www.oregonmetro.gov

Appendix 7:

Summary of potential infrastructure funding sources

Metro | *People places. Open spaces.*

INTRODUCTION AND PURPOSE

Securing funding to maintain or improve infrastructure and services in existing communities and accommodate population and employment growth is an important factor in facilitating residential, commercial and industrial development across the region. Regardless of where the development is located—whether in new or existing urban areas—funding for infrastructure is limited and constrained by a variety of factors.

This memo explores the different limitations on funding for infrastructure to support development in existing urban areas and new urban areas as well as the variety of factors that influence whether and how funds are available for infrastructure in these areas. Examples of funding sources used to support development around the region help illustrate the availability of funding sources in existing and new urban areas. While further investments across the region are needed to accommodate anticipated population and employment growth, this memo illustrates that there are a variety of considerations on funding sources used in the region's new and existing urban areas.

KEY FINDINGS

- **Federal and state funding sources for infrastructure have steadily decreased over the years.** Over the last 30 years, "the federal share of infrastructure funding has been declining…and many funds once available to state governments for capital improvements no longer exist" (Metro, Regional Infrastructure Analysis, 2008). This leaves a larger burden on local governments to develop more robust funding tools for infrastructure. Accordingly, the 2035 Regional Transportation Plan update assumes that local funding sources (including system development charges, urban renewal, local gas taxes and vehicle registration fees) will pay for 53 percent of project costs in the plan.[1]
- **Local sources are subject to multiple limitations**. Local funding sources for infrastructure such as system development charges, urban renewal and developer contributions are constrained by a variety of factors. State law prohibits jurisdictions with populations of 50,000 or more from putting more than 15 percent of assessed value or land area in urban renewal and mandates that system development charges only pay for certain capital improvements. In addition, local improvement districts and urban renewal must be approved by a vote of the people, which adds a political dimension to the utilization of these funding sources. Finally, local funding sources are often collected with the sole purpose of funding maintenance like street utility fees or capital projects like system development charges and cannot be used for other purposes. The lack of federal and state resources and the limitations on local sources makes it challenging to utilize local funding sources for infrastructure in new and existing urban areas.
- **There are different funding sources available in new urban areas than there are in existing urban areas.** There are a variety of factors that can influence what local funding sources are available for infrastructure. These include the location of the development, the

[1] This figure is for the State RTP. For the Financially Constrained RTP, local funding sources account for 44 percent of total project costs.

number of developers involved and their willingness to invest up-front capital, the fragmentation of the land and the political will of the jurisdiction. In new urban areas, where land ownership is often less fragmented and there are only a few developers involved at the start, the public sector can work with the developers to invest up-front capital to fund large needed infrastructure improvements.[2] Developers, whose investments will be reimbursed through SDC credits or fees on future development, are willing to put up this money because they will receive a significant economic return on their investment.

Currently, in areas like South Hillsboro and North Bethany significant infrastructure costs will be funded by the local jurisdiction though property taxes, transportation development taxes, community service districts and by private developers through supplemental development fees. This was also the case in South Waterfront, where two major property owners (Oregon Health Sciences University and North Macadam Investors) partnered with the City of Portland to fund the infrastructure needed to redevelop the existing urban area. In existing urban areas, where ownership is more fragmented and each developer is responsible for a smaller portion of infrastructure investment needed to facilitate development, there is less economic benefit that developers will realize by financing infrastructure investments up front. While both existing and new urban areas are able to access traditional funding sources like urban renewal and system development charges, it is this impetus for developers to invest in significant infrastructure improvements that can be more common in new urban areas.

Furthermore, according to Metro's 2008 Regional Infrastructure Analysis[3], "urban developments tend to require the majority of their infrastructure up-front, while urbanizing developments can finance this in phases over many years" (Metro, Regional Infrastructure Analysis, 2008). In existing urban areas, which are more compact and must serve as functional developments for existing residents and employees, all necessary infrastructure must be built up-front. Whereas in new urban areas, which are more spread out, infrastructure investments can be phased over time and targeted to the areas where development is planned. This allows developers in new urban areas to fund infrastructure in segments, while funding infrastructure in existing urban areas at once can be challenging for the multiple developers typically found in an existing urban area.

- **Funding sources for infrastructure are not interchangeable.** Examination of federal, state and local funding sources in this memo reveals that funding sources for infrastructure are often tied to a specific location or development and cannot be used interchangeably. Federal or state funding, in the form of loans or grants, is often authorized for a specific project that meets particular criteria. Local funding sources like urban renewal and local improvement districts can only be used in the areas in which they are levied. System development charges and transportation impact fees are used for a narrowly defined list of projects that is often predetermined through capital improvement plans or transportation plans. For example, taxes and fees raised with a specific purpose, such as Washington County's transportation

[2] This phenomenon is exemplified in the examples section of this memo, which focuses on North Bethany, South Hillsboro and Pleasant Valley.

[3] In 2008, Metro convened infrastructure providers and local jurisdictions across the region to conduct an analysis on the region's infrastructure needs over a 30-year period.

development tax, can only be used to pay for transportation projects. Furthermore, local funding sources are constrained by geography, as a funding source raised in one area cannot be used to fund infrastructure in another. Washington County's Major Streets Improvement Program (MSTIP), approved by Washington County voters, cannot be used outside of Washington County. The examples of funding sources used in developments across the region highlight this fact that funding is often tied to a specific location.

BACKGROUND

Overview

Public investments like transportation and parks help shape the built environment and attract private investments in residential, commercial and industrial development. Private investment in existing urban areas utilizes the zoned capacity within the urban growth boundary to accommodate population and employment growth. As such, public investments in infrastructure are needed to spur private investment activity necessary to accommodate population and employment growth within the urban growth boundary. A 2009 advisory group on development in the region's centers and corridors[4] noted that, "the current level of public investment in compact urban development is not sufficient to address escalating costs of development" (Portland Metropolitan Studies, 2009).

Metro's capacity analysis using Metroscope modeling and market-based pro-forma tools has illustrated the impact of various newly-adopted public infrastructure investments (i.e. light rail) on increasing market capacity to accommodate additional development inside the existing urban growth boundary. However, even accounting for multiple targeted infrastructure investments in existing urban areas, the market is not expected to use 100 percent of zoned capacity within the existing urban growth boundary. As a result, the Metro Council might need to consider strategic urban growth boundary expansions as part of the overall strategy to accommodate projected growth for the upcoming 20-year period.

