Jesse Simpson
Environmental Studies Thesis—First-Stage Buildout
February 9, 2017

Planning Gentrification

Municipal Policy & Price Effects of the Orange Line in Portland, OR

Urban planning may be said to be the uneasy unification between two contradictory impulses—social reform and facilitation of growth. New forms of unifying these threads emerge from the crises wrought by the unforeseen consequences of the older order of planning, shaped in reaction to the failures and contradictions of the previous institution. We may trace this dynamic back to the origins of planning as a modern discipline in the 19th century. Physical planning of street layouts emerged from the exigencies of colonialism and rapid expansion. The grid expressed both a mode for efficiently commodifying and selling land as real estate and a desire for ordered simplicity and spatial equality. Alarmed by the social unrest and squalor fermenting in the gridiron repetition of the industrial city, the Garden City and City Beautiful movements urged for reforming the city. These movements sought to bring the naturalistic or monumental back into the city as a mode of instilling civic virtue, thereby keeping the capitalist growth machine churning. The antipathy of the Garden City movement to the urban morphed into postwar suburbanization and the hollowing-out of cities. Its corollary in the remaking of the extant city laid in modernization and growth through high-rises and highways, envisioned as the rationalization of the landscape. Rallying to the cry of open space and automobile efficiency, and generously funded by the federal government, planners led the charge of urban renewal against the city. Freeway construction, "slum clearance," and the creation of Corbusierian-Keynesian public housing heralded progress. This planning consensus began to crumble in Western nations in the late 1960s, crashing down before the empirical failure of these interventions to revitalize cities, mobilization of oppositional citizenry, and the recession of the Keynesian welfare state with a crisis of accumulation.

From these ashes came a new planning focus on entrepreneurial urban policy and investment in amenities to attract private capital back to the city (Zukin 1987). Gentrification has increasingly come to define the contemporary city, reworking its socio-spatial nature. As a process of the class-upgrading of space, gentrification is driven by a host of political, economic, and cultural factors, underlaid by a combination of the post-Fordist "return to the city" by capital and the middle class and the shift in urban governance towards entrepreneurial creation of value (Ley 1997; Smith 1996; Harvey 1989). Drawing on the rebuke of modernist planning and growing cultural, environmental, and economic critiques of suburban sprawl, a new model of growth and urban renewal emerged from the crisis of the 1970s, prioritizing privately-focused reinvestment in the core. Municipalities have been central agents in this process, playing (or attempting to play) a key role in encouraging and abetting the "revitalization" of areas, by amending zoning, investing in amenities, and pursuing strategic partnerships to maximize land value with redevelopment (Hackworth 2006). This entrepreneurial orientation is part and parcel of neoliberalism as expressed at the municipal scale (Farmer 2011). As Peck and Tickell note, the situation of cities in a context of diminished federal and state funding is precarious: "cities must actively—and responsively—scan the horizon for investment and promotion opportunities, monitoring 'competitors' and emulating 'best practice,' lest they be left behind in this intensifying competitive struggle for the kinds of resources (public and private) that neoliberalism has helped make (more) mobile" (2002, 394). This competitive positioning towards the real estate market feeds the impulse of gentrification, transforming the process from a sporadic occurrence to a globalized phenomenon (Smith 2002). Attracting growth to cities constitutes the main aim of neoliberal urbanism, gentrification being a major tool by which the competitive class restructuring is accomplished.

Though gentrification and attendant displacement can be identified with cities as diverse as Shanghai (He 2010), São Paulo (Siqueira 2014), Lagos (Nwanna 2012), or Cape Town (Fleming 2011), its primary geography lies in cities with a large and centralized advanced service/professional sector (Slater 2011). The core-centric nature of the geography of gentrification brings the importance of transit to bear. Though transit enables mobility and opportunity, underpinning access to the city for those without a private car, it is constituted as a central aspect of the municipal accumulation regime, with transit-oriented development plans justifying development as environmentally (and economically and socially) sustainable. Such plans simultaneously may raise the potential ground rent of an area, enhancing the profitability of capital investment (Revington 2015). Transit can also directly affect land values by providing accessibility to the urban core, as valued by market actors and capitalized into housing prices. In this paper, I will examine such price effects of the recent expansion of light rail in Portland. Through regression analysis, I found that the Orange Line has rapidly created a sizable price premium, valorizing land for profitable transit-oriented development and raising the specter of price-induced displacement. This valorization is not merely an unintended byproduct of transportation investment; rather, it is the result of an active strategy of revitalization, with predictable (and predicted) effects on property values.

Portland is commonly identified as an exemplary planning model, with a pleasurably European-feeling downtown, a serious commitment to sustainability, and a uniquely high level of public engagement (c.f. Ozawa 2004; Walton 2004). This reflects both a reality and a very successful branding effort. While all of major elements of Portland livability and planning (light rail and transit-oriented development, bike lanes, an urban growth boundary, community engagement in and public feedback on the planning process, and strong discursive, if not material, support for equity) are by now commonplace in cities, its commitment to these elements of smart growth has a notably long history. Portland's urban history up until the 1970s mirrored national suburbanization trends—the city's population stagnated while its suburbs exploded; it catered to automobile access by bulldozing the central city for highways and surface parking lots; and it engaged in prototypical urban renewal programs that involved the wholesale demolition of the "blighted" South Auditorium and Central Albina neighborhoods (Goodling 2015). A sea change in planning was brewing, however, with community activists in inner neighborhoods like Corbett-Terwilliger and the Northwest District organizing to resist clearance (Abbott 1983). Goldschmidt's election in 1973 shifted Portland into a new model of growth with transit and revitalization. Over the span of the proceeding decade, the basic structure of the Portland Way would be constructed. Freeway riots overturned the Mt. Hood Freeway planned to carve through Southeast Portland, the federal money apportioned for the highway set aside for the Banfield light rail. Trimet and the City coordinated to create the bus mall downtown, while the City's Downtown Plan envisioned revitalization through improved transit access, with spillover effects from a more attractive downtown revalorizing the inner neighborhoods. Harbor

Drive, the waterfront highway, was ripped out and turned into a park named for the Governor who mandated urban growth boundaries in Oregon. And the "Nodes and Noodles" alternative of the 1978 Comprehensive Plan marked a commitment both to transit-oriented development and to large-scale preservation of the single-family zones of Portland.

Portland can be said to have, in part, generated the contemporary smart growth concept, being at the forefront of the reintroduction of transit and planning as a mode for enhancing reinvestment and creating real estate value. Light rail in Portland acts as a spine on which densification and growth are planned, with the Comprehensive Plan formally regulating the order of the city with regard to rail transit. These plans formed a holistic ecosystem of reinvestment in the core to attract and retain the middle class and to maintain the position of Portland, and particularly downtown Portland, within the region. And now, nearly fifty years later, the City has reaped the crop of gentrification. The socio-economic geography of Portland has been systematically reordered, with the gentrification of inner neighborhoods (to the west of 82nd Avenue) strikingly visible in both the shifts in and state of household incomes and college education (Figures 1 and 2). Metro-wide real median household incomes have been stagnant since 2000, though this obscures the nature of the metropolitan restructuring. While household incomes have risen throughout most of the inner city (and, in some cases, at the metropolitan

