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Portland Parks & Recreation: Funding and Financial Impact Analysis

Peter Hulseman
Portland State University

Katelyn Kelley
Portland State University

Hoang Nguyen
Portland State University

Emma Brophy
Portland State University

Northwest Economic Research Center

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NeRC

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PORTLAND PARKS & RECREATION℠
Healthy Parks, Healthy Portland

Portland Parks & Recreation provides safe places, facilities, and programs to promote physical, mental, and social activity in the Portland metropolitan area. By getting people—especially kids—outside, active, and connected to the community, they increase the city's wellness and livability.

NERC is based at Portland State University in the College of Urban and Public Affairs. The Center focuses on economic research that supports public-policy decision-making and relates to issues important to Oregon and the Portland Metropolitan Area. NERC serves the public, nonprofit, and private sector community with high quality, unbiased, and credible economic analysis. Dr. Tom Potiowsky is the Senior Advisor of NERC, and also the former Chair of the Department of Economics at Portland State University. Dr. Jenny H. Liu is NERC's Assistant Director and Associate Professor in the Toulan School of Urban Studies and Planning. This report was researched and written by Peter Hulseman, Katelyn Kelley, Hoang Nguyen, and Emma Brophy.

NeRC
Northwest Economic Research Center

Portland State University
College of Urban and Public Affairs
PO Box 751
Portland, OR 97207-0751
503-725-2315
nerc@pdx.edu

www.pdx.edu/NERC
@nercpdx

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Executive Summary

For this report, the Northwest Economic Research Center (NERC) investigated six potential revenue generating measures, as requested by Portland Parks and Recreation (PP&R). This research includes an analysis of the revenue potential for each tax, the impacts of compression in property taxes, and an assessment of tax incidence.

Three of the funding options investigated are forms of property tax: a temporary local option tax, a permanent special district tax, and a general bond obligation. Using 2017 property tax data, NERC built a model that simulates these tax increases for each tax lot in Portland. The growth of Assessed Value (AV) and Real Market Value (RMV) over time are accounted for in revenue projections, which are made from FY2020-21 to FY2024-25. PP&R provided the scenarios that determined the target value to raise independently from any NERC analysis. The rates described in the report are the rates necessary to meet these targets.

Our model estimates a $0.92 (per $1,000 AV) temporary local option property tax would generate roughly $50 million for PP&R in FY 2020-21. This equates to a $76.60 increase (per $100,000 AV) for a typical household. By gradually increasing the rate to $1.19 over a five-year horizon, these revenues can reach up to $68 million by FY 2024-25. For comparison, this would change the average household tax bill increase from $76.60 to $92.10 (per $100,000 AV).

In order to raise the same $50 million, the city would need to levy a permanent special district tax of $0.80 (per $1,000 AV). This fee would increase the typical Portland household tax bill by $67.80 (per $100,000 AV) – about $9 less than the local option. However, adding a special district tax affects the funding of other local tax levies more than adding a local option tax, due to tax compression (a term that describes the mandatory limit on property tax rates in Oregon, as set forth in 1990's Ballot Measure 5). Compression "squeezes" revenues from both local option and special district taxes, reducing them below expected levels calculated using solely tax rates and property values.

The final property tax revenue option examined is a general obligation bond. This type of property tax does not have compression effects, but does entail the restriction that revenues can only be used for capital purchases (i.e. cannot be put toward operating costs). Because of this caveat, we estimate a bond rate of $0.74 (per $1,000 AV) is required to raise a slightly lower target of $48 million in revenue. Adding this bond is estimated to increase a typical Portland household's property tax by $74.30 (per $100,000 AV).

The other three funding options analyzed are consumer goods taxes: a transient lodging tax, a cell phone tax, and a prepared food and beverage tax. All three taxes are estimated for 2018.

Portland currently has three local transient lodging taxes; two levied at the city level and one collected by Multnomah County (and passed through to Metro). These taxes are paid by travelers renting short-term lodging (hotels, Airbnb, private campsites, etc.) and collected by the operator of the accommodation. Considered simultaneously, these taxes result in a 15.3% rate on lodging in Portland, comparable to that observed in cities across the Pacific Northwest. The City of Portland estimates that raising this tax by 1%

would have generated an additional $7 million in 2018.[1] However, this new revenue is limited in what it may be used for – Oregon statutes mandate that no more than 30% of local transient lodging taxes can be set aside for city or county services.[2]

With the implementation of a 5% cell phone tax on the wireless industry, our analysis estimates annual revenues for 2018 between $6.98 and $7.25 million. We arrive at these estimates with three different methodologies. The first approach uses wireless gross receipts data for the nation as a whole from the Cellular Telecommunications Industry Association (CTIA), proportionately adjusted to match Portland population levels. The next two methods use data from the City of Portland's 2017 Tax on Wireless Communication Services. We use 2016 estimates for wireless revenues in both Multnomah County and the city of Eugene and then scale these values by national wireless revenue growth rates to arrive at 2018 revenue estimates for both areas.

Lastly, our estimates find that a 5% food and beverage tax in Portland could have generated between $72.9 and $96.1 million in revenue in 2018. The low estimate is derived using 2018 gross national restaurant sales from the US Bureau of Labor Statistics' Quarterly Census of Employment and Wages (QCEW) survey, scaled to Portland levels, with a 5% rate applied. If the restaurant business is more intensive in Portland than the U.S. as a whole, this may lead to an underestimate. Higher estimates are calculated using revenues from Ashland's Food and Beverage Tax and the Portland Business License Tax for businesses associated with food and beverage sales.

What follows in this report is a detailed account of how these estimated are obtained, what the funding potential is for each option, how the phenomenon of compression will alter revenues for property taxes, and how the tax burden will be distributed in the local economy for each of the revenue generating measures described above.