It is proven that infrastructure investments (like light rail) in focused locations can spur the private investments necessary to accommodate population and employment growth. However, there is limited funding available to support these investments. In that context, one of the factors determining where development can accommodate growth is where funding mechanisms are or will be available to deliver the infrastructure and services that support development.

Historically, infrastructure investments in new urban areas have been funded in a relatively straightforward manner with public sources such as property taxes and federal investments in highway and water infrastructure. Redevelopment in existing urban areas, which often involves reuse of brownfield sites or adding housing and employment to existing areas, represents a different model than development in new areas, and doesn't necessarily have the same funding options. In comparison to funding for new urban areas, these complexities can make it challenging to utilize various local and state funding sources to support infrastructure in existing urban areas.

[4] In the summer of 2009, a group of private finance and development experts were convened by Institute of Metropolitan Studies on Metro's behalf to discuss challenges to developing in centers and corridors. This finding came out of their conversation about the various challenges to compact urban development.

Private capital has also historically preferred financing development in new areas (i.e. more traditional single family housing or low density employment areas) compared to more compact urban development. Despite the fact that recent demographic, economic and environmental trends are favoring compact development in existing urban areas, redevelopment can be perceived to be a higher investment risk for capital investors (Portland Metropolitan Studies, 2009). The more traditional types of development, typically built for one owner/tenant, are seen as well known investment models with less complexity and therefore, fewer early financing requirements to minimize risk. On the other hand, sites with multi-lease or sale requirements typical of compact development, are required by investors to sell or lease a high percentage of the units very early on in the process to get funding from the banks. For example, a 2005 white paper on infill barriers notes that, "because infill and redevelopment projects are often concerned with providing amenities such as transit and pedestrian orientation, access to retail and employment opportunities and green space and residential dwelling units located above commercial development, the capital lending markets consider such projects as risky." (Infill Development: Barriers and Incentives, 2005) This makes private financing sources more expensive than the standardized capital available in new urban areas (Infill Development: Barriers and Incentives, 2005).

While the paradigm is beginning to shift as a result of many successful urban developments across the region, this perception remains. In addition, the recent financial crisis has increased the standard for banks to invest in projects, which makes it less likely to get private capital funding for non-traditional development types (Portland Metropolitan Studies, 2009).

Infrastructure Costs

In 2008, Metro convened infrastructure providers and local jurisdictions across the region to conduct an analysis of the region's infrastructure needs over a 30-year period. The resulting report, the 2008 Regional Infrastructure Analysis, divides infrastructure costs into three categories:

- **Local**—demand related to specific dwelling units
- **Community**—off-site infrastructure attributed to specific dwelling units
- **Regional**—infrastructure that benefits the entire region, though it is difficult to establish a nexus between the need and individual use.

Local and community infrastructure needs are typically addressed by a variety of local funding sources such developer contributions, system development charges and urban renewal. Regional infrastructure needs, are by definition not directly connected to individual use, and are therefore, not typically funded by local sources that are levied on individual development. Regional infrastructure, such as major arterials and bridges, regional water and sewer facilities and transit, are often funded by federal and state formula funding, grants and loans. This memo focuses primarily on local funding sources that are levied on development and used to pay for infrastructure that supports development. However, this memo provides some context on federal and state funding sources.

STATE AND FEDERAL FUNDING SOURCES

Federal Funding Sources

Federal funding sources for infrastructure, which typically fund large highway, water, transit and community development projects, have declined over the last 30 years. The Oregon Task Force in Land Use Planning report notes that, "in the 1970s, federal grants financed 75 percent of water and wastewater project costs and 80 percent of transportation projects. In the 1980s, Congress reduced these grants…and by the 1990s, federal funding sources were further reduced and converted from grants to loans (Oregon Task Force, 2009)." There are a variety of federal programs such as Community Development Block Grants and transportation funding through the Transportation Authorization Bill (SAFETEA-LU)[5] that allocate federal dollars to metropolitan regions, cities and counties based on a formula by population. However, these programs are unable to keep up with the growing needs and inflation across the country. For example, it is projected to cost $250 billion annually over the next 50 years to support "good" infrastructure and the U.S. currently spends about 40 percent of that amount each year (Metro, Regional Infrastructure Analysis, 2008).

State Funding Sources

State funding for infrastructure is provided through road taxes (i.e., state gas taxes, vehicle registration fees, and weight-mile taxes), bond measures, user fees and state lottery dollars. Oregon's gas tax has experienced a decrease in purchasing power relative to the costs for maintaining and building roads, sidewalks, transit systems. In addition, other infrastructure finance tools available to state government have not kept pace with the rate of inflation (Oregon Task Force, 2009).

The state of Oregon employs a set of loan and grant programs funded by these various sources to offset the cost of large infrastructure projects. These programs focus funding on state highways and other transportation projects, clean drinking water, brownfields, Port projects and other special public works projects. Typically state monies are distributed through Business Oregon, the State's Economic Development clearinghouse, or Oregon Department of Transportation, which establish specific criteria to prioritize certain projects.

- **Infrastructure Finance Authority:** The Infrastructure Finance Authority (IFA) was created to ensure that the state's infrastructure needs, namely those around safe drinking water and wastewater systems, are better identified and prioritized to most efficiently use the state's limited resources. The Infrastructure Finance Authority coordinates state funded loans or grants according to state priorities and criteria attached to certain federal funding streams that support the projects such as Community Development Block Grants (CDBG). The IFA assists communities to build infrastructure capacity that addresses public health safety and compliance issues as well as support their ability to attract, retain and expand businesses. The

[5] The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) was signed into law in 2005 and provides guaranteed funding for highways, highway safety, and public transportation totaling $244.1 billion.

IFA also works with municipalities, state agencies and property owners to prepare industrial land for certification.

The fund provides loans for wastewater and safe drinking water investments, community development investments and special works projects such as airport facilities, restoration of publically owned industrial lands, telecommunications facilities, railroads, roadways and bridges and others. The criteria by which infrastructure projects are funded by the state particularly through the Infrastructure Finance Authority vary depending on the federal source of the money. The Safe Drinking Water program's priorities are set by the Health Division and by compliance related issues. The CDBG program's priorities are listed in the Method of Distribution and approved by the U.S. Department of Housing and Urban Development (HUD). The IFA relies on local communities to identify their priorities, and then evaluates the requests through the state's perspective of what's important. According to utility providers, the IFA loans represent such a small percentage of the costs of serving growth in both new and existing urban areas.[6] In addition, the majority of the projects funded in one quarter of 2009 reflected a diverse focus on wastewater, manufacturing projects, community development projects and forest and wood projects (Business Oregon News Room, 2009).

