The City of Portland is considering the formation of local improvement districts (LIDs) to fund a portion of costs anticipated for an aerial tram, extension of the Central City streetcar and Macadam Avenue access improvements. This memorandum is intended to provide a preliminary review of economic costs and benefits to affected property owners.1 Topics covered are:

Summary/Cost/Benefit Assessment
Local Improvements Districts Proposed
LID Benefits
Comparable Central City Experience

SUMMARY COST/BENEFIT ASSESSMENT

Principal findings of this preliminary LID economic analysis follow:

• A total of approximately $10.4 million in LID funding is proposed – to cover a portion of the costs of an aerial tram, Phase IV-V Central City Streetcar extension, and Macadam Avenue access improvements.

• Property owner assessments will range from an estimated $0.93 to $5.99 per square foot of developable land area – with the high end of the assessment range for properties located closer to the tram and/or Macadam Avenue access improvements.

• This $10.4 million in private LID funding is expected to leverage $219 million in public and $1.9 billion in combined public-private investment by 2020 – representing $184 in added public-private investment for every $1 in up-front LID commitments.

• Land values generally can be expected to increase by more than the amount of the LID investment – with the amount of gain depending on property specific circumstances including such factors as property acquisition price, net developable land area, and density of development realized. For the examples provided in this analysis, potential
increases in land value anticipated with redevelopment range anywhere from $12-$63 per square foot, more than compensating for the $1-$6 per square foot range in LID costs.

- LID payment is not expected until improvements are completed and can be made in ensuing installments payments over up to a twenty year period.
- The proposed North Macadam LIDs are comparable in scale to earlier LIDs for the Oregon Convention Center and downtown portion of the Central City Streetcar – all at less than 1% of property valuation and new investment potential.

**Local Improvement Districts Proposed**

Local improvement districts being considered to fund a portion of infrastructure necessary for North Macadam development are:

- **Aerial Tram** – An approximately $4.5 million LID covering the South Waterfront district from the Marquam Bridge to Bancroft Street. A three-tiered rate structure is proposed for this area – ranging from $0.50 to $2.92 per square foot of developable land area (depending on distance from the tram terminus). Note: An additional $5 million of LID funding is proposed for assessment on OHSU Marquam Hill property. This additional LID amount, applied only to OHSU, is not directly included in this analysis.

- **Central City Streetcar Extension** – A Phase IV LID covers the area south to Gibbs at an estimated cost of $2.02 million. Phase V extends the streetcar to its ultimate terminal, with a separate LID south to Bancroft for $1.37 million. An assessment of $1.00 per square foot for developable area is proposed within both Phase IV and V boundaries. Note: Phase III LID funding from PSU to River Place – estimated at $3 million – is not directly included with this analysis.

- **Macadam Access Improvements** – An approximately $2.5 million LID covering the district from the Marquam Bridge south to Bancroft. A three-tiered rate structure is proposed, ranging from approximately $0.44 to $1.50 per square foot of developable area (depending on distance from improved intersection portals via Macadam Avenue at Gaines and Curry).

**Typical Assessments:** Depending on location and LID assessment rates applied, a total of 18 different LID rates are possible – as the combined totals of tram, streetcar and Macadam Avenue assessments. The range is from $0.93 per square foot (north end) to $5.99 (for two Central District blocks associated with RCI/NMI development).
Three categories of LID rates have been identified for purposes of analysis and discussion:

- **Low** assessment category properties have assessments of $2.00 or less per square foot – with the lowest at $0.93 per square foot. These properties comprise 19% of assessable acreage – located primarily at the northern edge of the district or on property that has been planned for public use.

- Properties in the **middle** impact group are those with assessments between $2-$4 per square foot – mostly at the lower end of this range. These properties comprise 55% of North Macadam assessable area including Central District NMI parcels on the river side of Bond and properties situated in the southern part of North Macadam.

- **High** impact properties have assessments ranging above $4 to just under $6 per square foot – and represent 26% of the assessable acreage total. These are properties that also are expected to receive the most direct benefits – notably from proximity to the Central District tram terminus as well as Macadam Avenue access improvements at Gaines and Curry.

