# Unlocking Smart Growth: The Effects of Proposed Transit-Oriented Development Laws on the Puget Sound Region

Tiernan Martin<sup>1</sup>, Alex Brennan<sup>1</sup>

<sup>1</sup>Futurewise,

Corresponding author: Tiernan Martin, tiernan@futurewise.org

#### Abstract

17

18

19

20

21

22

23

24

25

28

29

31

32

33

34

35

During the 2024 legislative session in Washington State, members of the House 7 of Representatives introduced a bill aimed at promoting community and transit-8 oriented housing development. This, House Bill 2160, proposed mandating cities to allow developments of a specific scale within certain distances from high-capacity 10 transit stops. This study evaluates the extent to which the proposed increases in 11 development capacity under this bill exceed current allowances. The findings indi-12 cate a substantial increase in development potential for the majority of areas within 13 walking distance of transit stops. Specifically, for land that is developable and zoned 14 for lower development capacity than what the bills propose, the average increase in 15 capacity is projected to be an additional 1.35 floor area ratio (FAR). 16

# Plain Language Summary

In 2024, the Washington State Legislature considered two new laws aimed at making it easier to build homes near public transit areas, like light rail stations and bus rapid transit stops. These laws would require cities to allow taller, denser buildings in these areas. Our study looked at how much more development could happen under these new laws compared to what's currently allowed. We found that, if these laws pass, there would be a lot more room for building new homes and apartments near transit stops.

#### About Futurewise

future wise

Futurewise is a nonprofit organization that works throughout Washington State on the implementation of the Growth Management Act (GMA). We partner with local communities to support land use policies that encourage healthy, equitable and opportunity-rich communities, and that protect our most valuable farmlands, forests and water resources. We have members across the state including the central Puget Sound region. For more information about our organization, visit our website at <a href="https://futurewise.org/">https://futurewise.org/</a>.

# Acknowledgments

The authors received no financial support for the research, authorship, or publication of this article.

Thanks to Yonah Freemark from the Urban Institute for providing zoning district data. (Urban Institute, 2023) Thanks to Lauren Engel, Carol Naito, and Robin Koskey from the Puget Sound Regional Council for sharing the agency's public transit data and analysis of Washington State House Bill 2160 and Senate Bill 6024. (Puget Sound Regional Council, 2024) Thanks to Noha Mahgoub from the Office of Governor Jay Inslee for providing feedback and guidance.

## 1 Introduction

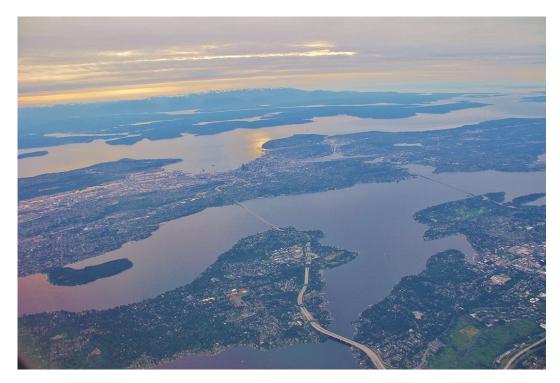


Figure 1: Central Puget Sound | Photo courtesy of Clemens Vasters from Viersen, Germany, CC BY 2.0, via Wikimedia Commons

# 1.1 The Central Puget Sound Region

The Puget Sound metropolitan region is one of North America's major growth centers for people, jobs, and housing. Between 2010 and 2023, the central Puget Sound's four-county region (King, Snohomish, Pierce, and Kitsap counties) added more residents and housing units than the rest of Washington state combined.<sup>1</sup> According to forecasts by the Puget Sound Regional Council, the region's population is expected to grow to 5.8 million people living within 2.8 million households by 2050.(Puget Sound Regional Council, 2018)

One challenge that the central Puget Sound region faces is high, rising housing costs. The Puget Sound Regional Council's *Housing Stability Strategy: 2023 Monitoring Report* provides several sobering statistics about the region's housing costs. According to the report, during the decade between 2010 and 2020, the region added only one housing unit for every three new people that were born or moved there. By 2023, the annual income required to purchase the area's median priced home was \$160,000.<sup>2</sup> Between July 2015 and July 2023, the median rent cost increased by 50%.(Puget Sound Regional Council, 2023)

<sup>&</sup>lt;sup>1</sup>The source of these statistics are the author's analysis of postcensial estimates by the Washington State Office of Financial Management. The central Puget Sound population grew by 414,400 people between 2010 and 2023, while the rest of the state's population grew by 84,300 people. During the same period, 276,177 housing units were added in the this region, while 179,786 units were created elsewhere in the state.

 $<sup>^2</sup>$  This estimate includes three of the four central Puget Sound counties: King, Pierce, and Snohomish.