- **Strategic Investment Program:** The Strategic Investment Program is a state economic development initiative that exempts a portion of large capital investments from property taxes for businesses that qualify. The program is available statewide for projects developed by businesses that often require expensive and expansive infrastructure investments, which commonly means manufacturing firms. Once the state enters into a deal with the company under the provisions of the Strategic Investment Program, the program allows for the assessed value of large industrial facilities to be capped at $100 million (with annual increases of three percent). Instead of property taxes, companies pay a community service fee to local governments equal to either 25 percent of the abated property tax savings or $500,000 annually, whichever is greater, up to two million dollars. This program has been instrumental in facilitating the investment and development of Intel in Ronler Acres and Genentech by Shute Road in Hillsboro among other projects. Since this program is designed to attract large and expansive capital investments, it is typically applied to developments on the edges of the region in less developed urban areas and isn't often utilized by companies locating in dense existing urban areas.
- **Funding for Brownfield Assessment and Cleanup:** There is much interest in the region in developing more brownfield sites in existing urban areas to accommodate employment and population growth; however, the funding sources that exist aren't robust enough to address redevelopment needs. As the Port of Portland's comparison of Brownfield and Greenfield development costs concludes that "there is a public value to developing brownfield sites, but there is little to no public money available to do so" (Mackenzie, 2005).

  The state created a brownfield redevelopment fund in 1997 that was re-capitalized in 2006 with nine million dollars to fund cleanup efforts across the state. The primary purpose of this fund is to assist local governments, non-profit organizations and private interests to evaluate

[6] Meeting of select water providers from around the region at Metro, July 28th, 2010

and clean-up contaminated sites for redevelopment (Financial Tools for Brownfield and Infill Redevelopment, 2009). Also, the State runs the Oregon Coalition Brownfields Cleanup Fund (BCF), a brownfields cleanup ongoing loan program, which is capitalized at $2 million. Funds for this program come from the Environmental Protection Agency.

LOCAL FUNDING SOURCES

The following funding sources available to local jurisdictions are strongly connected to specific developments. As such, they are levied on new development and help fund infrastructure to support new development. However, each jurisdiction is responsible for deciding how to utilize these funding sources and how heavily to rely on them. Each funding source described below is subject to specific limitations, which constrain its ability to support needed infrastructure in both new and existing urban areas.

Developer Contributions

The level of developer contributions utilized for a development depends on the particular infrastructure needed to make the land ready for development and are subject to an agreement between a jurisdiction and developers.[7] Developers typically are responsible for investing in on-site or off-site improvements that make the land ready for development. On-site improvements are internal to the development and off-site costs are improvements directly connected to the project. In new urban areas, the few developers who are responsible for contributing to the infrastructure needed to support the development will often realize the economic benefit of making investments in public infrastructure. On the other hand, the multiple property owners in existing urban areas who are responsible for contributing fees to support improvements probably won't realize the economic benefits in the same way.

For development in new urban areas, this involves creating a master plan, clearing and preparing a site, building internal roads, installing utilities, creating parks and open spaces, protecting environmentally sensitive areas, and building any other required elements for place-making. Internal collector streets and other improvements that provide district-level access can also be funded by the developer such as a new intersection or road that would primarily serve a project (Leland Consulting, 2008). For redevelopment in urban areas, this could involve cleaning up a brownfield site (which can be both publicly and privately funded), providing on-site amenities such as a plaza and, depending on the size and location of the site, paying for access and internal circulation within the site. These costs are incurred by the private developer without public funding assistance, though they can sometimes be traded for system development charge credits.

System Development Charges

Under Oregon Revised Statutes, System Development Charges (SDC) are subject to limitations on how they can be assessed and what capital projects they can fund. In addition, jurisdictions make policy decisions about how to assess SDCs on different types of development and what portion of

[7] This phenomenon is exemplified in the examples section of this memo, which focuses on North Bethany, South Hillsboro and Pleasant Valley.

the full cost of growth SDCs should charge. As a result, these considerations seriously impact the capacity of SDCs to fund infrastructure in both new and existing urban areas.

System Development Charges are fees levied on new development to finance improvements and services required to accommodate the development that are larger than just on-site improvements. Services funded by system development charges include transportation, water, sewer, stormwater and parks. Jurisdictions can charge two types of SDCs:

- **Improvement**—charges to fund new infrastructure to serve new development
- **Reimbursement**—charges to fund existing capacity in a system that will be used to serve new development. Oregon law mandates that SDCs can only be used for five infrastructure types: water, sewer, parks, stormwater and transportation. In addition, Oregon law requires that improvement SDCs be based on "a capital improvement plan, public facilities plan, master plan or comparable plan that includes a list of the capital improvements that may be funded with improvement fee revenues and the estimated cost and timing for each improvement."

There is flexibility in Oregon law as to whether SDCs assessed may include a reimbursement fee, an improvement fee, or a combination of the two. However, jurisdictions can only use system development charges for certain types of infrastructure and only for capital projects, not maintenance. In new urban areas, SDCs are typically used for needed basic infrastructure such as roads, parks and creation or increase of water and sewer capacity. To a point, infill development in existing urban areas, which increases the density of residential and commercial development served, can often leverage existing infrastructure services already in place through a hookup or access to existing services. This can take less of a toll on infrastructure services than development on the edge of urban areas. In addition to these technical considerations around SDCs, each jurisdiction decides how to assess SDCs on different types of development, how to use SDCs as incentives and what percent of the cost of infrastructure to charge is a policy matter.

Historically, SDCs have been assessed uniformly across service areas based on system-wide average costs and many jurisdictions in Oregon currently charge a uniform SDC rate for single family and multi housing developments, which can often have different impacts on the system. In order to reflect these differential impacts, a few jurisdictions including Portland, Beaverton, Oregon City and others assess differential SDC rates for transportation and parks based on development impacts. As a result, multi-family and more compact development in existing urban areas is charged less than detached single family houses in new areas, which provides incentives to build more compact development and assess fees that are more reflective of actual costs (Galardi, 2007).

Recently, however, more jurisdictions are revising their SDCs to more realistically reflect the differences in costs between development and redevelopment and the impacts of location on service costs. Gresham's parks, stormwater and transportation SDCs in the new urban areas of Pleasant Valley and Springwater reflect the higher costs required to extend and construct facilities in those areas. A survey undertaken by the City of Portland in 2007 reveals that transportation system development charges assessed by Gresham for the Springwater area were a region-high of $6,416 per residence (Economic Analysis for 2007 Update of Portland's Transportation System Development Charge). These SDCs are intended to support the high costs of serving the area

including a ramp to U.S. 26 priced at around $29 million and water, sewer, and stormwater systems that cost $40 million to $50 million (Mayer, 2009).