### LID Benefits

Costs of the proposed North Macadam local improvement districts are counterbalanced by substantial benefits to affected property owners. LID benefits addressed by this analysis relate to leveraged public and private investment, increased land valuation, timing and payment options.
**Leveraged Investment:** The proposed North Macadam local improvement districts (LIDs) are part of $1.9 billion in anticipated public and private investment anticipated through 2020. Total South Waterfront area LID investment for the projects being considered amounts to approximately $10.4 million – less than 1% of planned North Macadam investment.

**North Macadam/South Waterfront LID Investment Leverage**

<table>
<thead>
<tr>
<th>Investment Amount ($ millions)</th>
<th>Leverage per LID $</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Public + Private Investment</td>
<td>$1,908.1</td>
</tr>
<tr>
<td>Private Development Investment</td>
<td>$1,689.1</td>
</tr>
<tr>
<td>Public Investment</td>
<td>$219.0</td>
</tr>
<tr>
<td>From LID Funding</td>
<td>$10.4</td>
</tr>
</tbody>
</table>


In effect, every dollar of LID investment from the North Macadam/South Waterfront area serves to leverage $21 in total public investment and $163 in private development investment – for a combined leverage factor of 184:1.

It is noted that the above leverage calculations estimate exclude the added additional $5 million of LID funding proposed for assessment on OHSU Marquam Hill property and the corresponding added building and equipment investment anticipated by OHSU on Marquam Hill. Also excluded from the investment side of the above analysis is approximately $1.2 billion in Marquam Hill development planned by OHSU – outside the North Macadam/South Waterfront project area.

In summary, while this property owner investment seems relatively small, it does occur *up-front* at a time when alternative funding sources are not readily available. Yet this initial owner contribution is essential to construct infrastructure critical for resulting public/private investment commitments to be secured.

**Increased Land Valuation:** For the purposes of enacting one or more local Improvement Districts, Portland City Council typically makes a finding that the financial benefit of the LID is equal to or exceeds the anticipated assessment to the property owner. So, a pivotal question addressed by this report is whether land values in North Macadam/South Waterfront can be expected to increase by more than the approximate $1-$6 cost of the LID (depending on location).

Experience both in North Macadam and other Central City areas indicates that economic benefits can be expected to substantially outweigh costs. The land value supported can be linked to density (or FAR) of development. The following example illustrates a range of added (or enhanced) land values that might be expected at:

- Different *going-in* land costs – shown at $10 and $20 per square foot
- Anticipated FAR of development – with the low FAR equal to the current expected district-wide average and high FAR comparable to NMI/RCI development density.
With the example shown, the increase in land value anticipated with redevelopment (with value increases ranging anywhere from $12-$63 per square foot) more than compensates for the $1-$6 per square foot LID cost.5

### Land Value Enhancement

<table>
<thead>
<tr>
<th>Factor Affecting Land Value Increase</th>
<th>Low FAR</th>
<th>High FAR</th>
<th>Low FAR</th>
<th>High FAR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Going In Land Cost/Valuation:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of Site Area (Going-In)</td>
<td>$10</td>
<td>$10</td>
<td>$20</td>
<td>$20</td>
</tr>
<tr>
<td>% of Site Assessed (Average)</td>
<td>67%</td>
<td>67%</td>
<td>67%</td>
<td>67%</td>
</tr>
<tr>
<td>Cost Attributed to Assessable Land</td>
<td>$15</td>
<td>$15</td>
<td>$30</td>
<td>$30</td>
</tr>
<tr>
<td><strong>Finished (Ready-to-Build) Valuation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value per FAR</td>
<td>$12</td>
<td>$12</td>
<td>$12</td>
<td>$12</td>
</tr>
<tr>
<td>Anticipated FAR</td>
<td>3.5:1</td>
<td>6.5:1</td>
<td>3.5:1</td>
<td>6.5:1</td>
</tr>
<tr>
<td>Value per Finished Site Area</td>
<td>$42</td>
<td>$78</td>
<td>$42</td>
<td>$78</td>
</tr>
<tr>
<td><strong>Land Value Enhancement:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase in $ Value</td>
<td>$27</td>
<td>$63</td>
<td>$12</td>
<td>$48</td>
</tr>
<tr>
<td>% Increase</td>
<td>180%</td>
<td>423%</td>
<td>41%</td>
<td>161%</td>
</tr>
</tbody>
</table>


As might be expected, the greatest increase in land values can be expected for property owners who have (or will) buy into the area at a relatively low cost and develop their properties to the highest density of development that is financially feasible. However, property owners in a wide variety of circumstances can expect to benefit with site reuse and development.