Property Taxes

Data and Methodology

Three property tax funding options are considered: i) a temporary local option tax; ii) a permanent special district tax; and iii) a general bond obligation. We use 2017 property tax data, which includes Maximum Assessed Value (MAV) and Real Market Value (RMV) at property level. MAV and RMV are adjusted to account for their potential change over time. Their assumed growth rates over the period of five years (Table 1) are consistent with the ones used in revenue projections by other levies[3]. Our model also requires the current tax rates of all local options and permanent special districts-- these are provided by Multnomah County, and used in all property tax estimates for this report.

Table 1: Assumptions used in property tax simulation

Assumptions	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
RMV Growth	13.8%	7.5%	5.0%	4.0%	4.0%	4.0%	4.0%	4.0%
AV Growth	4.8%	3.3%	3.5%	3.5%	3.3%	3.2%	3.2%	3.0%

[1] Estimates provided by City Economist Josh Harwood
[2] OregonLegislature.gov. (2019). 2017 ORS 320.350. Retrieved from https://www.oregonlegislature.gov/bills_laws/ors/ors320.html
[3] As provided by City Economist Josh Harwood.

The calculation is straightforward in the case of the general obligation bond: the tax rate is determined simply by dividing the target revenue ($50 million) by total MAV for each property. However, this method cannot be transferred when considering local option and permanent special district taxes because of past ballot measures limiting property taxes and resulting in the phenomenon of property tax compression.

Compression is an important characteristic of Oregon's property tax system. Oregon Ballot Measure 5, passed in November of 1990, requires that, for every property, total property taxes dedicated to general government are limited to $10 for every $1,000 RMV. When that limit is exceeded, the total tax rate must remain the same, so taxes are reduced in a specified order (described below), meaning that an increase in one tax levy results in decreased revenue for other tax levies. This decrease in revenue is termed compression, and it occurs at the property level. Temporary local options and permanent special district taxes are subject to the compression, while general bond obligations are exempt from it, meaning that they are not included in the tax required to fall under the 10% limit (hence the simplicity of the calculation). According to the priority of taxes in compression, local option taxes are compressed first, and if there are multiple local options, all of them are compressed proportionately. The compression of permanent special district taxes starts only after all local option taxes are zero, and if there are multiple special district taxes, proportionate compression is also applied.

This tax compression has a number of implications. First, an increase in the special district or local option tax rate (or both) does not necessarily coincide with a proportional rise in government revenue. Actual revenue generated is generally lower than total tax extended. Second, since the compression occurs at an individual property level, using aggregate data is likely to produce an inaccurate estimate of the tax rate required to meet a target revenue. Third, due to the proportionate compression mechanism, raising revenue through a specific PP&R levy will necessarily result in lower revenues for other existing tax levies. Due to the compression order, which levy has a reduction and by how much, depends on the type of tax (i.e. whether it is a permanent rate or a temporary local option) adopted by PP&R in relation to other existing property tax levies in place.

More specifically, a PP&R local option will result in a decrease in local option revenues collected by the other levies, but will not affect their permanent special district taxes, while a PP&R permanent special district tax will reduce all of them. Consequently, to reach a given revenue goal, the local option requires a higher tax rate, but impacts the revenue of other levies less. The permanent special district draws more revenue from other levies, thereby requiring a lower tax rate. To this end, it is clear that using the local option to fund the PP&R will cause, on average, a larger increase in household tax bills than using the permanent special district. The bond obligation is not compressed and does not affect the revenue of other levies; and its effect on household tax bills depends on the scenario and state of compression of the household.

The Fire & Police Disability & Retirement Fund (FPDR) adds an additional dimension of complexity. FPDR has a target revenue, which is raised by a permanent special district tax. Although the tax is subject to compression, the levy can increase its tax rate until the target is met. The target revenue of FPDR over the next five years is provided in Table 2.[4] Due to compression, adding the PP&R permanent tax necessarily

[4] For the simulation, we use the required FPDR revenue without accounting for discounts or delinquencies. As a result, our estimated FPDR rates without PP&R is marginally lower than those of the FPDR department.

causes the FPDR revenue to be reduced. Therefore, for each fiscal year, a new FPDR rate must be estimated so that both departments can simultaneously achieve their target revenues. This issue does not arise in cases of the PP&R local option due to the order of compression, or for the general bond obligation, which is exempt from compression.

Table 2: Target FPDR Revenue

Assumptions	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
FPDR Target Revenue ($ million)	163.5	182.8	195.0	210.1	224.1

Given all of the complications analyzed above, the simulation strategy for the case of the PP&R local option differs slightly from the case of the PP&R permanent special district.

To determine the PP&R local option rate, we follow a simple algorithm. For each property, we first calculate the tax limit equal to 1% of its RMV, and select an initial rate. Then we calculate the total property tax extended on that lot, and compare it to the tax limit. If the extended tax does not exceed the limit, then the levied PP&R tax revenue is equal to the amount extended. If the extended tax is higher than the limit, however, compression is modeled for as follows.

First, we compare the permanent special district tax revenue to the limit. If the former is less than the latter, the total local option revenue will be equal to their difference. If the former is larger than or equal to the latter, the local option revenue is set to zero, and the permanent special district tax revenue is set equal to the limit. After accounting for compression, the PP&R revenue can be calculated by multiplying the PP&R local option rate with the after-compression total local option revenue, and then divided by the total local option rate. The total PP&R revenue is the sum of revenues across all properties. This total revenue is then compared to the target revenue. A lower rate is applied if it exceeds the target, and a higher rate is applied if it is lower than the target, until the two are sufficiently close to each other.

For the permanent special district tax, the compression process is similar, but not identical. Because the imposition of the PP&R permanent special district affects the FPDR revenue due to compression, some modifications to the revenue calculation are warranted. First, based on the target revenues provided by FPDR, we recover the FPDR tax rate and revenue at property level before the PP&R permanent rate is introduced, using a procedure similar to the calculation of the PP&R local option rate. Then, we subtract the original FPDR rate from the total permanent special district rate to obtain the total rate of all fixed components. Finally, we estimate a permanent special district rate sufficient to raise revenue equal to the total target revenue of PP&R and FPDR. The estimation procedure is similar to the one used to calculate the FPDR rate, with the only exception being that the total permanent rate now equals the total rate of all fixed components (i.e. excluding the original FPDR) plus the total rate of PP&R and FPDR so that FPDR is not double-counted. The PP&R individual rate can be calculated by multiplying the obtained rate by PP&R's share of the PP&R and FPDR total revenue.