On the other hand, some jurisdictions use reduced or waived SDCs as an incentive to encourage compact development. For example, the City of Portland offers substantial reductions (by 30-60 percent) in the transportation system development charge for developments in the Central City located on or near a frequent service bus, streetcar, or light rail line or other projects that either meet minimum density requirements or are located in a commercial zone where no parking is required, no on-site parking is provided, and there are no drive-through facilities. In 2010, the Portland Bureau of Transportation also created two overlay zones where transportation SDCs can be added to the citywide SDC fee. The fees helped pay for the Portland-to-Milwaukie light rail project (Bjork, 2010).

In addition, no jurisdiction in the region charges SDCs that re-coup the full costs of providing services (Galardi, 2007). Instead, most cities and service districts charge about 30 to 50 percent of costs through SDCs (1000 Friends). Cities and counties are not legally prohibited from charging SDCs that re-coup the full service costs, but cities and counties usually charge less than full SDCs for many political and economic reasons.

This is underscored by the fact that each jurisdiction requires different levels of on and off-site improvements for infill development. As part of the development of Metro's 2008 Regional Infrastructure Analysis[8], a survey of over 8,600 residential building permits issued in recent years was conducted in selected jurisdictions in an effort to understand the on- and off-site improvements required for each type of development. The results of this survey, however, did not provide clear and consistent data from which to draw conclusions, due to differences in local jurisdiction's definitions of "infill/minor partitions" and "subdivisions/PUDs", and policies on when off-site infrastructure improvements are required. This highlights the significant variations in policies at the local level on charging developments for improvements to infill development sites. As such, reducing SDCs or charging differential SDCs is a policy decision for each jurisdiction and can be a significant barrier or incentive for different types of development.

Transportation Impact Fee/Transportation Development Tax

In addition to city-wide system development charges, both Clackamas and Washington counties charge Transportation impact fees/transportation development taxes and county-wide system development charges. Similar to SDCs, transportation impact fees are assessed on development to pay for growth and are used to fund specific projects identified in transportation plans (Washington). Clackamas County administers Transportation System Development Charges (TSDC), one-time fees for new or expanded developments in unincorporated Clackamas County. The fee, based on the number of vehicle trips a particular type of development generates, is

[8] As part of the work to develop the 2008 Regional Infrastructure Analysis, Metro hired consultants to study the infrastructure costs in different areas across the region and develop a report called *Comparative Infrastructure Costs: Local Case Studies, 2009*.

intended to cover the cost of transportation facilities needed to serve the new or expanded development and the people who will occupy or use the development.

Prior to 2008, Washington County's transportation impact fee was assessed uniformly on development regardless of whether it was located within cities, unincorporated urban or rural areas. However, in 2008 Washington County voters approved a Transportation Development Tax (TDT) to replace the transportation SDC. The Transportation Development Tax (TDT), a countywide tax applied to all new developments to pay for the transportation infrastructure needed throughout the county to accommodate growth, doubled the charge that developers pay for the impacts on the transportation system. The TDT was projected to bring in enough revenue to construct about 28 percent of the transportation infrastructure in the cities and county's 20-year transportation plans. Eligible projects are on major roads, including sidewalks and bike lanes, as well as transit capital projects like bus shelters.

Urban renewal

Urban renewal can be an especially effective and robust tool for funding infrastructure needed for development. In addition to Portland's aggressive urban renewal portfolio, cities across the region have used urban renewal to varying degrees and have experienced relative success with urban renewal districts in downtowns and employment areas. While typically in this region, urban renewal has been used primarily to fund development in existing urban areas, the requirements of urban renewal allow it to be used for both new and existing urban areas.

However there are some limitations on how urban renewal districts can be established and utilized. In order to establish an urban renewal district, a city must identify a blighted area that needs serious investment. Definitions of "blighted" include an area that lacks necessary infrastructure or has dilapidated infrastructure. However, there are political considerations associated with determining areas as "blighted" that can make it challenging for governments to establish urban renewal districts. In 2007, Washington County considered using it to pay for major infrastructure improvements in the North Bethany area, but faced opposition regarding determining the area as "Blighted" (Pitz, 2007).

In Oregon, jurisdictions with a population of 50,000 or higher can only put 15 percent of their total land or assessed value in urban renewal. For jurisdictions with a population of less than 50,000, this cap is at 25 percent. Roughly half the jurisdictions in the region have established urban renewal districts (including Hillsboro and soon to be, Beaverton[9]). Portland has almost reached their limit of 15 percent land area and assessed value in urban renewal. As a result of this law, there is a limit on how broadly urban renewal can be used in one jurisdiction and therefore, how much infrastructure it can fund.

In addition, urban renewal has been and continues to be a politically sensitive issue. Voters must approve an urban renewal district in their jurisdiction and over the years voters have rejected

[9] In 2008, the City of Beaverton's voters approved a city charter amendment that makes urban renewal available as a tool for the city to use, subject to voter approval. Although an urban renewal program is not yet adopted, it is expected that an urban renewal plan will be on the ballot in Beaverton in November 2010.

several attempts to establish urban renewal districts. Recently, Tualatin voters rejected an extension of an urban renewal district last year (Frank, 2010). Since urban renewal freezes the existing tax base and uses property tax increment for specific projects in the district, other special districts and taxing authorities may oppose urban renewal districts. The special districts working with the 2009 Legislature passed house bill 3056 which impacts the process for determining maximum indebtedness for a new URA and affects how much financial capacity an urban renewal district will have. House bill 3056 also imposes a cap on the value of tax increment revenue that could be collected by an urban renewal area in a given year with the difference being released back to the other taxing districts (EcoNorthwest, A Primer on Urban Renewal Legislation and House Bill 3056, 2009). In essence, this limits financial capability and revenue generation potential for urban renewal, which dilutes its ability to fund infrastructure for new and existing development.

Recently, Portland has received criticism for attempting to inject more flexibility into the utilization of urban renewal revenue by extending the life and geographic boundaries of successful urban renewal districts to pay for needed infrastructure in adjacent areas. The Portland City Council proposed expanding the River District boundaries into Old Town and Chinatown, other downtown pockets and projects in the David Douglas School District. This expansion was intended to pay for a variety of needed infrastructure projects including investments in a post office complex in Northwest Portland, a service center for the homeless in Old Town, downtown's low-income housing stock, Multnomah County offices and a new school for David Douglas. However, this proposal was met with much political and citizen opposition and resulted in a lawsuit (Haberman, 2009).