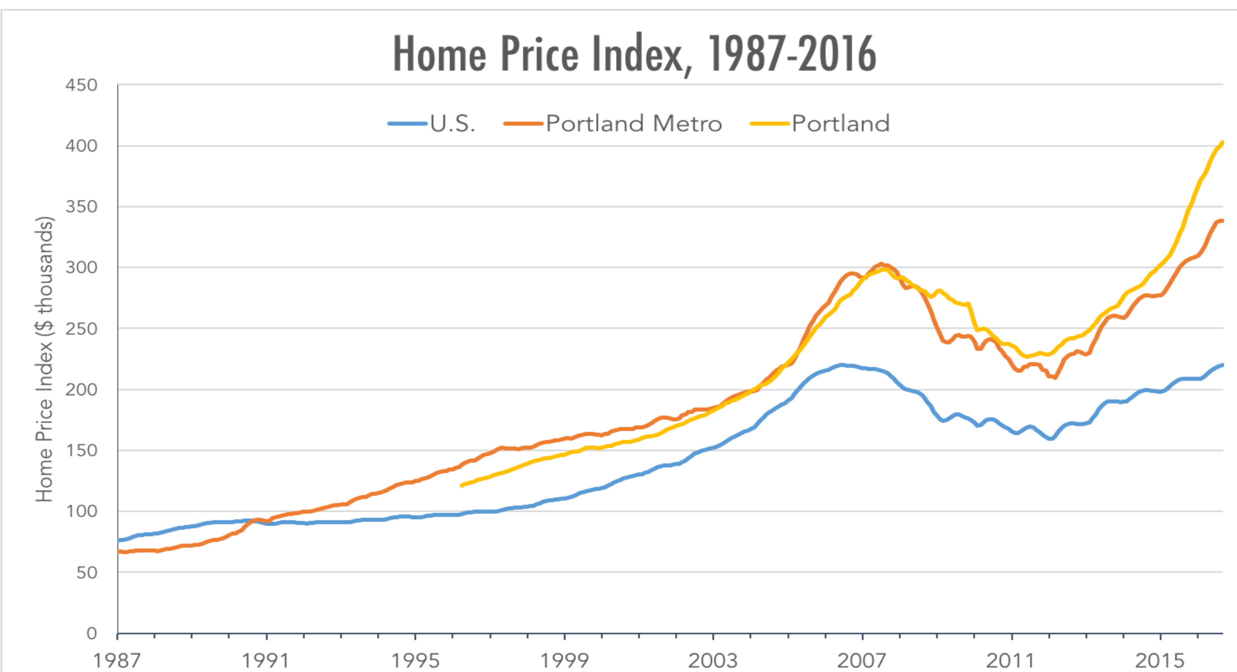


Figure 1

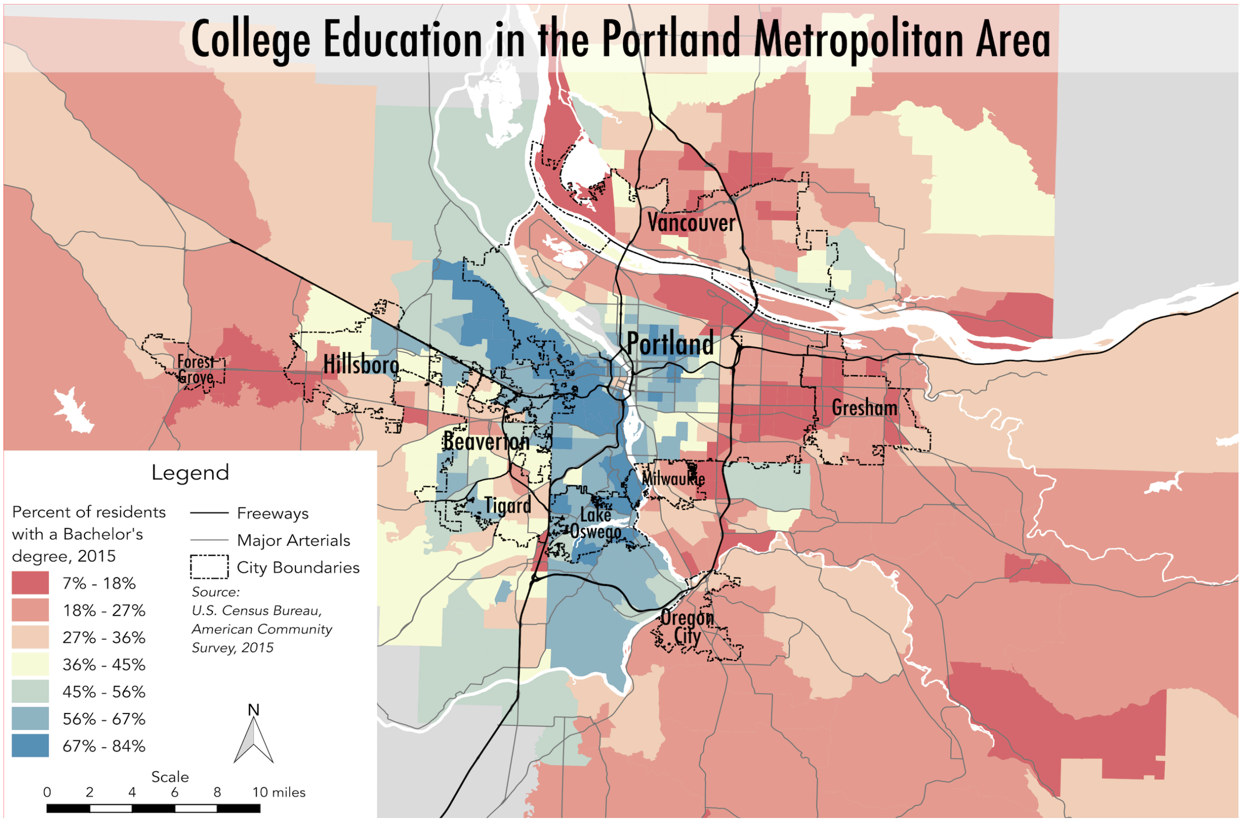
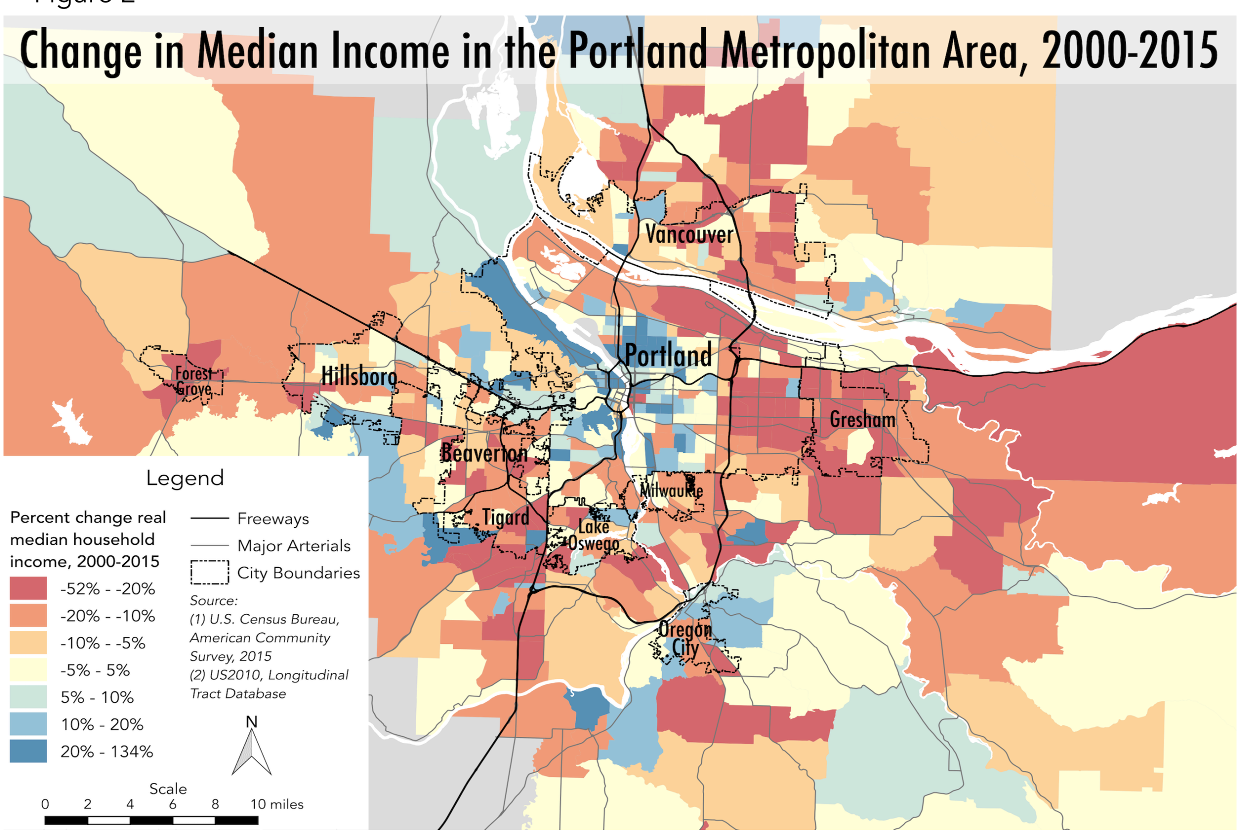
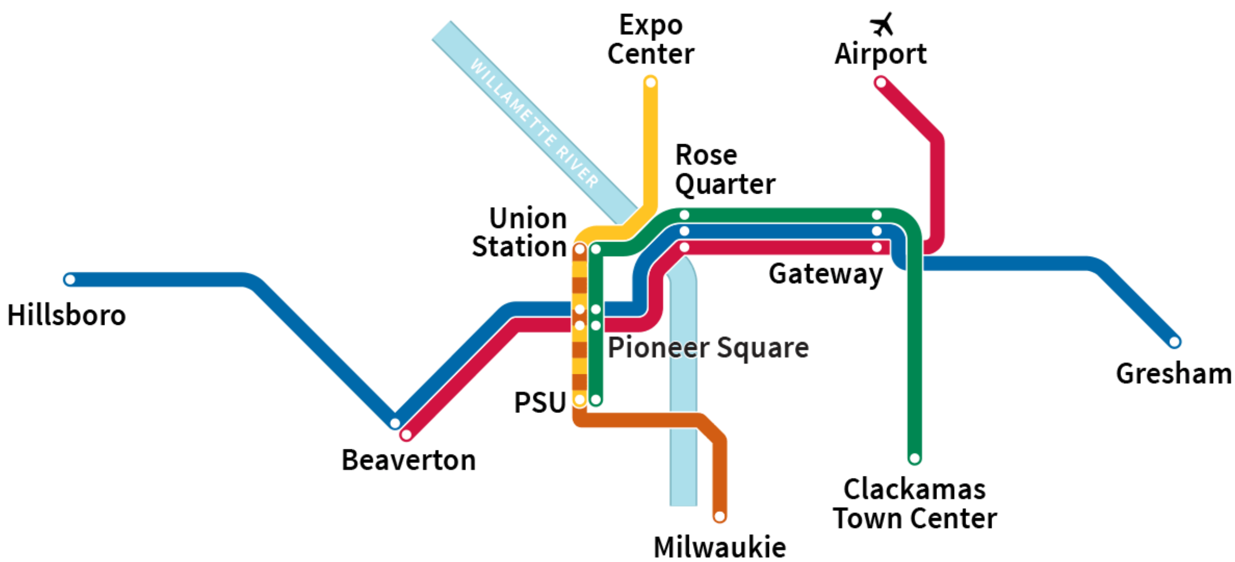