The compression loss amounts to the difference between the total tax extended and the total tax levied. To calculate the revenue losses of other departments, we compare their revenues before and after the PP&R tax is added, holding the target FPDR revenue unchanged. The revenue of each local option tax is

calculated by multiplying its tax rate by the total local option tax levied, and then dividing by the total rate of all local option taxes. A similar process is also used to calculate the permanent special district revenue.

PP&R requested NERC calculate the rates under two different scenarios (called Scenarios 2 and 3 since the first scenario—not modeled—involves no change in revenue, and thus no change in tax). These scenarios have increasing revenue goals over a five-year period, with Scenario 2 incorporating little to no expansion of PP&R's activities, and Scenario 3 incorporating some capital and operating expansion. NERC's estimates of rates, compression impacts, etc. are presented with regards to these scenarios. Notably, the goals for the bond is lower because the bond cannot be used to fund operating cost. Finally, the difference between "goal" and "generated" is about 0.1% or less; essentially measurement/approximation error.

Revenue Impacts

Table 3 presents the estimated mill rates required for a local option tax to reach the target revenues over the period of five years. For example, a $0. 92 (per $1,000 AV) temporary local option property tax would generate roughly $50 million in FY 2020-21. By gradually increasing the rate to $1.19 over a five-year horizon, these revenues can reach up to $68 million by FY 2024-25. In order to raise the same $50 million, the city would need to levy a smaller special district tax of $0.80 (per $1,000 AV), as shown in Table 4, which provides revenues and necessary mill rates for the special district tax scenario.

The final property tax revenue option examined is a general obligation bond (Table 5). This type of property tax does not have compression effects; however, these funds can only be used for capital purchases (i.e. cannot be put toward operating costs). Because of this caveat, we estimate a bond rate of $0.74 (per $1000 AV) is required to raise a slightly lower target of $48 million in revenue.

PP&R requested NERC calculate the rates under two different scenarios (called Scenarios 2 and 3 since the first scenario—not modeled—involves no change in revenue, and thus no change in tax). **These scenarios have increasing revenue goals over a five-year period, with Scenario 2 incorporating little to no expansion of PP&R's activities, and Scenario 3 incorporating some capital and operating expansion**. NERC's estimates of rates, compression impacts, etc. are presented with regards to these scenarios. Notably, the goals for the bond is lower because the bond cannot be used to fund operating cost. Finally, the difference between "goal" and "generated" is about 0.1% or less, and just sort of measure/approximation error[5].

[5] Estimates reported are rounded

Table 3: Estimated Tax Rates and Revenues for a Local Option Tax

Year	Target Revenue ($ million)	Mill Rate ($ per $1,000 MAV)
Scenario 2		
FY 2020-21	50.1	0.923
FY 2021-22	54.5	0.979
FY 2022-23	58.3	1.015
FY 2023-24	63.0	1.064
FY 2024-25	68.3	1.118
Scenario 3		
FY 2019-20	119.3	2.375
FY 2020-21	126.2	2.440
FY 2021-22	132.6	2.474
FY 2022-23	140.0	2.517
FY 2023-24	148.2	2.573

Table 4: Estimated Rates of a PP&R Permanent Special District Tax

Year	Target Revenue ($ million)	Mill Rate ($ per $1,000 MAV)
Scenario 2		
FY 2020-21	50.1	0.798
FY 2021-22	54.5	0.841
FY 2022-23	58.3	0.873
FY 2023-24	63.0	0.914
FY 2024-25	68.3	0.962
Scenario 3		
FY 2020-21	119.3	1.922
FY 2021-22	126.2	1.971
FY 2022-23	132.6	2.008
FY 2023-24	140.0	2.055
FY 2024-25	148.2	2.111

Table 5: Estimated Rates of a PP&R Bond Obligation

Year	Target Revenue ($ million)	Mill Rate ($ per $1,000 MAV)
Scenario 2		
FY 2020-21	47.9	0.743
FY 2021-22	49.8	0.747
FY 2022-23	51.7	0.753
FY 2023-24	53.7	0.758
FY 2024-25	55.8	0.764
Scenario 3		
FY 2020-21	73.5	1.140
FY 2021-22	76.3	1.145
FY 2022-23	79.2	1.152
FY 2023-24	82.1	1.158
FY 2024-25	85.2	1.166

Compression Impacts

The property tax revenues cannot be stated without also discussing their impact on compression. In order to remain below the state mandated threshold for property taxes, an increase in local option or permanent special district property tax earmarked for PP&R would result in decreased revenue for other city services. Due to the compression priority, the latter affects all of them while the former affects only those that are funded by local option property taxes. As shown in Table 6, the difference in terms of revenue loss to other agencies caused by the PP&R local option and the PP&R special district can be substantial, approaching a factor of nine. The fact that FPDR revenue must be fixed further magnifies the impact of the PP&R special district on other property taxes. As the bond obligation is exempt from the compression, it has no effect on other agencies. Table 7 describes the reduction in revenue by levy under both a local option and a permanent levy in the first year (FY 2020-21) compared to the FY 2019-20 revenue.