Street Utility Fees

Street utility fees, which are sometimes called transportation utility fees, are monthly fees collected from residents and businesses based on their impact on the transportation system. Residential and commercial impacts on the transportation system are calculated according to number of trips a specific land use generates. Street utility fees, which are found across the region, are used exclusively for rehabilitation and maintenance of city streets and revenues cannot be used to fund capital projects to expand the transportation system. This provision makes them ineligible to be considered as useful tool to fund capital infrastructure needed to support development throughout the region.

Local Improvement Districts/Business Improvement Districts

A Local Improvement District (LID) is a method by which a discrete group of property owners can share in the cost of infrastructure improvements such as installing water and sanitary sewer lines or transportation improvements. A Business Improvement District applies the same concept to businesses in a given area. By law, LIDs can only be utilized by cities in the region. Most LIDs involve improving a street, building sidewalks, and installing a stormwater management system and are financed by special assessments on property taxes. In addition, special assessments are used to finance reconstruction of deteriorated, substandard, or outmoded facilities, both in older developed areas and in areas newly annexed to a city. What makes LIDs unique is that the costs of the infrastructure improvement are levied on the property owners who directly benefit from the

improvement and costs are apportioned according to the estimated benefit that will accrue to each property.

According to Legislation behind LIDs, local governments can use special assessments for LIDs based on three main factors of benefit. These principles include direct service that benefits a property (i.e. a road providing access), obligation to others (i.e. investing in infrastructure that allows for property to be developed without harming adjacent sites and equal sharing, which means that since each property owner benefits from a sidewalk, they are each responsible for it (Basics about Local Improvement Districts).

Local Improvement Districts require a majority vote of the people who would be taxed, which can limit their success of passing and subsequently funding infrastructure needs. In addition, special assessments can only be levied on the on the property owners that directly benefit from the improvement, which limits the type of improvement that can be financed through this method to ones that can be easily attributed to measureable benefits on the property values of select nearby properties.

County Service District

Though LIDs are unavailable to counties, state statute enables counties to establish Special Districts, which operate similarly to a LID. Special District Funds generated can be used for construction or operation of capital facilities. A district's assessments can be based on property value, in which case, as a property tax, it is subject to the tax limits associated with Measure 50/47. This funding mechanism was discussed as a possibility for North Bethany, with a focus on alternative assessment formulas based on factors such as land area, trip generation or proximity to facilities (Hovee, 2008). Since these mechanisms have been rarely used, the political and legal feasibility of these options has not been frequently tested.

EXAMPLES: NEW URBAN AREAS

The following examples of the sources utilized to fund development-supportive infrastructure in a set of new and existing urban areas illustrates the different funding challenges and opportunities for each community. In addition, these examples highlight how various funding sources can be developed and applied specifically to a district like a system development charge overlay, but not necessarily to the larger community.

North Bethany, Washington County Funding Sources Proposed to Finance $69 million for Transportation (Schmidt, 2010)

a

- $11 million to be raised by establishing community service district in 2011 from MSTIP funds
- $10 million over a 20-year period from a transportation fund collected by countywide property taxes

- 75 percent of North Bethany transportation development taxes to generate $24 million
- Supplemental development fee of over $6000 for a single family home in the area to raise $23 million
- $1.5 million from fund that developers were required to pay into when developing properties around Springville Road (Bjork, 2010).

North Bethany is a newly urbanizing area in Washington County that was brought into the urban growth boundary in 2002. The area is planned primarily as a residential community with adjacent commercial and institutional uses. Major infrastructure investment costs have complicated development in this area and Washington County has worked over the years to identify appropriate and robust funding sources to facilitate the development of this area. Under the current market at the time, land prices were exceptionally high and developers paid top dollar for land under the assumption that the traditional funding arrangement for infrastructure would apply (http://friendsofrockcreek.net/_pdf/KenT_NorthBethany_Presentation_20090513.pdf). This limited their ability and willingness to pay for the huge infrastructure costs needed to make the area ready for development (Gorman, 2007).

Since there were few existing facilities in the area when it was brought into the UGB, there's a wide gap between actual costs and conventional revenue resources. As identified in the North Bethany Concept Plan, the infrastructure necessary for the development of North Bethany is estimated to cost $520 - $540 million in 2007 dollars with transportation needs in the area currently comprising 40 percent of all estimated infrastructure needs (EcoNorthwest, 2009). This underscores the challenge posed by the fact that current charges levied against new development are insufficient to fund the creation of an entire transportation network (Hovee, 2008). A 2007 consultant report found numerous on- and off-site transportation needs created by North Bethany development could equal $289 million, but now the project list has been narrowed to $103 million (Schmidt, 2010).

In previous years, the County has considered the creation of an urban renewal area, a designation that elicited concern from several special tax districts about taking away revenue for service to the area (Pitz, 2007). Currently, the Washington County Commission is focusing on a mix of financing and funding strategies including the creation of a tax district, utilizing county transportation money and increased development fees passed on to homeowners. This mix of strategies would generate $69 million to pay for 12 projects including the construction of a major new road in North Bethany and improvements to Northwest Springville and Kaiser Roads (Schmidt, 2010). Since most of the infrastructure costs are needed up front before development can occur, the County will probably have to bond against future revenue streams—either from SDCs charged to developers or from future new taxes charged to Washington County residents.

South Hillsboro Funding Sources Proposed to Finance $235 million for transportation

- Private developers will pay $164 million to fund local neighborhood streets, collector roads and part of Cornelius

Pass Road and will re-coup some of these costs through an area-specific impact fee assessed to all new development in the area (Leland Consulting, 2008).

- Hillsboro will finance the remaining $39 million with the proposed South Hillsboro Enhanced Traffic Impact Fee that could produce as much as $32.5 million to help fund public improvements.

South Hillsboro is a new urban area that includes land inside and outside the urban growth boundary and is being planned for primarily residential and retail and office uses. The South Hillsboro Community Plan identifies almost $300 million in total infrastructure needs including $203 million of major transportation costs and over $50 million in parks costs needed to implement the full build-out of the 1,566-acre plan area (Hovee, 2008).