Figure 2



fringe), incomes throughout established suburbs and suburban East Portland have generally fallen (Figure 3). Despite this, housing prices have rapidly appreciated, both during the 2000s housing bubble and since 2012, increasing affordability pressures throughout the housing market. Portland's geography thus replicates both Ehrenhalt's (2013) Great Inversion and a generalized squeezing of the working and middle-class from the city as a whole.

Figure 3: Portland MAX Light Rail System



The Orange Line extends from downtown Portland into Milwaukie, Oregon, an inner suburb directly south of the city's borders. The corridor has long been prioritized for rail investment, being initially bundled as part of a North-South line from Clackamas Town Center, through Milwaukie and Downtown Portland, to Vancouver, Washington in the early 90s. Clark County voters rejected the $238 million bond to cover Washington's portion of the line costs, however, stalling plans for this rail expansion (Maras 2015). Trimet opened the northern portion of this line as the Yellow Line, terminating inside Portland city limits, in 2004. In 2008, Trimet finished construction on the Green Line to Clackamas Town Center, running south along I-205 from the existing rail lines at Gateway. After nearly two decades of false starts, the planning of light rail to Milwaukie began in earnest in 2008, opening as the Orange Line in September 2015. Owing to Portland's darling status with the Federal Transit Administration, half of the $1.5 billion line's costs were covered by the federal government through the Capital Investment Grant

Program (Gates 2016). Seeking federal funds meant that Trimet had to proceed through a formal Environmental Impact Statement (EIS) process. This included, among a host of other analyses, an estimation of the effect on land use and property values resulting from light rail investment.

Encouraging development was a major and explicit rationale for light rail as envisioned by Trimet, the regional transit planning and operating agency, who entitled the main report on the line "Growing Places." This development orientation recurred throughout the planning process. The alignment itself was altered in the 2008 Locally Preferred Alternative (LPA) Report from the 2003 LPA, adding a station south of downtown Milwaukie and adjusting the new bridge approach to add a station in the South Waterfront area. These changes were expressly to maximize development prospects (Metro 2008). Station area planning consisted primarily of assessing existing and potential development opportunities in an area, as well as the public investments which would maximize development potential. Though the potential for this transit-oriented development to spark displacement was left undiscussed during this station area planning process, it was distinctly noted as a possibility in the EIS:

> Investment in station areas could enhance the surrounding areas by adding services and value to the neighborhood. Where lots are vacant or underdeveloped, property owners may find that property values increase. While this could be a net benefit to property values, low income residents in adjacent neighborhoods may find it difficult to keep up with rising housing values. Property owners may benefit from this, but existing renters may need to move from the area to find accommodations with similar affordability. (Metro 2010, 3-67)

The Orange Line was also used as the basis for complementary municipal policy changes. Milwaukie created an urban renewal zone around its downtown. This urban renewal zone apportions additional property taxes from increased land values over the next 29 years, in order to service the debt from investing in the amenities that would increase those land values. Such municipal debt-financing of gentrification is coupled with a vague promise to invest in affordable housing, to advance equity. Meanwhile, Portland, constrained by regulations from Metro, the regional government and planning organization, concerning the supply of industrial lands, focused its planning efforts on densifying and gentrifying employment zoning by raising height limits and redefining "industrial offices" (software, graphic design, etc.) as industrial uses.

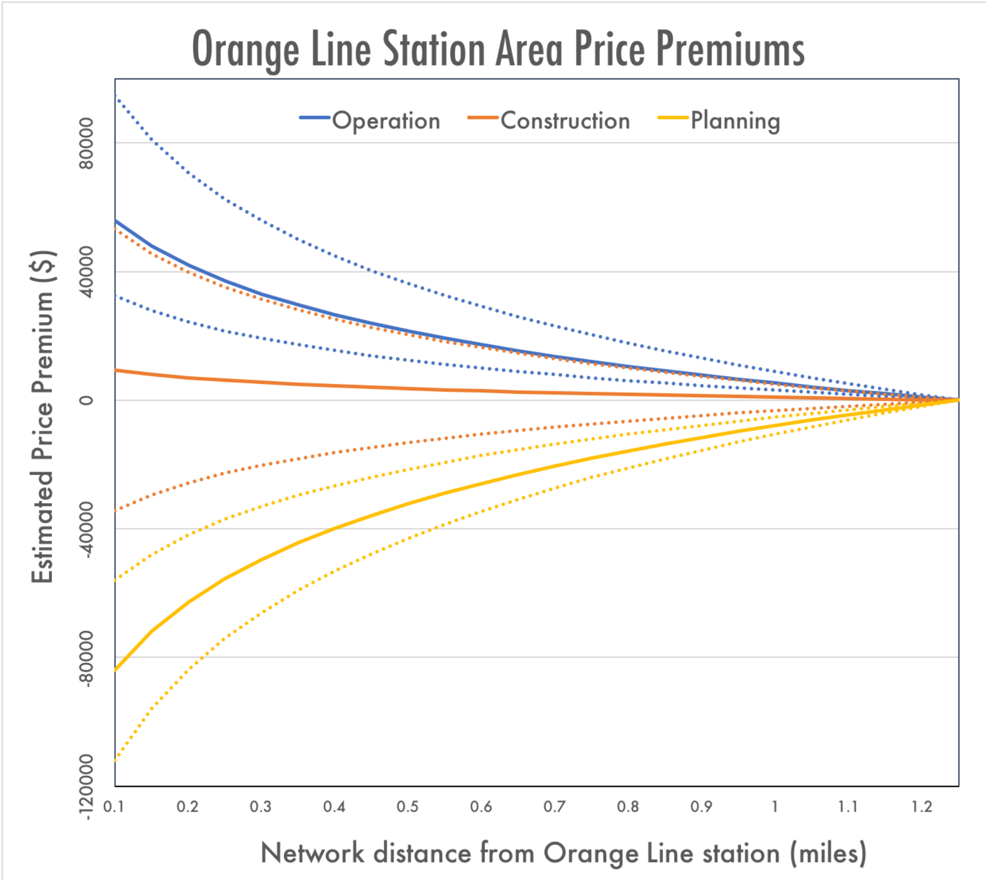
To analyze the potential price effects of the introduction of light rail, I conducted a hedonic analysis of home sales within 1.25 miles walking distance of each of the stations, between 2008 and 2016. Hedonic analysis is a revealed preference method of estimating the value of an aspect or component of a market good. It breaks down this good (housing for this analysis) into its constituent characteristics, and obtains estimates of the value contributed by each characteristic. The general hedonic model of housing is that prices are a function of their structural, neighborhood, and transportation attributes, with a normally-distributed error term. Variables are used as measures or proxies of these attributes, with each variable controlled in a linear regression to find the effect of the study variable on home prices, independent of all others.

I examined home sales with respect to both the timing of the sales and by the proximity to individual stations. I used three time periods for the stations—planning, construction, and operation. The beginning of construction on Tilikum Crossing, the new multimodal/car-free bridge, was chosen as the demarcation between planning and construction. The primary data source used for this analysis was the County Assessor's records of property sales, building area, and lot square footage. I calculated the key independent variable for my study—network distance to stations—using the Network Analyst tool in ArcGIS. I chose to measure walking/network distance since the hypothesized price premium of transit is generally considered to be a function of people valuing the accessibility benefits of transit (Higgins and Kanaroglou 2016), which are realized through the extant street network. Given that the Orange Line runs largely in an old freight rail right-of-way, alongside a large golf course, and near the Willamette River, accounting for how geographic barriers increase the actual distance to the station was obviously important. I based the exact corridor boundary on a survey of existing literature—a ~1 mile Euclidean buffer for studies using a continuous-distance variable is typical (c.f Duncan 2008; Yan et al. 2012; Atkinson-Palombo 2010); a 1.25-mile network buffer approximates this distance while accounting for significant geographic barriers.