Table 6: Reduction in revenue to other existing levies ($ million)

Year		PP&R target revenue	Local Option	Special District
Scenario 2				
FY 2020-21	Year 1	50.1	-0.72	-6.38
FY 2021-22	Year 2	54.5	-0.79	-7.09
FY 2022-23	Year 3	58.3	-0.84	-7.52
FY 2023-24	Year 4	63.0	-0.90	-8.12
FY 2024-25	Year 5	68.3	-0.96	-8.68
Scenario 3				
FY 2020-21	Year 1	119.3	-1.87	-17.13
FY 2021-22	Year 2	126.2	-2.01	-18.52
FY 2022-23	Year 3	132.6	-2.09	-19.30
FY 2023-24	Year 4	140.0	-2.20	-20.34
FY 2024-25	Year 5	148.2	-2.29	-21.25

Table 7: Reduction in revenue by levy (Local Options in Green, Permanent Levies in Orange)

	Children's Fund	Oregon Historical Society	Metro	City of Portland	Port	Metro	East/west soil	County	Urban Renewal Districts
Local									
Scenario 2	-2.4%	-1.9%	-1.9%	-	-	-	-	-	-
Scenario 3	-6.2%	-4.9%	-5.0%	-	-	-	-	-	-
Permanent									
Scenario 2	-4.2%	-3.3%	-3.4%	-0.4%	-0.5%	-0.5%	-0.6%	-0.6%	-0.7%
Scenario 3	-10.8%	-8.5%	-8.7%	-1.2%	-1.3%	-1.4%	-1.6%	-1.7%	-1.8%

Tax Incidence Analysis

Table 8 compares the effect of using the local option and the special district property tax on taxpayers. As explained, since the local option tends to pull less revenue from other departments, a given target revenue requires a higher mill rate, resulting in a larger increase to the homeowner's tax bill on average than the special district. For example, to raise $50 million by the PP&R local option, a typical homeowner would have to pay an additional tax of $76.6 for every $100,000 of their house's assessed value while the owners of median value houses would have to pay $144.2 more. In the special district case, these figures are only $67.8 and $127.7, respectively. For the bond obligation with slightly less revenue (i.e. $48 million), they are $74.3 and $139.9, respectively (Table 9). As expected, the effect of the bond obligation should be higher than that of the permanent special district case due to its compression exemption, but less than that of the local option due to its lower revenue target.

Table 8 Tax increases for homeowners by local option and special district tax

Year	Target Revenue ($ million)	Median AV ($1,000)	Local Option		Special District	
			Typical Homeowner Tax Bill Increase ($ Per $100,000 AV)	Tax Bill Increase by Median AV ($)	Typical Homeowner Tax Bill Increase ($ Per $100,000 AV)	Tax Bill Increase by Median AV ($)
Scenario 2						
FY 2020-21	50.1	188.3	76.6	144.2	67.8	127.7
FY 2021-22	54.5	194.6	80.6	156.9	71.1	138.4
FY 2022-23	58.3	200.8	83.7	168.0	73.9	148.4
FY 2023-24	63.0	207.2	87.6	181.4	77.4	160.3
FY 2024-25	68.3	213.4	92.1	196.7	81.6	174.2
Scenario 3						
FY 2020-21	119.3	188.3	182.1	343.0	158.4	298.3
FY 2021-22	126.2	194.6	186.4	362.7	161.6	314.4
FY 2022-23	132.6	200.8	189.9	381.2	164.9	331.2
FY 2023-24	140.0	207.2	194.2	402.4	168.7	349.5
FY 2024-25	148.2	213.4	199.7	426.2	173.8	370.9

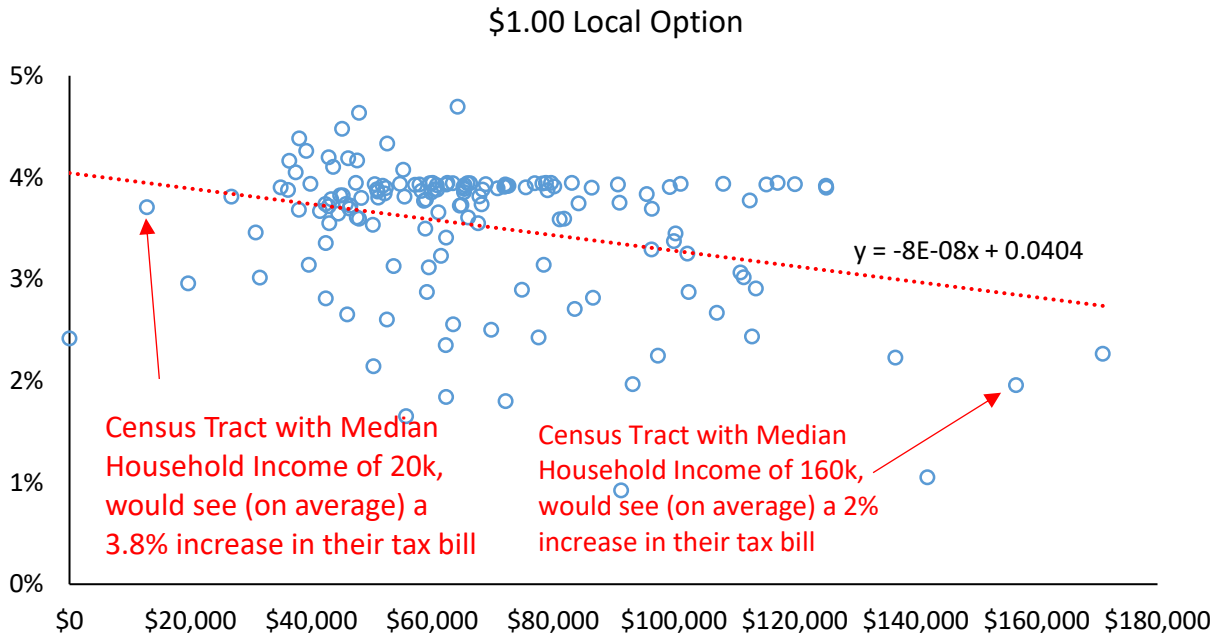
Table 9: Tax increases for homeowners by the bond obligation