While existing connection fees and system development charges are expected to generate sufficient revenues to finance public sewer, water and stormwater infrastructure in the South Hillsboro planning area, additional sources of funding will be required to fully finance public transportation and parks infrastructure. Current developers have agreed to invest in local streets and roads, but they will be reimbursed in part by an area specific impact fee, separate from the County transportation impact fee. This will ensure that all South Hillsboro developers share the cost of providing district-level improvements. The city is planning to finance the rest through the South Hillsboro Enhanced Traffic Impact Fee.

2007 Pleasant Valley Agreement—Funding Sources Proposed to Finance $30 million for Infrastructure

- The three major developers that owned about 120 acres in Pleasant Valley agreed to pay $14 million upfront for new infrastructure including wastewater and water lines, improving transportation and creating parks. The developers will be later reimbursed through credits for System Development Charge

City of Gresham website, http://greshamoregon.gov

- The City of Gresham will pay nearly $16 million for wastewater improvements—with money budgeted from capital improvement plans and loans.10

Pleasant Valley, a 1,400-acre parcel between Gresham and Happy Valley that was brought into the urban growth boundary in 1998, is planned as a residential community with a town center and employment zones. The land, which is split between the cities of Portland and Gresham, lacked the infrastructure required for development to occur, especially urban roads, water and wastewater systems. The Pleasant Valley Plan District calculates the 30-year costs of infrastructure needed in the area as around $450 million (Gresham, 2005).

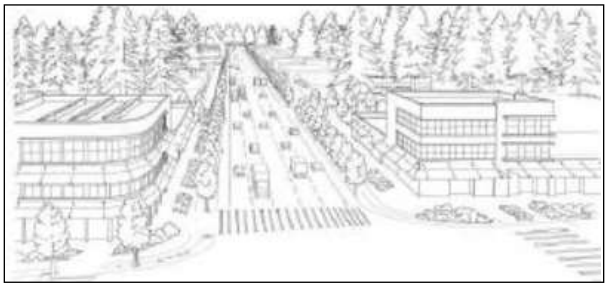
[10] Mara Stine, Gresham Outlook, Development begins in Pleasant Valley, July 2007

In 2007, city officials worked out a deal with a handful of developers to finance development for phase one, which spans 280 acres and will generate more than 1,200 homes and 6 acres of retail space. According to the agreement, the three major developers that owned about 120 acres in Pleasant Valley – agreed to pay $14 million upfront for new infrastructure, including a wastewater line, extending two major water lines and a stormwater management system, removing an unsafe curve from 190th Avenue and making it a two-way road, creating two parks and building environmentally sensitive green streets that better manage stormwater. Gresham planned to later reimburse the developers through credits for System Development Charges (Stine, 2007).

The amount charged to developers was around $25,000 per lot, a majority of which would be paid back over time as a credit for each home they built (Redden, 2009). The agreement, which was finalized in July 2007, fell apart when the housing market crashed and the developers went out of business. Due the downturn in the housing market and the subsequent deterioration of the agreement for funding infrastructure, Pleasant Valley development has slowed. As of 2009, Gresham has completed the sewer improvements for Phase I of the development of Pleasant Valley, making around 120 acres of land ready for development.

Coffee Creek, Wilsonville Potential Funding Sources for Infrastructure

- Developers will pay for local streets and utility connections
- A mix of public and private funding and financing will be used for on- and off-site improvements.



Drawing taken from the Coffee Creek Master Plan

The Coffee Creek area in Wilsonville is a newly urbanizing area that is being planned as an employment area and is designated as a Regionally Significant Industrial Area. According to the Coffee Creek Master Plan, major public infrastructure items including roads, trails, water, sewer, and storm water facilities are estimated to cost approximately $7.6 million over the initial five years. Additional capital costs are expected to require another $26.6 million for on-site public facility investments (excluding local streets, which are assumed to be paid and constructed by private developer(s). The Master Plan also recommended $16.7 million in road costs and the $4 million rail road crossing improvement in Coffee Creek (Otak, 2007).

According to the area's Master Plan, developers will be responsible for providing local streets and utility connections to trunk line systems. However, to maintain flexibility, the plan focuses primarily on collector and arterial roadway improvements, and water and sewer trunk lines and does not identify specific locations for local connections.

EXAMPLES: EXISTING URBAN AREAS

The following case studies highlight the challenges and opportunities of accessing funding for infrastructure improvements in existing urban areas. There are many areas within the urban

boundary that lack basic infrastructure like sidewalks. With highly fragmented land ownership, funding infrastructure in these areas often involves multiple property owners each concerned with only a small portion of the cost. On the other hand, when areas like Orenco Station are developed as a single large greenfield site by one company, it can be easier to facilitate and fund infrastructure improvements. Where property ownership is more dispersed and existing buildings are scattered across the terrain, it's extremely difficult to make changes to an area.

East Portland—Available Funding Sources

- System Development Charges
- Lents Urban Renewal District—$245,000,000 in maximum indebtedness (Annual Urban Renewal Report Covering Fiscal Years 2008-2009 and 2009-2010)

Assurety NW Headquarters in the Lents Town Center, from PDC's website, http://www.pdc.us/ura/lents.asp

The East Portland area, east of 82nd Avenue, encompasses many neighborhoods including Lents and Hazelwood and was annexed into the City around 20 years ago. As such, this area has never enjoyed the investments in infrastructure—sidewalks and other transportation in particular—that have been built in inner Portland neighborhoods and throughout the region. As the area has experienced tremendous growth, it is lagging behind in streets, parks, schools, community centers and other improvements necessary to accommodate the additional people (Redden, East Portland Already Feels Growing Pains, 2007). As East Portland continues to urbanize and experience high rates of infill on large lots, this lack of infrastructure is becoming a more significant issue. In addition, projects in East Portland received less than 10 percent of citywide federal stimulus money (Mirk, 2010).

New development in this area incrementally improves streets and sidewalks, but the network is incomplete, and facilities are overly burdened. This type of infill development contributes in a piecemeal fashion to the completion and improvement of the street network, including sidewalks. In some cases, improvements are required for the developing property, but the improvement may be isolated in a larger area that lacks full improvements, which can act as a barrier to development activity. Developers must cover the cost of their street improvements, but lack assurance that adjacent properties will make similar improvements in a timely manner. In addition, while costs and risks of investing in infrastructure are high, each property owner won't necessarily realize the economic benefits of making the investments and in fact, could experience negative pricing effects of the lack of infrastructure.