Given a dataset of 5,433 home sales, I then began an iterative process of model specification. For measurement of station distance, I ultimately settled on two functional model forms: a continuous level-log model and a distance bands model. Leaving the price variable untransformed was appealing on the theoretic basis of the nature of land premiums resulting from rail and the practical basis of simplifying interpretation of the results. To account for the likely nonlinear diminishment of station premiums, I log-transformed the distance variable, producing a model in which a percentage change in distance will equate to a given dollar change in price. I also measured station distance using a series of quarter mile network distance bands encoded as dummy variables. I log-transformed all locational distance variables, assuming a nonlinear return to proximity. I log-transformed building square footage and lot area, due to the positive skew of their distribution. I also squared age, to account for a general U-shaped function of age and price (new homes are more expensive than 30-40 year-old ones, but 100 year-old homes gain value).

Due to spatial autocorrelation of the residuals, I used a series of neighborhood dummy variables based on the neighborhood association the sales occurred in, as part of a spatial fixed effects model. I refined the model used for the time series analysis by adding variables with hypothesized effects on price, including those shown in the variable list (figure 1), along with some other neighborhood socioeconomic census variables (race and median household income); land use percentage within a quarter mile buffer; distance to water, community centers, grocery stores, and commercial areas; and measures of elevation and slope. These variables were discarded for lack of significance and issues with multicollinearity. The distance band dummy variables for bus and highway proximity were also comparatively insignificant and discarded for time series analysis. All time series models still showed a small, but statistically significant spatial correlation after imputing neighborhood fixed effects, which I accounted for by using the spatial lag and error model in GeoDaSpace, denoted 2SLS (Two-Stage Least Squares) in the regression table (Figure 2), in addition to the Ordinary Least Squares model. This model incorporates two variables, W_ADJ_PRICE and lamda, that allow for the spatial interdependence of the dependent variable and error terms. All OLS results shown use robust standard errors as computed by the White test, as heteroscedasticity was significant.

Figure 4

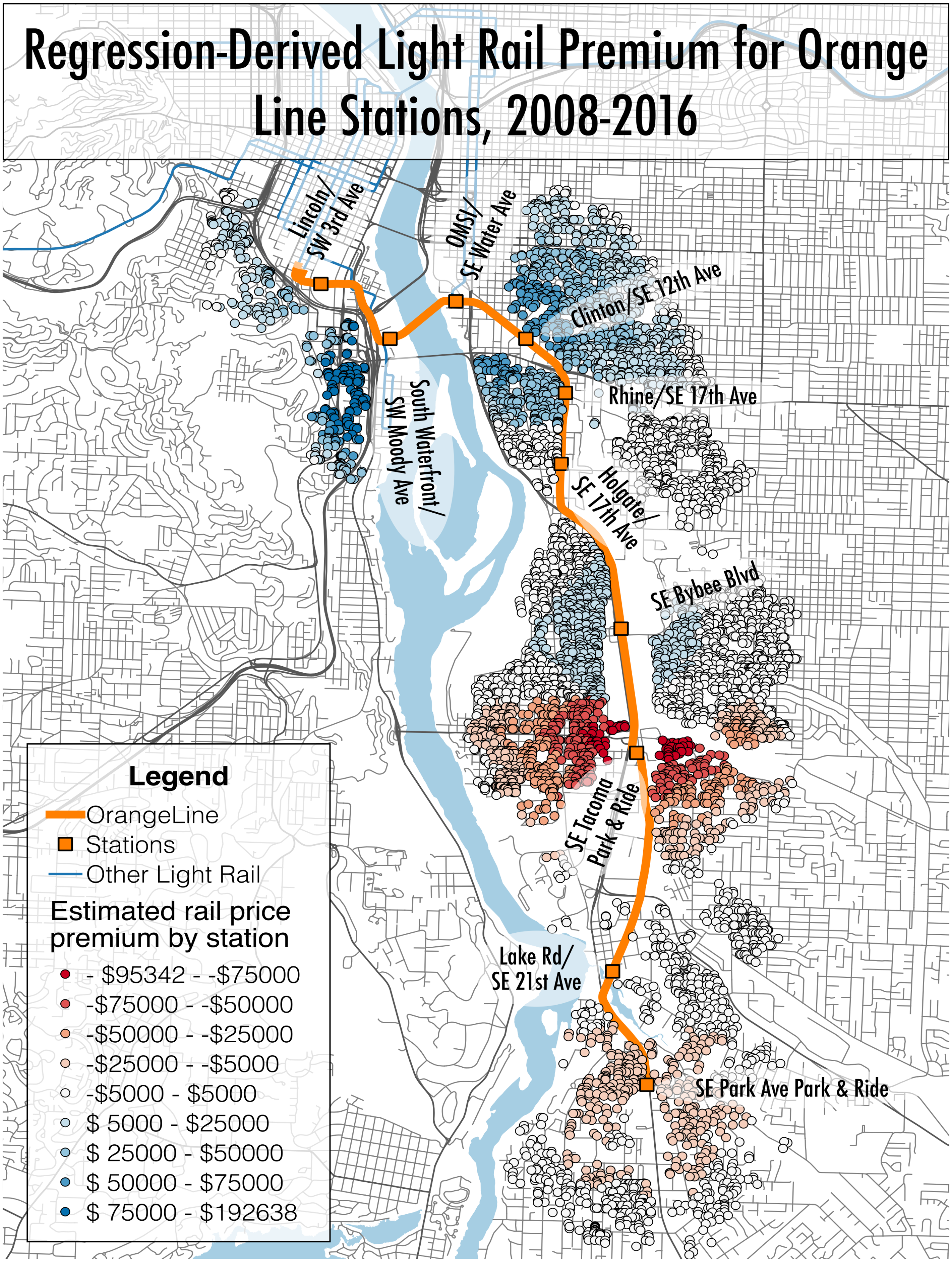


The independent variables of my analysis in this regression table are lnOLSta and the categorical distance variables. The coefficient for lnOLSta, divided by 100, is the expected change in price from a 1% change in station distance. The categorical distance variable coefficients measure the average station premium/discount of each distance band relative to properties between 1 and 1.25 miles from the station. This time series regression clearly illustrates the emergence of a light rail price premium, with the continuous and distance band variables becoming significant after the opening of the line. Below is a plot of the bid premium resulting from the 2SLS model of continuous distance, with 95% confidence intervals marked with dotted lines (Figure 4). It illustrates the rapid materialization of a ~$56,000 price premium between properties 1.25 miles away and those within 0.1 miles during the operation period, with either no statistically significant effects or a significant disamenity effect in the preceding periods. The categorical dummies corroborate this finding, pointing to a $56,000 premium up to a quarter mile and a roughly $30,000 premium between a quarter mile and three quarters of a mile.

Of course, these smoothed bid-rent curves for the network as a whole elide significant distinctions. Rail networks are not spatially homogenous—both the utility of stations and the attractiveness of their environments vary widely. To investigate potential spatial heterogeneity and help ground the econometrics in the localities of planning and equity, I conducted an individual station regression analysis. I split the sales data by the nearest station, excluding OMSI/SE Water Ave due to a lack of observations (N=9). I then ran a regression of each of these datasets, using a singular model specification developed on the dataset as a whole. For station areas revealing significant spatial autocorrelation, I ran the spatial lag and error model (figure 3). Accurate estimation of the station-specific price premiums was hampered in large part by the limited sample size available. Given that the time series analysis indicated that Orange Line station locations have only recently been capitalized into land markets, it is perhaps unsurprising that a majority of the results were statistically insignificant. Restricting the analysis to sales within the operation period was not a viable option, given the sample size. Nevertheless, statistically significant effects were found for five stations: a transit-premium for the South Waterfront ($2,900 increase with a 1% decrease in distance), Clinton/SE 12th Ave ($810-$840 increase), and Rhine/SE 17th Ave stations ($440 increase) and a disamenity effect for the SE Tacoma Park & Ride ($1,200-$,1600 decrease per 1% decrease in distance) and the Park Ave Park & Ride and home prices ($450 decrease).

To visualize these spatial patterns, I mapped the derived light rail premium for each sale (Figure 5). I multiplied estimates of station-specific coefficients by the percentage change in the distance to the nearest station from the corridor boundary to that of the observed sale. The results indicate a strong light rail premium near the city center and a discount for properties near a park and ride (though this provides no analysis provides no indication as to whether such a discount applied to the area before pre-light rail). As this analysis uses residential sales, it is admittedly poorly suited to analyzing the effects of two key stations: OMSI and downtown Milwaukie (Lake Road), both of which were spotlighted in the revitalization planning process.