Year	Target Revenue ($ million)	Median AV ($1,000)	Typical Homeowner Tax Bill Increase ($ Per $100,000 AV)	Tax Bill Increase by Median AV ($)
Scenario 2				
FY 2020-21	47.9	188.3	74.3	139.9
FY 2021-22	49.8	194.6	74.7	145.4
FY 2022-23	51.7	200.8	75.3	151.1
FY 2023-24	53.7	207.2	75.8	157.0
FY 2024-25	55.8	213.4	76.4	163.0
Scenario 3				
FY 2020-21	73.5	188.3	114.0	214.6
FY 2021-22	76.3	194.6	114.5	222.8
FY 2022-23	79.2	200.8	115.2	231.3
FY 2023-24	82.1	207.2	115.8	239.9
FY 2024-25	85.2	213.4	116.6	248.8

While they differ in their impact on taxpayers, all three measures are regressive: the local option and permanent special districts are equally regressive, and bonds are the least regressive on average (it should be emphasized that this finding is true on average, and that there are exceptions to this rule). Figures 3 and 4 illustrate the percent increase in taxes faced at different income levels, for the local option tax/special district tax and bond obligation respectively. (Again, the local option tax and special district tax have the same distribution in terms of percent increase by income level, hence the representation on the same graph.)

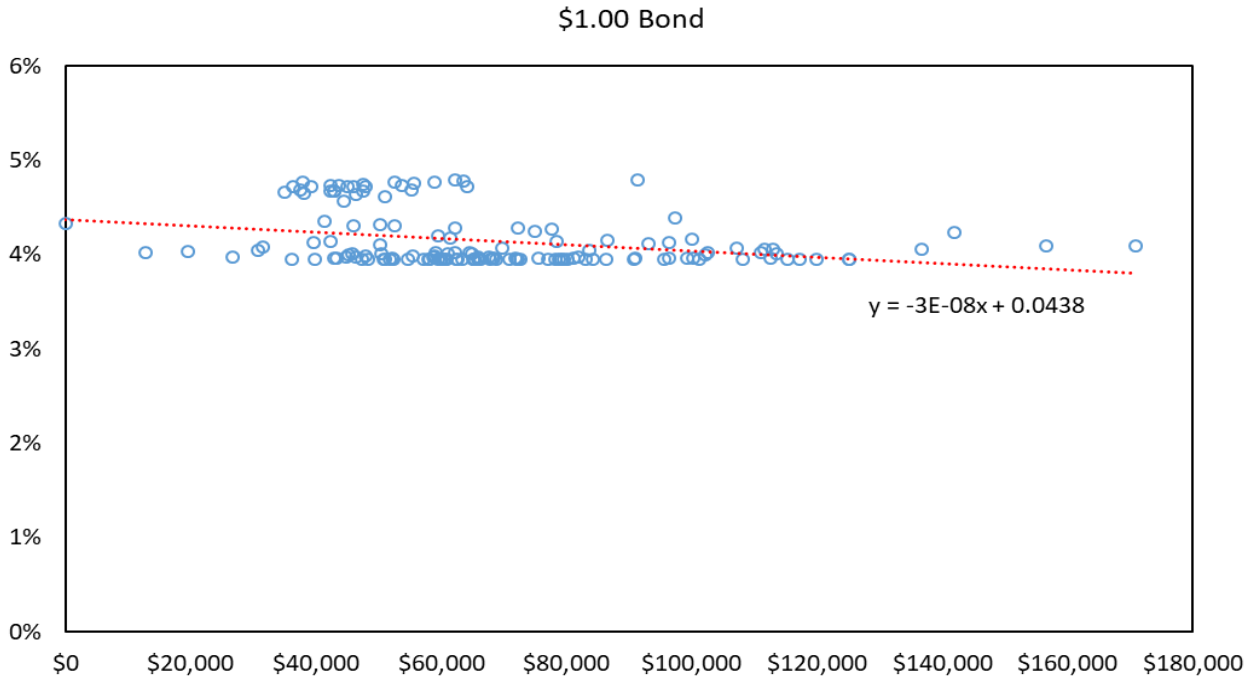
Figure 3, on the next page, shows the spatial distribution by median income (top) and by estimated tax bill (bottom). These maps suggest that, as shown in Figures 1 and 2, the wealthiest households do not face the highest tax bills, and present this information geographically. The regressivity can be attributed in part to compression, which caps the tax payments for some homes in wealthier areas.

Figure 1: Percent increase in taxes paid by median household income level (for select areas) by Local Option or Permanent Levy



Note: The results are for the case of imposing a $1.00 mill rate of local option. Use of a $1.00 permanent special district would produce virtually the same result.

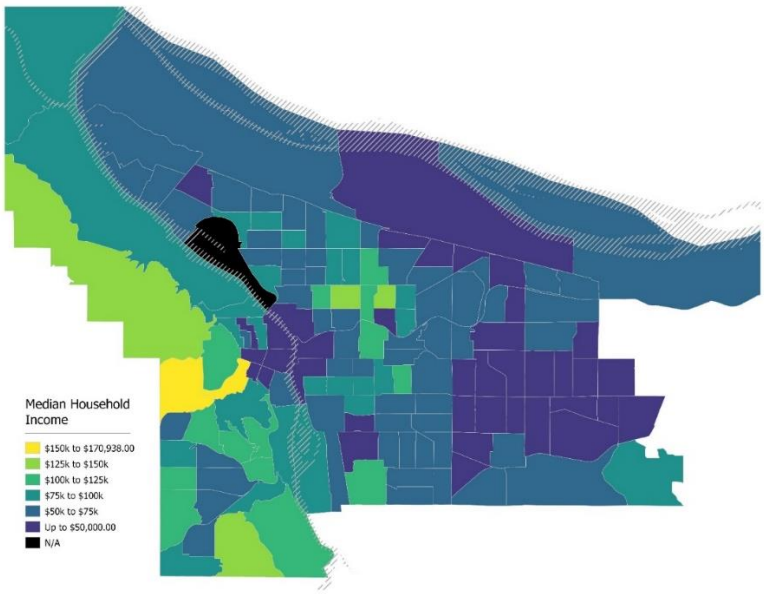
Figure 2: Percent increase in taxes paid by median household income (for select areas) by bond obligation