Property owners located further from the aerial tram terminus and Macadam Access improvements will be assessed substantially less than those within close proximity. But they can still expect to benefit – particularly as Central District development serves as a catalyst for future development both to the north and south. This development potential simply is not anticipated to occur without the upfront transportation improvements.

Of particular importance to OHSU is the aerial tram – as the transportation connector between its current Marquam Hill campus and its new facilities planned for North Macadam’s Central District. In the absence of the tram investment, OHSU development plans on Marquam Hill would likely be scaled back and OHSU related development in North Macadam would not occur. Related NMI residential and mixed use development in the Central District also would be effectively curtailed, substantially delayed, or rendered infeasible.

With the tram connection between Marquam Hill and North Macadam, plans for Central District developments of OHSU and NMI/RCI can proceed, capturing what currently appears as the most viable or perhaps only near term opportunity for significant redevelopment investment in North Macadam. The market potential for related office development – both for bioscience and other
more traditional business tenants – will spill over to adjoining properties, particularly as non-institutional employment development is no longer planned for the Central District.6

In short, the benefits of facilitating early phase OHSU related development at the tram terminus include impetus for Portland’s emerging bioscience cluster, accelerated diversification of the metro area economy, development of more diverse Central City housing and stimulus of more bioscience and traditional office development than could be projected with any other reasonable scenario at this time. North Macadam/South Waterfront development can proceed more quickly, at higher densities and with resulting property value enhancements well exceeding what would otherwise be expected at a time of continued economic downturn statewide and regionally.

**Timing & Payment Options:** Mechanisms for receipt of payment can be important to support and minimize the economic impact to property owners paying the assessment:

- The assessment roll will be finalized after construction of LID funded improvements. Completion of the aerial tram is expected by December 2005. Both the Phase IV streetcar extension (to Gibbs) and Macadam Avenue access improvements are expected to be complete by December 2006. Timing of the Phase V streetcar improvement is more uncertain, but completion is tentatively programmed for year end 2009.
- LID assessments are not due and payable until approximately three months construction completion with finalization of the assessment roll.
- Assessment payments may then be made either in full or on an installment basis over 5, 10, or 20 years. Interest rates on repayment of 20 year LID bonds are currently in the range of 5¼% (including financing costs).

Realization of enhanced property value comes at the time when owners sell or redevelop their respective sites. Because owners who elect to hold without further improvements may find that they are paying without receiving tangible benefits, the LID will provide an economic incentive to redevelop sooner rather than later. This economic incentive is important to realization of housing and employment projections for the district – including generation of added tax increment in a timely fashion.

However, there may be situations where an existing business located in a structure with remaining useful life could make a case for undue economic hardship over at least an interim period. Some businesses and property owners may require added time to plan and make the transition to more intense property disposition, use and/or redevelopment. Because most of the North Macadam area is undeveloped (with structures already cleared), this is not expected to be a major consideration except in limited circumstances.

Though not required by state law, options for PDC or City to defer payment of the LID assessment may be suggested for consideration in exceptional situations. For example, provision for LID payment deferral for a period of up to five years was available with the Airport Way LID in the Columbia South Shore area.7
COMPARABLE CENTRAL CITY EXPERIENCE

LIDs proposed for North Macadam can draw on ample precedent elsewhere in the Central City. Two specific assessments profiled here are the Oregon Convention Center and initial (Phase I) Central City Streetcar LIDs.

**Oregon Convention Center:** In 1986 voters in the Tri-County area – comprising Multnomah, Washington and Clackamas Counties – approved a $65 million bond measure for construction of the Then-proposed $85 million Oregon Convention Center. Of the remaining $20 million in funding required, $5 million in LID funding was authorized in 1987 by Portland City Council.8

The assessment area covered downtown Portland on the west side of the Willamette River together with the Central Eastside and Lloyd District areas on the eastside. The rate of assessment was approximately $2.75 per $1,000 of tax assessed valuation.