Figure 5: Station Area Light Rail Premium Map



The Orange Line was explicitly about creating better places; in many ways real estate was the vehicle justifying light rail investment. Thus, the results of this regression analysis illustrate success on one level—an indication that market actors collectively value this capital expenditure. Moreover, from a developer's perspective, rising prices and rents make more developments pencil out, expanding opportunities for profit. But, increased home prices will tend to displace the lower income, transit-dependent residents who most benefit from increased transit access. Though there is a growing recognition of the connection between transit and gentrification, both in Portland and at larger scales, the language and policy of transit-oriented revitalization still presumes the achievability of growth-oriented "Triple-Bottom-Line" sustainability, albeit with some modifications to selectively "mitigate" the impacts of gentrification. Light rail and TOD were and are envisioned as a catalyst for meeting the needs not only of private and public profit, but as the model by which the new, amenity-filled, environmentally sustainable, and socially equitable city is created.

The language of planners promoting investment hinges on a rhetorically seamless linkage between growth, sustainability, and equity; these three concepts are recanted together, as if through repetition they will become reality. The soaring language of the Plan's goals is diminished only by the insufficiency of its policies. Underneath the surface goals of achieving equity lie policies either of a hopelessly modest scale or merely presenting an equitable direction while retaining and fulfilling substantial municipal and private interests in land value maximization. The long-term vision is housing in livable, diverse, multi-modal neighborhoods as a social right; the present reality is amenity provision as a variously intentional and inadvertent strategy of urban renewal, raising land values, spatially isolating an underclass, and attracting the footloose capital and middle class for which the spectacles of gentrification are constructed.

In interpreting the role of planning within these structures, it would be improper to assign either insufficient or excessive blame for gentrification to the planning profession; planning is complicit in, but not the ultimate driver of, the embourgeoisement of the city. We should neither lose sight of the structural limits on municipal-level planning in terms of constructing cities nor the ways in which the success of revitalization deepens the unevenness of the urban landscape.

This uneven development proceeds apace, its logic derived from the fixed spatial nature of capital, the tendency towards crises of overaccumulation under capitalism, and the use of the spatial fix to temporarily resolve these crises of declining profitability (Smith 1982). The state intervenes in and shapes this process, but is itself constrained in its actions. Keeping the growth machine oiled comprises the base concern of urban politics (Molotch 1976). Smart growth revitalization and densification has emerged as a predominate strategy for attracting and directing capital accumulation in the contemporary city.

Scalar contestations of equity emerge as we consider who the City is constructed for. The global city concept is particularly relevant to understanding the nature of unequal service of segmented scales of the "public." Farmer (2011) illustrates how globally-oriented transit expansions in Chicago, in the form of an express line from downtown to the airport and the Circle Line around greater downtown, have been prioritized above both the maintenance of the system and the needs of the local transit-dependent population. Similarly, Enright (2013) analyzes how the Grand Paris Express, a plan to dramatically expand transit access in the Parisian suburbs, was directed towards the creation of a globally competitive polycentric city. By dictate, its first priority was that of "serving urban travelers and linking technological, scientific, and economic poles on the outskirts of the city with the center of Paris… One of the key features of this transit-led development, however, is that many of these poles must also be brought about through the creation of a transit system" (798). This issue of global branding and infrastructure extends far beyond transit, however, with international airports, other transport infrastructures, convention centers, stadiums, mega-events, skyscrapers, starchitecture, and more, appearing as the physical manifestation of a politics of global positioning. The physical side of global striving is accompanied by discursive branding, the creation of a recognizable and unique identity. The rush to brand and reshape cities for capital contravenes with local needs; for whatever competitive benefits success on the global scale carries for the land-based elite, those living in a city must contend with the creative destruction of their lived environment and increased competition for the basic needs of housing.

Appendix

Table 1: Variables List

Variable	Description	Source
ADJ_PRICE	Most recent sale price (US$), inflated to Sept 2016 values using Portland Metro Area S&P/Case-Shiller Index for date of purchase	County Assessor Data accesssed through PortlandMaps
lnAREA	Natural logarithm of the square footage of the lot	County Assessor/PortlandMaps
lnBLDG	Natural logarithm of the building square footage	County Assessor/PortlandMaps
AGE	Age of structure at purchase in years	County Assessor/PortlandMaps
AGE2	Age of structure at purchase squared	County Assessor/PortlandMaps
ATTACHED	Dummy variable indicating if property is attached, calculated using property code descriptions	County Assessor/PortlandMaps
SFRzone	Dummy variable indicating if within a single-family residential zone (R5, R7, R10, and R20 and analogous zones outside Portland)	Metro RLIS
PREWAR	Percentage of structures within a quarter mile buffer that were constructed before 1940	Metro RLIS
PER_BACH	Percentage of residents with a Bachelor's degree or higher	US Census 2010, by census tract
lnOLSta	Natural logarithm of network distance (ft) to nearest Orange Line station	Metro RLIS
lnBUS	Natural log of Euclidean distance (ft) to nearest bus route	Metro RLIS
lnHWY	Natural log of Euclidean distance (ft) to nearest highway or interstate	Metro RLIS
lnDOWNTOWN	Natural log of network distance (ft) to centroid of CBD census tract	Metro RLIS
lnPARK	Natural log of Euclidean distance (ft) to nearest park	Metro RLIS
HWY500	Dummy variable indicating if within 500 ft Euclidean distance of a highway	Metro RLIS
HWY1k	Dummy variable indicating if between 500 ft and 1000 ft Euclidean distance of a highway	Metro RLIS
OL500	Dummy variable indicating if within 500 ft Euclidean distance of Orange Line track	Metro RLIS
OL1k	Dummy variable indicating if between 500 ft and 1000 ft Euclidean distance of Orange Line track	Metro RLIS
BUS500	Dummy variable indicating if within 500 ft Euclidean distance to a bus route	Metro RLIS
BUS1k	Dummy variable indicating if between 500 ft and 1000 ft Euclidean distance to a bus route	Metro RLIS
0-.25mi	Dummy variable indicating if within 0.25 mi of an Orange Line Station	Metro RLIS
.25-.5mi	Dummy variable indicating if between 0.25 and 0.5 mi of an Orange Line Station	Metro RLIS
.5-.75mi	Dummy variable indicating if between 0.5 and 0.75 mi of an Orange Line Station	Metro RLIS
.75-1mi	Dummy variable indicating if between 0.75 and 1 mi of an Orange Line Station	Metro RLIS