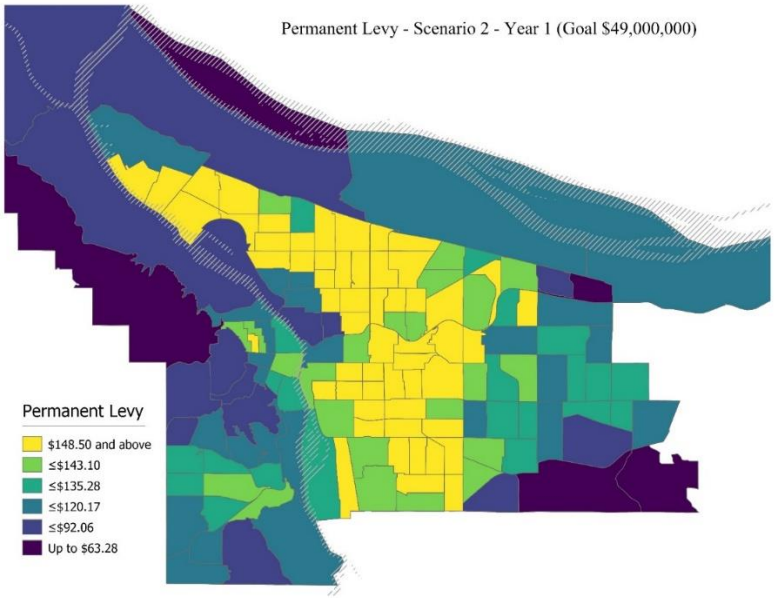
Note: The results are for the case of imposing a $1.00 mill rate of bond obligation

Figure 3: Percent increase in taxes paid by median household income levels by bond obligation

Spatial Distribution of households by their median households incomes



Spatial Distribution of households by Tax Bill



Source: Randy Morris, Institute of Portland Metropolitan Studies

New Cell Phone Tax

Data and Methodology

In 1997, the City of Eugene adopted an ordinance requiring telecommunications companies to pay a 2% business tax in order to fund future telecommunication-related projects.[6] The tax is passed to consumers on their monthly cell phone bill, and generated roughly $800,000 for the city in 2016. We consider a similar tax for the City of Portland, which currently administers a negotiated fee on telecommunication services but does not have an outright cell phone tax.

We arrive at these estimates using three different methodologies; the first employs national level data from the Cellular Telecommunications Industry Association (CTIA) 2019 Industry Survey. These wireless gross receipts are then proportionately adjusted to match Portland population levels. After arriving at an estimated value for total wireless revenue for Portland, we reduce the taxable revenue by 15%[7] due to devices and services that are not subject to the tax but are included in industry data. After applying the 5% tax rate, we then adjust the revenues further to account for internet access charges, which are non-taxable.

The next two methods use data from the City of Portland's 2017 Tax on Wireless Communication Services. We use this report's 2016 estimates for wireless revenues in both Multnomah County and the City of Eugene, and then scale these values by national wireless revenue growth rates to arrive at 2018 revenue estimates for both areas. Once we have estimated total revenue, the methodologies for Multnomah County and Eugene diverge: the county level uses a similar process to that described above with the national CTIA data, but Eugene's results are estimated using a "bottom-up" approach. First, 2018 estimates for revenue per capita are calculated, subsequently converted to Portland revenue per capita using a multiplier, and finally aggregated to estimate wireless tax revenues for the city.

Revenue Impacts

With the implementation of a 5% tax, our analysis estimates annual wireless revenues for 2018 between $6.98 and $7.25 million. Table 10 delineates these findings. Since cell phone rates do not depend on income, cell phone taxes are regressive.

Table 10: 2018 Revenue Estimates from Portland Cell Phone Tax

Method	2018 Revenue
Extrapolated from CTIA National Data	$6,982,414
Extrapolated from Eugene Tax Revenue*	$7,138,334
Extrapolated from Multnomah County's Tax Revenue Collected*	$7,254,479

*Revenue extrapolated from 2018 national revenue growth

[6] Eugene-or.gov (2004) City of Eugene Fact Sheet Fees and Taxes on Telecommunications Businesses. Retrieved from https://www.eugene-or.gov/DocumentCenter/View/2065/TelecomFeeFactSheet?bidId=

[7] The 15% reduction of taxable revenues is taken from City of Portland's 2017 Wireless Tax Analysis

New Prepared Food and Beverage Tax

Data and Methodology

Another tax option analyzed is the prepared Food and Beverage Tax (FBT). Ashland, Oregon has had a 5% FBT since 1993, projected to bring in nearly $3 million in revenue for the city in 2019. The Ashland FBT is levied on all prepared food items served in a restaurant, excluding alcohol – this includes takeout, delivery orders, grocery store deli items, coffee shops, caterers, and food carts.

We employ three methods to estimate the revenue potential for a Portland FBT. The first estimate is derived using 2018 gross national restaurant sales, scaled to Portland levels with the 5% tax applied. It is reasonable to assume this estimate represents a lower bound for the area, due to the city's prevalent "foodie" culture of fine dining. Higher estimates are calculated using revenues from Ashland's Food and Beverage Tax and the Portland Business License Tax for businesses associated with food and beverage sales.

Beginning with Ashland's FBT revenue estimates from the city's 2017-19 Biennium Budget, we use a simple population adjustment to translate these figures to Portland. In 2018 Ashland's population was roughly 20,700, representing 3.29% of the population in Portland (630,300). Scaling the Ashland revenues up by this percentage, we estimate a similar FBT tax would generate roughly $90 million in revenue for the city of Portland.

Lastly, we extrapolate Portland business revenues for businesses with NAICS codes associated with the prepared food and beverage industry. With data from the Portland Revenue Bureau's food and beverage sales tax analysis, we adjust 2012 gross income for the industry using wage growth as a proxy. First, we calculate wage growth between 2012 and 2018 using Food Service and Drinking Places data from Oregon Employment Department. Once this growth is applied, we arrive at an estimated $1.92 billion in gross income for Portland food and beverage industries. Finally, the 5% tax is applied to the industry's aggregate income, resulting in an estimated $96 million in government revenue.