The public funding tools available to fund infrastructure improvements in East Portland include urban renewal in Lents, system development charges, and portions of the city's general fund. The Lents urban renewal district, which was established in 1998, covers over 2800 acres, has a maximum indebtedness of $245 million. The last date to issue debt is June 2020. As of June 30, 2009 $58.5 million of maximum indebtedness had been issued. The district is earning about seven

to eight million in property tax income, but in order to get maximum revenue out of the district, more investments need to be made that increase the increment generated. Finally, since there are so many property owners in the district, the City can't develop an agreement with developers to pay for infrastructure improvements.

Gateway—Available Funding Sources

- System Development Charges
- Gateway Urban Renewal District—$164 million in maximum indebtedness (Annual Urban Renewal Report Covering Fiscal Years 2008-2009 and 2009-2010)

The Russellville Commons Transit Oriented Development Project in Gateway Regional Center

Gateway is another area within the Portland boundaries that needs significant infrastructure improvement, especially in the transportation realm, but lacks the cohesive comprehensive strategy to achieve it. Despite its central location and access to major transportation nodes, Gateway has struggled to develop a cohesive sense of place. The street grid in Gateway is bigger and the intersections fewer than in other neighborhoods in Portland, which makes creating a pedestrian-oriented environment more challenging and expensive. Paying for a new, dense street network would financially burden property owners in the area

Even so, developers foot the cost of many infrastructure additions, which increase the cost to build, translating into either smaller units or higher prices (Ryan, 2007). And in Gateway, where market rate units are priced under $200,000 is key, costs for these improvements are more than the property owners or developers can pay and are not justified by the revenue generated by the redevelopment projects (Ryan, 2007). According to a developer in the area, other challenges include land assembly, which the City has since examined as part of the Gateway redevelopment strategy, and creating street access to large parcels (Ryan, 2007).

The Gateway Urban Renewal District was established in 2001 and is capable of financing up to $164 million for public improvements over 20 years. However, lack of development limits the revenue generated by the district. The district comprises 659 acres, with a maximum indebtedness of $164.2 million of which $21.0 million has been issued through 2009. In 2007, a super local improvement district (LID) was considered as part of the Central Gateway Redevelopment Plan to defer infrastructure costs of new projects as well. Currently, PDC is considering expanding the Gateway boundary along a corridor bounded by Northeast Halsey and Southeast Stark streets from 106th to 122nd avenues to place more commercially developable property in the district (Perlman, 2010).

South Waterfront District, Portland 2003 Development Agreement

- In total developers invested a total of $1.6 billion in up front capital and took on payment obligations to service debt on increased TIF (Curl, 2003).
- OHSU paid $17 million for the tram (City Council approves third amendment to South Waterfront Development agreement, 2003)
- PDC paid $274 million with funding from urban renewal and advance borrowing on projected tax increment for fiscal year 2008/2009 (Hovee, 2003).
- The balance of public funding came from local improvement districts; Portland Department of Transportation system development charges; and other federal, state and regional dollars.

2010 North Macadam Transportation System Development Charge

- In 2010, the North Macadam Transportation System Development Charge Overlay was adopted to raise about $22.5 million over 20 years to pay for needed transportation infrastructure and to be used as match for state and federal projects.

South Waterfront is an existing urban area that is being redeveloped from an industrial area into a residential and employment hub for Oregon Health Sciences University (OHSU). The total projected cost of the infrastructure needed to serve development in the area was around $1.9 billion. Though the area was designated as an urban renewal district in 1999, in 2003 the City of Portland signed an agreement with private developers and OHSU to fund the infrastructure needed to redevelop the area. The three principal parties developed and signed a development agreement in 2003 that explicitly outlined funding responsibilities and strategies, which was ultimately feasible because the small number of interests and landowners involved—the City, OHSU and North Macadam Investors. The agreement, which formalized obligations for redevelopment of a 31-acre property in the center of the South Waterfront District, called for public investment in streets and in exchange for the developer's providing land for green space, affordable housing and require construction to attain the highest in environmentally sustainable standards (Curl, 2003).

In 2008, the city of Portland proposed a transportation overlay district, the North Macadam Transportation System Development Charge Overlay District as part of a North Macadam development strategy of $194 million (North Macadam Transportation System Development Charge Overlay Presentation, 2009). The SDC overlay district, which was adopted in 2010, will help address existing transportation needs in the area (Redden, Road Fees May Leap, 2009). The neighborhood, which was built in a former industrial zone with few existing streets, face transportation challenges as a result of regional and local growth in an already constrained transportation system. In addition, part of the promise of this densely planned area is to provide residents and workers with a variety of transportation options, including pedestrian and bicycle paths, a Portland streetcar link and a MAX light-rail line crossing the river. Paying for the improvements is proving difficult, however, in part because of city policies governing transportation system development charges. To address this, a transportation system development

charge overlay is estimated to raise $22.5 million toward the transportation projects (Moore, 2009). In 2008, this fund was used to fund $10 million portion of local match to Portland Milwaukie Light Rail project.

Redevelopment of Reynolds Aluminum Brownfield Site, Troutdale Funding Sources—$36 million

- ODOT grant—$1 million
- ODOT funding—$24 million
- State loans—$11.7 million (Parker, 2010)

The 350 acre Troutdale Industrial Park has been redeveloped by the Port of Portland and the City of Troutdale from an EPA Superfund site into a thriving industrial area home to FedEx offices. The Port of Portland purchased 700 acres of the site for $17 million and made over $30 million in infrastructure improvements for utilities and internal streets and transportation access.

The Port utilized a variety of public funding sources to pay for the cleanup and infrastructure required to make the site shovel ready. Specifically, the Port received a $100,000 grant from Oregon Department of Parks and Recreation for the Reynolds Trail and $1 million grant from ODOT Immediate Opportunity Funds for transportation improvements. The Port also received $24 million from ODOT for improvements at interchange at I-84 and $11.7 million from the state in loans including $3 million from Port Revolving Fund and $8.7 million from Special Public Works Fund (Parker, 2010).

CONCLUSION

Numerous local and regional reports over the past few years have highlighted the expense and challenge to fund infrastructure no matter where it is located. In addition, the funding sources for infrastructure at the federal and state level are decreasing and local funding sources are constrained by state law. For local sources, there are a variety of considerations that impact whether adequate funding sources will be available to support needed infrastructure including the location of the development, the number of developers involved and their willingness to invest up front capital, the political will of the jurisdiction and the fragmentation of the land in question. Finally, funding sources used in the region today are limited by geography and category of expenditure and are not interchangeable.

However, investing in infrastructure is an important element of supporting residential and employment growth. Furthermore, investing in infrastructure strategically in existing urban areas or new areas adjacent to existing urban areas creates a significant public good. Facilitating

redevelopment in existing urban areas ensures that more farmland and forestland is protected and preserved and investment in existing infrastructure is leveraged where possible.