Table 2: Time-Series Regression Table

	All Time Periods				Operation				Construction				Planning			
	ln(Network Distance)		Distance Bands		ln(Network Distance)		Distance Bands		ln(Network Distance)		Distance Bands		ln(Network Distance)		Distance Bands	
	OLS	2SLS	OLS	2SLS	OLS	2SLS	OLS	2SLS	OLS	2SLS	OLS	2SLS	OLS	2SLS	OLS	2SLS
	Coefficient (Std. Error)	Coefficient (Std. Error)	Coefficient (Std. Error)	Coefficient (Std. Error)	Coefficient (Std. Error)	Coefficient (Std. Error)	Coefficient (Std. Error)	Coefficient (Std. Error)	Coefficient (Std. Error)	Coefficient (Std. Error)	Coefficient (Std. Error)	Coefficient (Std. Error)	Coefficient (Std. Error)	Coefficient (Std. Error)	Coefficient (Std. Error)	Coefficient (Std. Error)
(constant)	-1801774.02***	-2451879.49***	-1827631.05***	-2465102.98**	-1395704.69***	-1644613.43***	-1681791.88***	-1981682.8***	-1760084.52***	-2133996.91***	-1715520.54***	-2040382.03***	-1940036.69***	-2418861.9***	-1834298.63***	-2381211.12***
	(176738.75)	(223970.92)	(189743.06)	(236019.88)	(393061.58)	(279498.55)	(422582.6)	(291022.55)	(230304.47)	(307334.39)	(247885.8)	(317029.34)	(362234.56)	(623968.46)	(394080.87)	(317373.56)
Property characteristics																
lnBLDG	246711.47***	230523.05***	246610.18***	230450.14***	203916.78***	188380.22***	204971.26***	188040.81***	261171.17***	249895.75***	260905.98***	249589.79***	254611.88***	247034.49***	254397.35***	245869.58***
	(6269.74)	(5047.22)	(6278.77)	(5047)	(13745.06)	(11005.72)	(13732.59)	(11023.23)	(8085.65)	(6673.79)	(8106.37)	(6672.49)	(12972.25)	(10263.51)	(12946.07)	(8017.49)
lnAREA	91131.62***	79532.26***	91177.81***	79395.33***	60245.14***	51133.44***	58962.58***	47707.58***	93388.72***	84825.18***	93601.6***	84766.28***	98099.27***	86144.06***	98376.53***	77189.08***
	(7144.85)	(5216.66)	(7165.29)	(5217.71)	(10528.19)	(10215.32)	(10554.19)	(10104.73)	(8573.3)	(6698.97)	(8593.44)	(6692.03)	(18563.91)	(6319.81)	(18631.56)	(8561.97)
AGE	-3317.15***	-3411.49***	-3308.74***	-3401.81***	-1070.31*	-1190.37**	-1112.48*	-1267.21**	-3451.2***	-3422.95***	-3426.05***	-3401.66***	-3293.22***	-2802.21***	-3261.82***	-2975.09***
	(242.12)	(221.07)	(242.82)	(221.17)	(490.29)	(453.38)	(488.82)	(448.59)	(292.71)	(285.52)	(293.53)	(285.34)	(631.78)	(519.72)	(636.29)	(471.48)
AGE2	21.1***	23.05***	21.01***	22.97***	5.17	6.43	5.54	7.16*	21.25***	21.78***	21.04***	21.61***	20.87***	18.73***	20.54***	19.22***
	(1.93)	(1.79)	(1.93)	(1.79)	(3.86)	(3.48)	(3.85)	(3.44)	(2.44)	(2.35)	(2.45)	(2.35)	(4.79)	(4.33)	(4.82)	(3.87)
ATTACHED	-45129.53***	-32970.96***	-45369.2***	-33038.9***	-47837.96**	-44042.47***	-47241.28**	-43073.76**	-45922.7***	-38453.82***	-46470.82***	-38814.82***	-45085.64***	-32914.45*	-44932.36***	-38521.58**
	(6315.54)	(6615.06)	(6316.51)	(6616.41)	(15296.85)	(13443.19)	(15312.66)	(13294.75)	(7932.87)	(35361.11)	(7961.77)	(8589.89)	(13665.73)	(15038.1)	(13583.41)	(13545.01)
SFRzone	18760.68***	12822.95*	18175.01***	12310.34*	10190.59	7200.34	11012.67	8255.6	25848.72***	21501.76**	25166.1***	20996.03**	14275.77	11832.97	13923.61	4633.51
	(4911.44)	(5410.79)	(4927.33)	(5429.19)	(11459.77)	(9693.03)	(11699.6)	(9590.99)	(5973.07)	(7205.44)	(5977.68)	(7211.21)	(10304.21)	(11506.31)	(10306.13)	(8445.57)
Neighborhood characteristics (Dummy variables not shown)																
PREWAR	225729.72***	133602.05***	227076.13***	135985.2***	138393.29***	94329.92**	137492.47**	87731.52**	228621.45***	138264.95***	231530.93***	144411.13***	280630.96***	220116**	280191.06***	185752.31***
	(19707.92)	(27422.51)	(19678.85)	(27660.82)	(42236.07)	(31935.98)	(42328.19)	(30549.09)	(25607.47)	(36235.54)	(25742.11)	(36236.69)	(40600.78)	(85332.78)	(40464.39)	(29165.18)
PER_BACH	170189.88***	-16662.72	165604.69***	-24024.74	283642.29***	179909.76**	294980.77***	183085.64**	156318.67**	-11226.08	144907.87**	-27890.78	97699.1	-118390.95	92012.21	5680.98
	(34227.01)	(41722.21)	(34921.7)	(42054.16)	(60722.29)	(57910.87)	(60334.52)	(56259.48)	(48652.62)	(55819.27)	(49644.28)	(55920.85)	(68310.28)	(97986.09)	(70162.99)	(55431.47)
lnPARK	-5986.27*	-1943.59	-6149.21*	-1843.04	-4468.31	-3914.92	-4666.7	-3846.47	-4766.79	-2613.16	-5146.23	-2891.63	-7743.25	-4009.11	-6749.71	-4887.87
	(2467.78)	(2588.09)	(2478.12)	(2600.64)	(4856.02)	(4211.01)	(4858.7)	(4138.05)	(3282.22)	(3326.9)	(3291.4)	(3330.66)	(5323.87)	(5975.22)	(5373.01)	(4136.55)
Transportation characteristics																
lnOLSta	-9161.43	-7918.61			-23094.19*	-24192.08*			-7621.77	-4059.92			5552.71	36282.08**		
	(5706.02)	(8495.41)			(10921.62)	(10135.77)			(7711.67)	(11497.26)			(12041.74)	(12092.89)		
0-.25mi			27474.12*	24775.15			60938.75*	56472.46*			24322.84	9820.27			-1365.3	15417.67
			(11597.33)	(16087.25)			(25731.38)	(23044.25)			(14983.22)	(21112.06)			(22889.8)	(23103.04)
.25-.5mi			4321.55	5257.31			27008.84	31078.65*			-2405.95	-11266.97			-4272.18	6185.83
			(7640.04)	(9902.48)			(14934.8)	(12467.12)			(10141.25)	(13100.23)			(16364.35)	(12670.43)
.5-.75mi			1605.18	-4808.99			30436.57*	32608.9**			-4199.85	-15175.45			-14018.27	-2550.59
			(6007.94)	(7974.7)			(12490.91)	(10151.42)			(8172.17)	(10392.71)			(11770.95)	(10068.54)
.75-1mi			-1716.44	-4309.52			9645.58	12865.96			-2345.15	-6788.8			-12377.44	-4631.88
			(5498.23)	(6266.97)			(12085.72)	(9908.76)			(7009.67)	(8013.24)			(11984.44)	(9399.94)
OL500	-46625.14***	-26353.98*	-50437.64***	-30791.11*	-40787.88*	-31791.85	-41601.11*	-27647.24	-42159.74***	(-23429.08)	-45810.9***	-25777.57	-67564.54***	-34405.63	-74665.15***	-49010.37
	(8928.8)	(12694.4)	(9264.73)	(12725.95)	(16704.52)	(17630.92)	(17242.3)	(18478.68)	(12340.8)	(16636.14)	(13041.28)	(16525.02)	(16617.01)	(32278.57)	(16588.45)	(19607.55)
OL1k	-27143.99***	-10463.78	-28663.8***	-12875.66	-29954.53*	-23648.25	-30735.42*	-21987.18	-25983.29**	-14394.36	-26375.13**	-14230.1	-23298.88*	7665.6	-29338.92*	-14157.88
	(6339.51)	(8397.78)	(6384.07)	(8353.6)	(14503.62)	(13308.07)	(14238.25)	(13033.4)	(8468.09)	(10938.31)	(8541.38)	(10799.18)	(11157.89)	(20833.99)	(11571.42)	(13821.51)
lnBUS	8878.14***	10441.57***	8710.87***	10200.43***	11126.03*	11486.81*	12009.22*	12334.04**	8480.68**	10518.4**	7864.88*	9515.79**	6360.55	7954.1	5772.08	7206.28
	(2321.85)	(2755.65)	(2337.48)	(2752.18)	(4921.95)	(4546.36)	(4946.42)	(4402.74)	(3128.74)	(3601.96)	(3137.66)	(3584.17)	(4606.77)	(5612.6)	(4704.17)	(3888.42)
lnDOWNTOWN	-40937.13*	29761.79	-45975.71**	24442.39	-16398.36	15114.77	-9043.35	27970.16	-57666.72**	-18852.22	-67681.58**	-30403.51	-52694.29	-39393.89	-58041.15	8763.99
	(17032.75)	(22633.51)	(17810.8)	23145.88	(40488.62)	(27660.21)	(42255.29)	(27460.91)	(22442.87)	(30691.56)	(23463.36)	(30942.04)	(32105.38)	(77044.42)	(33826.17)	(31454.99)
W_ADJ_PRICE		0.52***		0.52***		0.3939***		0.4269***		0.3729***		0.4***		0.39***		0.43***
		(0.05)		(0.05)		(0.0619)		(0.0599)		(0.0623)		(0.062)		(0.12)		0.06
lamda		0.47***		0.48***		-0.2831*		-0.3755**		0.5483***		0.5477***		0.79***		-0.28***
		(0.06)		(0.06)		(0.1204)		(0.1226)		(0.0871)		(0.0857)		(0.04)		0.08
Model Statistics																
N	5433	5433	5433	5433	998	998	988	988	3006	3006	3006	3006	1429	1429	1429	1429
Adjusted R squared	0.6888	0.6866	0.6888	0.6851	0.6665	0.6818	0.667	0.6837	0.7232	0.724	0.7232	0.7232	0.6642	0.6434	0.6639	0.6763
Moran's I	0.0642***		0.0643***		0.0318***		0.0286***		0.0593***		0.0596***		0.0366***		0.0368***	
Log likelihood	-71500.422	-71422.5	-71498.94	-71429.6	-13039.242	-13035.2	-13036.899	-13033.1	-39466.049	-39437.2	-39464.733	-39437.4	-18842.371	-18835.9	-18841.368	-18834.7
Akaike info criterion	143062.845	142907	143065.88	142927	26140.484	26132.3	26141.797	26134.3	78994.098	78936.4	78997.466	78942.8	37746.741	37733.7	37750.737	37737.5