Revenue Impacts

Our estimates, displayed in Table 11, find that a 5% FBT in Portland could have generated between $72.9 and $96.1 million in revenue in 2018. We note the higher estimates are likely closer to the true value since there is a prevalent dining culture in Portland.

Table 11: 2018 Revenue Estimates from Portland Food and Beverage Tax

Method	2018 Revenue
Extrapolated from National Restaurant Association Data	$72,949,528
Extrapolated from Ashland's Tax Revenue Collected	$90,276,074
Extrapolated from Portland Business Revenue*	$96,118,835

*Portland Business Revenue extrapolated from 2012 using wage growth as a proxy

To gain some insight on how stable this revenue source could be, it's helpful to examine the volatility of Ashland's FBT from 2008 to 2019. As shown in Figure 4, FBT revenues for the city have increased every

year except 2009-2010 (this is unsurprising due to the Great Recession); however growth tends to bounce from zero to positive values ranging between 10%-20%.

Figure 4: Ashland, OR Food and Beverage Tax (FBT), Annual Revenue, 2008-2019

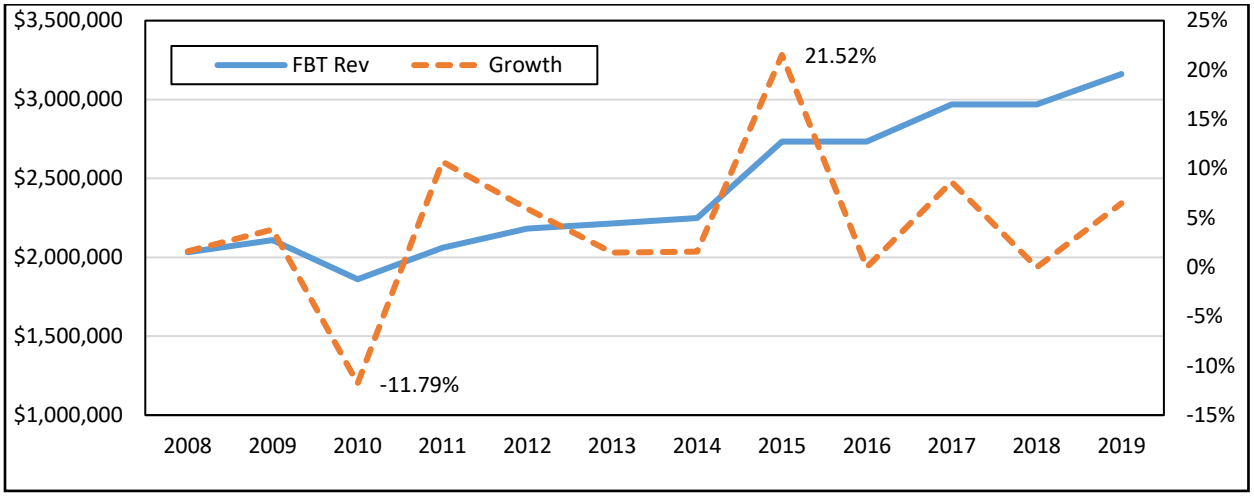
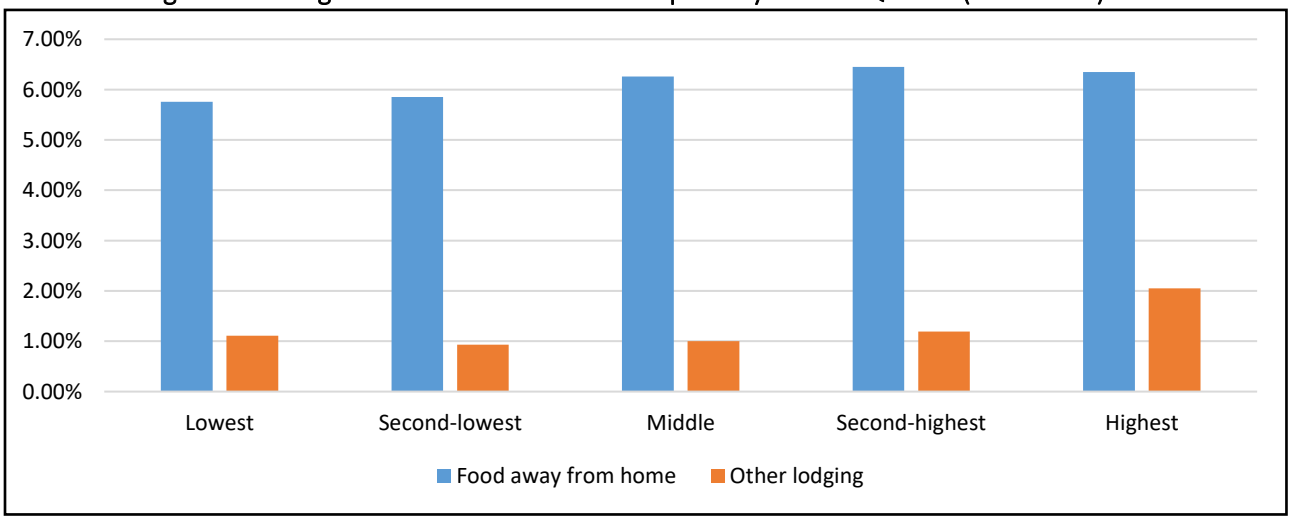


Figure 5 illustrates the percent of food eaten away versus at home broken down into income quintiles at the national level. The data indicates that prepared food and beverages are a special type of good known as a luxury good; this means that higher income individuals spend more of their income on these goods than do their lower income counterparts. Unlike a normal good, when a flat tax is applied to a luxury good, that tax is considered progressive. It is easy to see how this would be the case of a prototypical luxury good such as a yacht or private airplane, but prepared food and beverages fall into the rather nebulous zone between a normal and luxury good, since the difference in share of consumption between lower and high-income individuals is small. Due to this nebulousness, NERC refers to a food and beverage tax as "relatively progressive," since it is more progressive than most of the other taxes discussed in the report.