## 1.2 Transit-Oriented Development

61

69

70

71

73

74

76

77

78

81

82

88

91

93

Transit-oriented development (TOD) is a strategy of building homes at or near public transportation stops and stations. In the United States, this strategy has had a complicated record—often leading to increased property values while simultaneously lowering household travel costs and reducing reliance on personal vehicles.(Lund, 2006) TOD often raises concerns about the displacement of low-income residents and small businesses, leading some local and regional governments to include affordability requirements in their TOD programs.(Dawkins & Moeckel, 2016)

While these concerns are valid, there is not an obvious, superior alternative to TOD. Sharp increases in sprawling, low-density residential and commercial development in Washington during 1980s resulted in many unintended consequences, including ecological disruption, traffic congestion, urban disinvestment, and loss of agricultural lands.(Trohimovich, 2002) This led the Washington State Legislature to adopt the Growth Management Act (GMA), a law requiring cities and counties to plan to accommodate growth within designated areas (urban growth areas or UGAs). Many of the GMA's planning goals are highly aligned with TOD as a land use strategy—particularly the first four goals of the law.<sup>3</sup>

#### 1.3 House Bill 2160

House Bill 2160 (HB 2160) of the 2023-2024 Washington State Legislative Session proposed changes to the GMA intended to promote community and transit-oriented housing development.<sup>4</sup> These changes, which would apply to all cities planning under the GMA, included the following:

- Prohibiting cities from preventing the siting of multifamily housing on residential land within transit station areas
- Prohibiting cities from enacting maximum floor area ratio (FAR) regulation under the following thresholds: 3.5 FAR for station areas of light rail, commuter rail, or streetcars; 2.5 FAR for station areas of bus rapid transit
- Limits the ability of cities to require off-street parking of new residential or mixed-use projects
- Categorically exempting residential or mixed-use projects within station areas from the State Environmental Policy Act (SEPA)

The bill also proposed several requirements of residential development built within station areas, including making at least 10% of its residential units affordable.<sup>5</sup>

(1) Urban growth. Encourage development in urban areas where adequate public facilities and services exist or can be provided in an efficient manner. (2) Reduce sprawl. Reduce the inappropriate conversion of undeveloped land into sprawling, low-density development. (3) Transportation. Encourage efficient multimodal transportation systems that will reduce greenhouse gas emissions and per capita vehicle miles traveled, and are based on regional priorities and coordinated with county and city comprehensive plans. (4) Housing. Plan for and accommodate housing affordable to all economic segments of the population of this state, promote a variety of residential densities and housing types, and encourage preservation of existing housing stock.

 $<sup>^3</sup>$  The first four goals of RCW~36.70A.020~Planning~goals are:

<sup>&</sup>lt;sup>4</sup> This study uses the Second Substitute of House Bill 2160 as the basis for its analysis.

 $<sup>^5\,\</sup>mathrm{The}$  bill defines "Affordable housing" as:

# 1.4 Research Objective & Questions

- The purpose of this study is to provide information about the effects of the proposed HB 2160. Specifically, we seek to answer the following questions:
  - 1. What are the characteristics of the current land uses of the transit station areas as defined in the bill?
  - 2. Would this bill have an effect on the allowed development capacity of transit station areas?
  - 3. What is the size of any effect this bill may have?
  - 4. How are the bill's effects distributed between the two station area types that it defines?
  - 5. What patterns are present in the cities that would be significantly impacted by the bill?

# 2 Data & Methods

## 2.1 Research Design

We use a quantitative method to attempt to answer its research questions. To quantify the impact of zoning changes on development capacity within transit areas, we define the area-weighted mean of net development capacity  $(AWM_{NDC})$  as follows:

$$AWM_{NDC} = \frac{\sum_{i}(NDC_{i} \cdot A_{i} \cdot I_{i})}{\sum_{i}(A_{i} \cdot I_{i})}$$

where:

101

102

103

104

105

106

110

111

112

114

115

116

117

118

119

120

121

122

124

125

126

- $NDC_i = FAR_{new,i} FAR_{old,i}$  represents the net development capacity for parcel i, calculated as the difference between the new Floor Area Ratio (FAR) and the old FAR.
- $A_i$  denotes the area of parcel i.
- $I_i$  is an indicator function that equals 1 if parcel i satisfies all of the following conditions: it is within a station area, it lies within a zoning district where residential use is permitted, and it is within an urban growth area; otherwise,  $I_i$  equals 0.

This formula ensures that the calculation exclusively incorporates parcels meeting the specified criteria, with each parcel's contribution to the overall mean being proportionally weighted by its area. This method offers a precise metric for evaluating changes in development potential, reflecting the nuanced effects of the proposed bill. It also allows us to summarize the bills effect at different geographic levels, including station area, city, and region. We can then both describe individual geographies (e.g., a specific station area) and compare between geographies (e.g., several cities compared individually to the region).