Table 3: Station-Area Regression

Station	Lincoln/SW 3rd Ave		South Waterfront	Clinton/SE 12th Ave		SE Rhine	Holgate/SE 17th Ave		SE Bybee Blvd		Tacoma P&R		Lake Road	Park Ave P&R	
Model	OLS	2SLS	OLS	OLS	2SLS	OLS	OLS	2SLS	OLS	2SLS	OLS	2SLS	OLS	OLS	2SLS
Variable	Coefficient (Std. Error)	Coefficient (Std. Error)	Coefficient (Std. Error)	Coefficient (Std. Error)	Coefficient (Std. Error)	Coefficient (Std. Error)	Coefficient (Std. Error)	Coefficient (Std. Error)	Coefficient (Std. Error)	Coefficient (Std. Error)	Coefficient (Std. Error)	Coefficient (Std. Error)	Coefficient (Std. Error)	Coefficient (Std. Error)	Coefficient (Std. Error)
(constant)	-1829566.08	-1631329.6	-6362041.17*	-2452534.79***	-2478809.04***	-4355348.45***	-3279324.29***	-3070533.43***	-4589375.9*	-3632441.62***	4264974.05	2829365.85**	1788162.45	3143209.37*	-245677.34
	(1588591.39)	(1632411.1)	(2746832.11)	(626216.81)	(574588.83)	(1199219.5)	(541094.95)	(500765.49)	(692194.13)	(617344.6)	(1073478.74)	(1016041.63)	(1159532.96)	(1543255.15)	(1500689.5)
Property characteristics															
lnBLDG	299808.76***	295221.19***	269421.9***	331164.8623***	323150.33***	230478.09***	196085.32***	188450.35***	299618.99***	270587.19***	235095.14***	212062.86***	104717.32***	160496.17***	155154.09***
	(56551.16)	(49328.79)	(39183.44)	(15304.31642)	(15213.94)	(21398.91)	(10271.14)	(10360.32)	(14800.15)	(12194.96)	(13229.72)	(10842.81)	(16143.05)	(16242.82)	(11271.61)
lnAREA	163517.93**	157559.14***	31970.24	80225.887***	71848.05***	55131.42***	78037.09***	75526.75***	198025.22***	168658.23***	72344.21***	57817.74***	86663.97***	71714.7***	55377.94***
	(54821.38)	(41942.57)	(21389.26)	(18396.58)	(18454.02)	(16928.83)	(13476.11)	(13032.87)	(20645.39)	(15166.29)	(14511.19)	(10232.5)	(20685.29)	(16190.08)	(8438.1)
AGE	-414.32	-667.52	-635.45	-4564.45***	-4433.65***	-3150.47***	-3299.81***	-3171.84***	-6170.1***	-6188.13***	-3486.28***	-3550.25***	-2908.68***	-2014.88**	-1720.15***
	(2873.46)	(2659.27)	(1654.85)	(746.346)	(738.61)	(624)	(445.38)	(433)	(680.77)	(555.32)	(453.15)	(442.43)	(848.07)	(655.16)	(480.52)
AGE2	-1.93	-0.13	4.87	30.66***	30.37***	22.45***	22.18***	21.47***	44.66***	47.72***	24.3***	24.85***	18.72**	10.1	8.85*
	(19.96)	(18.8)	(11.49)	(6.03)	(5.72)	(4.8)	(3.53)	(3.42)	(5.7)	(4.76)	(4.09)	(3.68)	(6.24)	(5.58)	(4.43)
ATTACHED	10046.09	11177.57	-16251.04	-52546.03***	-46486.59**	-45220.38***	-25043.58*	-19918.75	NA	NA	-51218.74**	-42240.29**	NA	NA	NA
	(45809.23)	(51856.29)	(26916.09)	(17109.24)	(15311.99)	(13058.58)	(11092.37)	(10915.59)			(16020.51)	(13898.73)			
SFRzone	-15871	-15216.06	99397.92	36615.86*	32033.44	-10888.51	-1610.19	-999.27	-8163.88	-6680.01	29658.93**	25464.58*	-93815.03***	-31478.73	-21168.24
	(73020.03)	(74985.81)	(61719.75)	(16127.69)	(16786.3)	(11707.96)	(7664.26)	(7249.77)	(15318.82)	(14057.55)	(10374.67)	(10927.56)	(35886.85)	(21717.27)	(12394)
Neighborhood characteristics															
PREWAR	-356693.69	-176901.2	-252807.82	327110.75*	193488.69	659833.83***	125626.75***	126883.28***	299982.47***	148582.33***	53546.31	13031.79	76515.14	4308	82034.76
	(205638.33)	(261942.78)	(374175.03)	(165863.83)	(166137.44)	(139406.17)	(33764.92)	(31762.66)	(37868.98)	(41164.55)	(56407.49)	(48261.18)	(58767.19)	(137145.54)	(62416.68)
PER_BACH	-83077.09	-90208.53	-476902.74*	-49381.94	-46288.81	62300.03	139040.62	122466.8	720193.6***	321744.05**	314683.73***	193978.91***	-59436.77	-1208394.12*	-556154.67
	(207201.29)	(218800.22)	(240329.74)	(107796.48)	(99847.35)	(93223.01)	(81450.94)	(77006.66)	(122457.85)	(125465.34)	(44215.28)	(44344.15)	(201430.66)	(549866.09)	(356867.11)
lnPARK	95853.65**	82253.58**	-290.2	-299.127	-1418.93	-12293.61	2094.32	1347.13	-12463.38*	-5472.71	-10537.08	-7087.71	-9676.68	-13580.52*	-7386.37
	(29224.49)	(30488.59)	(12123.91)	(7890.90)	(7197.93)	(7752.45)	(4840.04)	(4560.98)	(6216.95)	(5067.08)	(6261.17)	(5225.34)	(5586.28)	(6842.22)	(4996.09)
Transportation characteristics															
lnOLSta	-3835.66	-52575.51	-293901.67*	-81846.53**	-84897.06***	-43945.08*	1319.8	2430.99	4063.06	-10356.1	159609.72***	119374.8***	2619.24	45162.98**	15841.15
	(97105.66)	(123889.66)	(130601.3)	(26442.47)	(24640.93)	(19610.03)	(19723.6)	(18619.72)	(22945.9)	(18755.06)	(43040.03)	(31249.65)	(21733.43)	(16907.97)	(14699.46)
OL500	NA	NA	NA	33221.23	-27921.21	-32175.59	-15470.67	-7840.62	-158713.04***	-109258.04**	-163803.4***	-116367.38**	19321.12	5563.14	-17685.27
				(57511.05)	(49442.36)	(26915.32)	(19048.59)	(18129.21)	(37066.81)	(43148.95)	(35052.82)	(35808.3)	(29262.44)	(29414)	(24260.59)
OL1k	-98291.88	-79919.42	86893.27	-2142.83	-26258.41	6690.62	-30893.73*	-18037.79	-43484.22*	-35147.94	-65045.32***	-27965.09	-8806.59	-485.05	-17102.29
	(61912.34)	(80682.74)	(90331.84)	(29206.10)	(28439.21)	(19955.88)	(14935.81)	(14782.74)	(20332.93)	(21410.3)	(18778.73)	(19872.51)	(19435.74)	(14996.14)	(17373.96)
lnBUS	-59833.63	-57599.27	9571.46	24658.08*	19494.29	15789.84	7695.23	3662.22	1805.49	7350.14	3368.38	-3310.1	11657.45	17163.58*	6872.29
	(42985.59)	(51378.08)	(22003.36)	(11484.41)	(11377.79)	(12605.1)	(7202.74)	(7001.73)	(7650.16)	(7158.38)	(8065.61)	(7765.21)	(10984.88)	(8392.29)	(7904.83)
BUS500	-108342.91	-84784.79	207.06	29700.36	33199.9	-4938.54	-5473.5	-2451.06	-18300.05	-7318.83	-51341.09**	-39696.21*	-4073.6	-4070.29	-15399.79
	(70671.85)	(89981.57)	(75835.48)	(24779.53)	(23907.67)	(22352.39)	(14397.87)	(13844.89)	(18123.69)	(16415.04)	(19616.13)	(16855.92)	(26206.39)	(15684.12)	(17034.59)
BUS1k	-76574.73	-64529.83	-18336.16	-52409.66	28207.96	-21617.15	13242.21	14588.31	-3297.56	2581.85	-43732.86**	-26412.35*	-11153.71	-9781.15	-11911.46
	(63528.98)	(75014.2)	(73492.9)	(17324.35)	(16698.51)	(14808.84)	(9618.47)	(9170.08)	(11196.12)	(11064.1)	(13807.76)	(11662.67)	(18843.73)	(10201.81)	(10344.78)
lnHWY	83138.12	75764.53	109583.22**	92740.03**	85350.69**	45937.15*	-21492.88	-11712.29	-69271.63***	-37638.29**	-100025.34***	-70281.98***	-25639.22	4039.93	-4048.09
	(59254.04)	(63694.07)	(34323.21)	(33173.97)	(33280.84)	(23539.83)	(15809.4)	(15453.93)	(17305.09)	(14703.09)	(25399.16)	(19127.41)	(16992.95)	(12172.75)	(11416.82)
HWY500	64670.15	75192.12	10268.12	160406.01*	151865.17	94219.89	-87570.31**	-63990.44*	-46830.37	12102.61	-72189.75	-49142.01	-43363.08	27347.71	16471.3
	(86914.47)	(110070.96)	(57619.22)	(81318.03)	(81741.06)	(54520.48)	(30656)	(30381.7)	(30525.91)	(36995.43)	(52428.04)	(59179.86)	(28272.05)	(28274.28)	(25513.81)
HWY1k	11325.37	14702.27	-28682.12	34289.62	25897.12	48302.23	402.16	3990.74	-29981.69	2883.2	-75459.75**	-57283.56	-8500.26	20492.03	15225.9
	(53388.91)	(59937.14)	(40003.93)	(52409.66)	(50805.6)	(35838.27)	(18651.71)	(17701.42)	(16959.81)	(20601.96)	(28240.51)	(34482.35)	(19494.44)	(13499.52)	(14943.1)
lnDOWNTOWN	-112406.53	-97365.04	733286.26*	-78966.14	-40610.6	226826.03	169132.17**	142928.12*	136410.52*	73531.5	-662574.92***	-485580.95***	-264217.86*	-452221.15**	-111154.5
	(154083.41)	(150623.76)	(338035.1)	(68283.47)	(63892.93)	(124381.28)	(62897.01)	(59833.94)	(65345.14)	(58122.73)	(113236.58)	(103742.15)	(116624.97)	(158558.8)	(143861.28)
W_ADJ_PRICE		0.2257			0.2233**			0.2170***		0.3339***		0.3767***			0.4449
		(0.2083)			(0.0808)			(0.0737)		(0.0455)		(.0552)			(0.2453)
lamda		0.1877			-0.0642			-0.0408		-0.0403		0.0847			-0.2596*
		(0.2664)			(0.1265)			(0.1095)		(0.0793)		(0.0819)			(0.1343)
Model Statistics															
N	171	171	170	716	716	438	639	639	1329	1329	978	978	311	672	672
Adjusted R^2	0.6263	0.6628	0.5076	0.5952	0.5949	0.5113	0.565	0.5801	0.6811	0.6929	0.5934	0.616	0.5119	0.4951	0.5152
Moran's I	0.0436*		0.0015	0.0294**		-0.0080	0.0614***		0.0947***		0.2393***		0.0279	0.0512***	
Log likelihood	-2325.767	-2325.77	-2222.436	-9461.339	-9460.5	-5665.516	-8133.425	-8130.55	-17546.929	-17509.7	-12820.511	-12735.8	-3976.782	-8676.071	-8675.64
Akaike info criterion	4689.534	4689.53	4482.871	18962.678	18963	11371.032	16306.85	16303.1	35133.858	35061.3	25681.022	25513.6	7991.563	17390.142	17391.3