With the assessed valuation of the LID district at approximately $1.8 billion, the LID represented 0.3% of affected property valuation.9 By comparison, the North Macadam LID represents an estimated 11% of current assessed valuation but approximately 0.5% of cumulative public-private investment in the district anticipated by 2020.10

The proposed North Macadam LIDs differ from Oregon Convention Center experience primarily in that the Convention Center was benefiting an already developed Central City core while North Macadam investments are being made in advance of substantial subsequent public-private investment. However, there is a similarity in the scale of LID investment anticipated – with LIDs accounting for well less than 1% of public-private investment in both areas.

**Portland Streetcar:** In 1998, a local improvement district (LID) was proposed to pay for 20% of the actual cost of a Central City streetcar – up to a maximum of $8.32 million. The LID investment represented approximately 0.8% of the taxable assessed valuation of $1.1 billion within the LID boundaries. First phase construction extended from Northwest 23rd Avenue to Portland State University (terminating at SW Montgomery Street on 10th/11th Avenues).

A Phase II extension through the PSU Urban Center to a new terminus on SW Montgomery between 4th and 5th Avenues was funded shortly thereafter. This LID involved an assessment of $1.288 million, also representing 0.8% of the non-exempt value within a separate LID area.

To fund Phase I and II construction, properties were assessed both on a lineal frontage rate (of $30 per foot for properties with frontage on the streetcar alignment) plus a rate per $1,000 of tax assessed valuation – for which two assessment zones were created:

- Zone A covering all properties within 200 feet of a streetcar street – at the full rate depending on principal use of the property.
- Zone B including all other properties – at 50% of the applicable Zone A rate.

Due to the developed nature of the properties assessed, varying assessment rates were applied depending on the principal use of the property.11
Total public investment in the streetcar (completed in 2001) was $56.7 million, with the LIDs representing less than one-fifth of project cost. Even before completion, properties along the Portland Streetcar line increased in value by more than 17% (in two years from 1999-2001). Apartment properties experienced the greatest increase in value – up by 38% in these two years. In addition to enhanced property valuation, density of development also increased – especially with new residential and mixed-use development in the Pearl/River District. This is substantially above the increase in assessed market value city-wide, which has averaged 4.3% annually since the mid-1990s.

Phase III will further extend the street car from PSU to Riverplace (at SW River Parkway and Moody). A $3.0 million LID will cover approximately a 1/6th portion of the $18.2 million extension cost. This LID represents approximately 0.6% of the area’s assessed valuation.

The assessment formula for Phase III (and subsequent phases) is being changed to reflect a minimum LID based on land area, potentially adjusted up based on total assessed value. This reflects greater potential for new construction than within the already developed downtown core and Northwest Portland areas covered by Phases I and II.

The entire streetcar system including future Phase IV and V extensions to the North Macadam/South Waterfront area is operated by Portland Streetcar, Inc. Planned extensions will not only improve access within North Macadam, but also provide non-auto connectivity to other key Central City destinations.

**LID Experience:** As illustrated by these two examples, property owner willingness to make an up-front LID contribution can result in substantial economic benefit – immediately and over time. Increased property valuation occurs as owners and investors respond to public improvements funded by a local improvement district.

Most important, the scale of LID investment appears to be relatively small in relation to the property value supported. In effect, the proposed North Macadam LIDs are comparable in scale to earlier LIDs for the Oregon Convention Center and downtown portion of the Central City Streetcar – all at less than 1% of property valuation and new investment potential.
APPENDIX. LID BOUNDARIES & ASSESSMENT FORMULAS

What follows is a brief summary of boundaries and assessment formulas for the North Macadam local improvement districts (LIDs) being considered.

**Aerial Tram**: $4.5 million LID (South Waterfront area only).
- **Tier 1** – within 2 blocks of tram terminal, 50% of LID amount, rate of approx. $2.92 per square foot of assessment area.
- **Tier 2** – within a 5-minutes walk (1,250), 30% of LID rate of about $1.45 per square foot.
- **Tier 3** – remaining 20% of LID, rate of just under $0.50 per square foot.