Figure 5: Average Share of Total Real Consumption by Income Quintile (1984-2012)[8]



[8] Source: Bureau of Labor Statistics, Consumer Expenditure Surveys, 1984-2012. Cleveland Federal Reserve. Categories are determined by the Bureau of Labor Statistics, and overlap relevant spending categories.

Increase in Transient Lodging Tax

Revenue Impacts

Portland currently has three local transient lodging taxes; two levied at the city level and one collected by Multnomah County (and passed through to Metro). These taxes are paid by travelers renting short-term lodging (hotels, Airbnb, private campsites…etc.) and collected by the operator of the accommodation. Combining these taxes, the rate in Portland is currently 15.3% which is similar to other lodging taxes in cities across the Pacific Northwest. The City of Portland estimates that raising this tax 1% would generate an additional $7 million.[9] However, this new revenue is limited in what it may be used for – Oregon statutes mandate that no more than 30% of local transient lodging taxes can be set aside for city or county services.[10] Other lodging (a Bureau of Labor Statistics category which includes hotels) is a luxury good because spending as a proportion of income increases with income (see Figure 2).

Table 12: Estimated Revenue from 1% Increase in Lodging Tax

Method	2018 Revenue
City of Portland estimate for 1% increase	$7,000,000

Conclusion

This report explored six different tax options (or tax increases) for the purposes of increasing revenue for Portland Parks and Recreation. Three of these options fall under the umbrella of property taxes and three are goods taxes. Due to state limits on property taxes such tax increases warrant in-depth discussions regarding the effects of compression which are provided above.

Of the three property tax options, a permanent special district tax is the least expensive for the typical homeowner, however this option has the largest implications in terms of revenue loss for other local levies. Temporary local option property taxes place a higher burden on taxpayers, with smaller compression adjustments, while general obligation bonds cost taxpayers more still given the absence of compression effects for this type of taxation.

Other than the prepared Food and Beverage Tax, the non-property tax revenue options have much lower funding potential - both a 1% increase in transient lodging taxes as well as a 5% cell phone tax could raise the city approximately $7 million. The revenue potential for FBT far outweigh the former options, with the potential to bring in between $73-$96 million annually. While this option remains somewhat volatile, historical data from Ashland shows net positive growth over the last decade.

[9] Estimates provided by City Economist Josh Harwood

[10] OregonLegislature.gov. (2019). 2017 ORS 320.350. Retrieved from https://www.oregonlegislature.gov/bills_laws/ors/ors320.html

Table 13: Summary of Conclusions

Tax	Rate	Potential Revenue	Regressivity
Temporary Local Option Property Tax	$0.923 (per $1000 AV)	$50 Million	Regressive
Permanent Special District Tax	$0.798 (per $1000 AV)	$50 Million	Regressive
General Obligation Bond	$0.743 (per $1000 AV)	$48 Million	Regressive (but less than Local Option and Special District)
Food and Beverage Tax	5% on individual prepared food and beverage consumers	$73-$96 Million	Relatively Progressive
Transient Lodging Tax	1% increase	~$7 Million	Relatively Progressive
Cell Phone Tax	5% on eligible cell phone revenues (paid by telecommunication companies)	~$7 Million	Likely Regressive based on exemptions

Appendix: General Property Tax Increases

Table 14: General Increase in Temporary Local Option Property Tax Levy in FY 2020/21

Revenue Raised ($ million)	Reduction in revenue to other agencies ($ million)	Tax Bill Increase ($ Per $100,000 AV)	Median Single Family Property Tax Bill Increase ($)
5.5	-0.07	8.5	15
11.1	-0.15	16.9	31
16.5	-0.23	25.3	46
22.0	-0.31	33.7	61
27.4	-0.39	42.0	77
32.8	-0.47	50.2	92
38.2	-0.55	58.4	107
43.6	-0.62	66.6	122
48.9	-0.70	74.7	136
54.2	-0.78	82.8	151

Note: The median AV of single-family properties amounts to $165,000 in 2017, and after adjusted to the growth of AV, is estimated to be equal to about $182,500.

Table 15: General Increase in Permanent Special District Tax Levy in FY 2020/21

Tax Increase ($ per $1,000 AV)	Revenue Raised ($ million)	Reduction in revenue to other agencies ($ million)	Tax Bill Increase ($ Per $100,000 AV)	Median Single Family Property Tax Bill Increase ($)
0.10	6.2	-0.72	8.5	15
0.20	12.4	-1.47	16.9	31
0.30	18.5	-2.23	25.3	46
0.40	24.7	-3.00	33.7	61
0.50	30.8	-3.79	42.0	77
0.60	37.0	-4.60	50.2	92
0.70	43.1	-5.42	58.4	107
0.80	49.2	-6.25	66.6	122
0.90	55.3	-7.10	74.7	136
1.00	61.3	-7.96	82.8	151

Note: The median AV of single-family properties amounts to $165,000 in 2017, and after adjusted to the growth of AV, is estimated to be equal to about $182,500.

Table 16: General Increase in Bond Obligation in FY 2020/21

Tax Increase ($ per $1,000 AV)	Revenue Raised ($ million)	Reduction in revenue to other agencies ($ million)	Tax Bill Increase ($ Per $100,000 AV)	Median Single Family Property Tax Bill Increase ($)
0.10	6.4	-	10.0	18
0.20	12.9	-	20.0	37
0.30	19.3	-	30.0	55
0.40	25.8	-	40.0	73
0.50	32.2	-	50.0	91
0.60	38.7	-	60.0	110
0.70	45.1	-	70.0	128
0.80	51.6	-	80.0	146
0.90	58.0	-	90.0	164
1.00	64.5	-	100.0	183

Note: The median AV of single-family properties amounts to $165,000 in 2017, and after adjusted to the growth of AV, is estimated to be equal to about $182,500.