[R]esidential housing whose monthly costs, including utilities other than telephone, do not exceed 30 percent of the monthly income of a household whose income is:

(a) For rental housing, 60 percent of the median household income-adjusted for household size, for the county where the household is located, as reported by the United States department of housing and 5urban development; or (b) For owner-occupied housing, 80 percent of the median household income adjusted for household size, for the county where 8the household is located, as reported by the United States department of housing and urban development. (Reed, 2024)

#### 2.2 Data Collection

The study uses several data sets from a variety of different sources. The following table summarize the study's data:

Data	Description	Citation
Current Parcels (2023)	A statewide data set of tax parcels	Washington State Parcels Project (2023)
Transit Stations	Transit station locations for light rail, commuter rail, streetcar, and existing bus rapid transit routes in the central Puget Sound Region	Puget Sound Regional Council (2024)
Puget Sound Zoning Districts (2023)	Zoning and land use regulations collected from central Puget Sound local governments' land use codes and maps	Urban Institute (2023)
Urban Growth Areas	Urban growth areas for the central Puget Sound region (King, Snohomish, Kitsap, and Pierce counties)	Puget Sound Regional Council (n.d.)

## 2.3 Data Analysis

The study uses a combination of a relational database and statistical software to conduct its analysis. The relational database, PostgreSQL with the PostGIS extension, is used to perform spatial filters and spatial joins on the Current Parcel data set. The R programming language is used to perform aggregations and calculate summary statistics on the filtered and augmented parcel dataset. R is also also used to produce summary tables and visualizations.

Data sets containing information relevant to HB 2160 are combined through spatial filtering and spatial joining to produce a data set of all parcels within the station areas. The refined parcel data are augmented with zoning and land use regulation information from the zoning districts. A maximum FAR baseline is estimated for all parcels, then the new maximum FAR that would be introduced by HB 2160 is estimated. For each parcel, the net difference between the current and new FAR is calculated. For parcels where the current zoning allows development greater than the new FAR, the effect of the bill is considered to be zero additional FAR; for parcels where the current zoning is more restrictive that the new FAR, the effect is calculated in terms of additional FAR allowed. The bill's effect on each parcel is then aggregated by station area, jurisdiction, and region, and summarized using the area-weight mean.<sup>6</sup>

#### 2.4 Limitations

- · Only includes parcels where residential use is allowed
- Walksheds calculated using Euclidean distance ("as the crow flies") to parcel center, not network distance
- Assumes 100% lot coverage is allowed when no max. building footprint or max FAR

<sup>&</sup>lt;sup>6</sup> Parcels that do not allow residential uses are characterized as "not developable" and are not included in the area-weighted mean statistic; however, these parcels are included in the study's analysis for other purposes such as describing and quantithe characteristics of land within each station area or jurisdiction.

- $\bullet$  Other development regulations (e.g., set backs) are not reflected in the estimated FAR
  - Does not account for HOA restrictions on allowed density
    - Does not account for maximum unit limits
  - Does not account for regulatory combinations such as max building height and max  ${\rm FAR}$
  - Does not account for other restrictions on development, such as critical areas, shoreline environments, or landmark designation
  - 3 Results

156

157

158

159

160

161

162

163

165

166

167

168

169

170

171

172

175

176

177

178

179

180

182

183

184

185

186

187

- 4 Discussion
- 5 Conclusion
- References
- Dawkins, C. J., & Moeckel, R. (2016). Transit-induced gentrification: Who will stay, and who will go? *Housing Policy Debate*, 26, 801–818. https://doi.org/10.1080/10511482.2016.1138986
  - Lund, H. (2006). Reasons for living in a transit-oriented development, and associated transit use. *Journal of the American Planning Association*, 72, 357–366. https://doi.org/10.1080/01944360608976757
  - Puget Sound Regional Council. (n.d.). PSRC data portal.
  - Puget Sound Regional Council. (2018). Draft 2050 forecast of people and jobs. Retrieved from https://www.psrc.org/media/1749
  - Puget Sound Regional Council. (2023). Regional housing strategy: 2023 monitoring report. Retrieved from https://www.psrc.org/sites/default/files/2023-11/reg-housing-strategy-monitoring-rpt-2023.pdf
  - Puget Sound Regional Council. (2024, January). Community and transit-oriented housing development bill 2024: An interactive web map. Retrieved from https://arcg.is/0SSvK10
  - Reed, R. J. (2024). An act relating to promoting community and transit-oriented housing development.
  - Trohimovich, T. (2002). The growth management act (GMA) after more than 10 years: Another look & a response to criticisms. *Growth*. Retrieved from http://www.futurewise.org/assets/resources/GMA\_another\_look.pdf
- Urban Institute. (2023). Urban institute puget sound zoning atlas.
  - Washington State Parcels Project. (2023). Current parcels (2023).