**Central City Streetcar**: Up to $3.39 million LID (Phases IV and V combined).
- **Gibbs Extension (Phase IV)** – $2.02 million LID. All properties assess at proposed rate of $1.00 per square foot of developable land area.
- **Gibbs to Bancroft (Phase V)** – Approx. $1.37 million LID. All properties assessed at proposed rate of $1.00 per square foot of developable area.

**Macadam Access Improvements**: $2.5 million LID.
- **Tier 1** – within two blocks of Gaines and Curry portals 30% of LID, rate of approx. $1.50 per square foot of developable area.
- **Tier 2** – remaining property in southern half of district (from Ross Island Bridge south to Bancroft), 50% of LID amount, rate of approx. $0.67 per square foot.
- **Tier 3** – remainder of assessment area, 20% of LID, rate of just under $0.44 per square foot.
ENDNOTES

1. This assessment provides both quantitative and qualitative analysis. Quantitative estimates are for illustrative purposes as circumstances may vary between property owners. Information has been obtained from sources generally deemed to be reliable, but accuracy is not guaranteed.

2. Blocks 32 and 34B are shown as having no tram assessment as they have been planned for parks use.

3. Excluded from this analysis is the Phase II streetcar extension from Portland State University to Riverplace. LID funding for this extension is estimated at $3 million.

4. A clear example of enhanced land value opportunity is provided by a review of NMI development plans for approximately 10 net buildable acres in North Macadam’s Central District. The original overall site acquisition cost for property acquired by NMI is approximately $17 per square foot of legal lot area. After adjusting for (approximately one-half of) site area originally purchased that is not developable, acquisition of net buildable land equates to $33 per square foot. Land value attributed by NMI to site/building specific pro formas averages in the range of $95 per square foot (upon completion).

Because the LID assessment for NMI covers a larger area than what NMI views as the net developable site, the value is adjusted from $95 to $74 per square foot of assessment area, and the cost from $33 to $26 per square foot. The net difference of finished less raw land value is on the order of $48 per square foot – approximately 8 times the amount of the high impact front-end LID investment of just under $6 per square foot.

5. Land value increases not adequate to fully cover LID costs could occur in extreme cases. Factors that could contribute include above average site acquisition cost, high proportion of site not developable (beyond what is currently anticipated), low intensity of development (FAR) or some combination of these factors.

6. A more detailed Economic Assessment of Marquam Hill-North Macadam High Speed Aerial Connector was prepared by E. D. Hovee & Company for the Portland Development Commission, July 2002.

7. Any mechanisms for LID deferral will require review and coordination with the City Office of Management and Finance (OMF) to arrange structuring of LID bond issuance while providing some owner payment flexibility and assuring the ability to meet the debt repayment schedule.

8. The remaining $15 million in Oregon Convention Center initial funding was authorized by the Oregon Legislature.

9. The $5 million Oregon Convention Center LID funding was projected in 1987 to stimulate an added $26 – $85 million in LID area property value, as cited by Economic Development Services, Special Benefits of the Oregon Convention Center to Commercial Properties within Portland’s Central City Area, prepared for Metro, May 1987.

10. Per PDC provided information, assessed valuation of the LID area – maximum of all parcels – is estimated at $93.5 million as of 2001.

11. Approximately 90% of the total Central City Phase I Streetcar assessment was apportioned among properties based on the following percentages of land and improvements value as determined by principal use of the property: regional institutional (at 100%), commercial (75%), local institutional (50%), industrial (50%), and residential (50%).

For Phase I, Zone A properties represented 59% of the assessed value and 79% of the LID assessment. Zone B properties accounted for 41% of the assessed value and 21% of the assessment.

12. For example, Hoyt Street Properties agreed to develop housing at an additional 22 units per acre minimum when Central City Streetcar construction began.

13. The Phase III Portland Streetcar assessment formula is calculated as a rate not to exceed $6.00 per $1,000 of assessed value, but not less than $0.90 per square foot of land area, multiplied by a distance factor inversely proportional to the ratio calculated by diving the distance from a streetcar street by 720 feet.