to be.*
- *Infrastructure and services have been provided to meet the needs of a growing population as well as to correct existing deficiencies.*
- *Redmond in 2022 has maintained a very green character; the City is framed within a beautiful natural setting and open spaces and an abundance of tress continue to define Redmond's physical appearance.*
- *Redmond is an effective, responsive local government that responds to and anticipates the changing needs of the community.*
- *In 2022, as in 2003, Redmond is a community of good neighbors.*