The examples highlighted here underscore the point that each location has its own opportunities and challenges relating to funding infrastructure and that several funding streams can only be applied to the location in which they are levied. In addition, examples like North Bethany highlight the challenges of trying to incorporate regional impacts from development into infrastructure funding strategies. In that context, development that leverages existing infrastructure in place has a smaller impact on regional systems. However, as examples of challenges in Gateway and East Portland highlight, challenges for funding infrastructure improvements in existing urban areas include multiple property owners/potential developers and the need for piecemeal improvements that carry limited financial benefits for developers. These factors mean that infrastructure needs must rely more fully on traditional tools like system development charges and urban renewal, which are each limited in their own way.

Due to all the challenges and complexities associated with funding infrastructure from private development, taxes and impact fees, solutions will need to be tailored to individual locations. The region needs to maximize public resources needed to maintain and improve existing communities and accommodate growth. Success should be measured through the lens of efficiency and the quality of the communities that are fostered.

SOURCES

1000 Friends, of Oregion. *Questions and Answers about Oregon's Land Use Program.* Retrieved July 29, 2010, from 1000 Friends of Oregon: http://www.onethousandfriendsoforegon.org/resources/downloads/qa/sdcs.pdf

Agency, T. M. (2005). *Infill Development: Barriers and Incentives.* Reno.

Bjork, N. (2010). North Bethany development gets push. *Daily Journal of Commerce* .

Bjork, N. (2010). Portland Adds Two System Development Charges. *Daily Journal of Commerce* .

Business Oregon News Room. (2009, August 25). Retrieved July 29, 2010, from Business Oregon: http://www.oregon4biz.com/news.php?a=11

City Council approves third amendment to South Waterfront Development agreement. (2003). Retrieved July 29, 2010, from Portland.com: http://www.portland.com/portland/press-releases/city-council-approves-third-amendment-to-south-waterfront-development-agreement/

Portland Development Commission. (2010). *Annual Urban Renewal Report Covering Fiscal Years 2008-2009 and 2009-2010.* Portland.

Galradi Consulting. (2007). *Promoting Vibrant Communities with System Development Charges.* Metro.

Curl, A. (2003). South Waterfront District Agreement Taking Shape. *Daily Journal of Commerce* .

Economic Analysis for 2007 Update of Portland's Transportation System Development Charge.

EcoNorthwest. (2009). *North Bethany Concept Finance Plan.* Portland.

EcoNorthwest. (2009) *A Primer on Urban Renewal Legislation and HB 3056.*

Frank, R. (2010). Tualatin Drops Urban Renewal Extension amid Community, Fire District Opposition. *The Oregonian* .

Gorman, K. (2007). The Puzzle of North Bethany. *The Oregonian* .

City of Gresham. (2005). *Pleasant Valley Plan District.* Gresham.

Haberman, M. (2009). Two Lawsuits Stall Portland's Efforts to help the Homesless and Create an Employment District. *The Oregonian* .

Hovee, E. (2003). *North Macadam Urban Renewal Area Return on Investment Update.* Portland.

Hovee, E. (2008). *South Hillsboro Infrastructure Funding Review.* Portland.

http://friendsofrockcreek.net/_pdf/KenT_NorthBethany_Presentation_20090513.pdf. (n.d.). Retrieved July 29, 2010, from http://friendsofrockcreek.net/_pdf/KenT_NorthBethany_Presentation_20090513.pdf

Leland Consulting Group. (2008). *Infrastructure Financing Strategy: South Hillsboro Planning Area.* Portland.

Mackenzie Group. (2005). *Brownfield/Greenfield Development Cost Comparison Study.* Portland: Port of Portland.

Mayer, J. (2009, December). Gresham Will Consider Downsized Development at Springwater. *The Oregonian* .

Mayer, J. (2009). Gresham Will Consider Downsized Development at Springwater. *Thr Oregonian*.

Metro. (2009). *Comparative Infrastructure Costs: Local Case Studies*.

Metro. (2008). *Regional Infrastructure Analysis*.

Mirk, S. (2010). East of Eden. *Portland Mercury* .

Moore, S. K. (2009). North Macadam Area Headed for a Makeover. *SW Community Connection* .

Office of Oregon Legislative Research and, P. (n.d.). *Basics about Local Improvement Districts.* Retrieved July 29, 2010, from Oregon Legislature: http://www.leg.state.or.us/comm/commsrvs/district.pdf

Oregon, B. (2009, October 17). *Financial Tools for Brownfield and Infill Redevelopment.* Retrieved July 29, 2010, from Northwest Environmental Business Council: http://www.nebc.org/Documents/brownfields09/w-homolac.pdf

Otak. (2007). *Coffee Creek Master Plan.* Wilsonville.

Parker, R. (2010, March). (B. Cohen, Interviewer)

Perlman, L. (2010). East Portland UR boundaries may change. *Mid-County Memo* .

Pitz, R. (2007). North Bethany Development Plan Could Have an Urban Feel. *Beaverton Valley Times* .

Task Force on Land Use Planning. (2009). *Final Report to the 2009 Oregon Legislature.*

Portland Metropolitan Studies, I. o. (2009). *Acheiving Sustainable Compact Development in the Portland Metropolitan Area: New Tools and Approaches for Developing Centers and Corridors.* Portland.

Redden, J. (2007). East Portland Already Feels Growing Pains. *Portland Tribune* .

Redden, J. (2009). Price of Growth: $10 Billion. *Portland Tribune* .

Redden, J. (2009). Road Fees May Leap. *Portland Tribune* .

Ryan, A. (2007). Portland's Gateway is a Pedestrian District, but one Without. *Daily Journal of Commerce* .

Schmidt, B. (2010). North Bethany's Future Relies on Corralling Transportation Money and Raising New Taxes and Fees. *The Oregonian* .

Stine, M. (2007). Development Begins in Pleasant Valley. *Gresham Outlook* .

Portland Bureau of Transportation. (2009, April). *North Macadam Transportation System Development Charge Overlay Presentation.* Retrieved July 29, 2010, from City of Portland: efiles.ci.portland.or.us/.../City%20Auditor%20-%20City%20Recorder%20-%20Council%20O~m%20Transportation%20System%20Development%20

Washington, C. (n.d.). *Transportation Development Tax*. Retrieved July 29, 2010, from Washington County: http://www.co.washington.or.us/LUT/Divisions/CurrentPlanning/Transportation/transportation-development-tax.cfm