Works Cited

Abbott, Carl. 1983. *Portland: Politics, Planning, and Growth in a Twentieth-Century City*. Lincoln: University of Nebraska Press.

Atkinson-Palombo, Carol. 2010. "Comparing the Capitalisation Benefits of Light-Rail Transit and Overlay Zoning for Single-Family Houses and Condos by Neighbourhood Type in Metropolitan Phoenix, Arizona." *Urban Studies* 47 (11): 2409–26.

Duncan, Michael Douglas. 2007. "The Conditional Nature of Rail Transit Capitalization in San Diego, California." University of California, Berkeley.

Ehrenhalt, Alan. 2013. *The Great Inversion and the Future of the American City*. New York: Vintage.

Farmer, Stephanie. 2011. "Uneven Public Transportation Development in Neoliberalizing Chicago, USA." *Environment and Planning A* 43 (5): 1154–1172. doi:10.1068/a43409.

Fleming, Andrew. 2011. "Making a Place for the Rich? Urban Poor Evictions and Gentrification in Woodstock, South Africa." London School of Economics.

Gates, Angela. 2016. "U.S. Department of Transportation Celebrates Opening of MAX Orange Line, Expanding Transit Options in Portland, Oregon." Text. *FTA*. https://www.transit.dot.gov/about/news/us-department-transportation-celebrates-opening-max-orange-line-expanding-transit-options.

Goodling, Erin, Jamaal Green, and Nathan McClintock. 2015. "Uneven Development of the Sustainable City: Shifting Capital in Portland, Oregon." *Urban Geography* 36 (4): 504–527. doi:10.1080/02723638.2015.1010791.

Hackworth, Jason. 2006. *The Neoliberal City: Governance, Ideology, and Development in American Urbanism*. Ithaca, NY: Cornell University Press.

Harvey, David. 1989. "From Managerialism to Entrepreneurialism: The Transformation in Urban Governance in Late Capitalism." *Geografiska Annaler. Series B, Human Geography* 71 (1): 3–17.

He, Shenjing. 2010. "New-Build Gentrification in Central Shanghai: Demographic Changes and Socioeconomic Implications." *Population, Space and Place* 16 (5): 345–61. doi:10.1002/psp.548.

Higgins, Christopher, and Pavlos Kanaroglou. 2016. "Forty Years of Modelling Rapid Transit's Land Value Uplift in North America: Moving Beyond the Tip of the Iceberg." *Transport Reviews*.

Jones, Craig E., and David Ley. 2016. "Transit-Oriented Development and Gentrification along Metro Vancouver's Low-Income SkyTrain Corridor." *The Canadian Geographer* 60 (1): 9–22. doi:10.1111/cag.12256.

Ley, David. 1997. *The New Middle Class and the Remaking of the Central City*. New York: Oxford University Press.

Maras, Ben. 2015. "Make Way for the Orange Line and a Milwaukie Renaissance." *Metroscape*.

Metro. 2008. "Locally Preferred Alternative Report." https://trimet.org/pdfs/pm/LPA_Report.pdf.

Metro, Trimet, and Federal Transit Administration. 2010. "Portland-Milwaukie Light Rail Project: Final Environmental Impact Statement."

Molotch, Harvey. 1976. "The City as a Growth Machine: Toward a Political Economy of Place." *American Journal of Sociology* 82 (2): 309–32.

Nwanna, Chinwe. 2012. "Gentrification in Lagos State: Challenges and Prospects." *British Journal of Arts and Social Sciences* 5 (2): 163–76.

Ozawa, Connie. 2004. *The Portland Edge: Challenges and Successes In Growing Communities*. Island Press.

Peck, Jamie, and Adam Tickell. 2002. "Neoliberalizing Space." *Antipode* 34 (3): 380–404. doi:10.1111/1467-8330.00247.

Revington, Nick. 2015. "Gentrification, Transit, and Land Use: Moving Beyond Neoclassical Theory." *Geography Compass* 9 (3): 152–63. doi:10.1111/gec3.12203.

Siqueira, Marina Toneli. 2014. "In Search of Gentrification: The Local Meanings of Urban Upward Redevelopment in São Paulo, Brazil." http://hdl.handle.net/10027/19121.

Slater, Tom. 2011. "Gentrification of the City." In *Wiley Blackwell Companions to Geography: New Blackwell Companion to the City*, by Gary Bridge and Sophie Watson. Somerset: Wiley-Blackwell.

Smith, Neil. 1982. "Gentrification and Uneven Development." *Economic Geography* 58 (2): 139–55. doi:10.2307/143793.

Smith, Neil. 1996. *The New Urban Frontier: Gentrification and the Revanchist City*. London; New York: Routledge.

Smith, Neil. 2002. "New Globalism, New Urbanism: Gentrification as Global Urban Strategy." *Antipode* 34 (3): 427–50. doi:10.1111/1467-8330.00249.

Walton, Judy. 2004. "Portland at a Crossroads: Sustaining the Livable City." *Yearbook of the Association of Pacific Coast Geographers* 66: 128–40.

Yan, Sisi, Eric Delmelle, and Mike Duncan. 2012. "The Impact of a New Light Rail System on Single-Family Property Values in Charlotte, North Carolina." *Journal of Transport and Land Use* 5 (2): 60-67.

Zukin, Sharon. 1987. "Gentrification: Culture and Capital in the Urban Core." *Annual Review of Sociology* 13 (1): 129–47. doi:10.1146/annurev.so.13.080187.001021.