



# Cascadia Innovation Corridor - Vision 2050

A MEGA-REGION SUSTAINABLE GROWTH VISION

FEBRUARY 2020



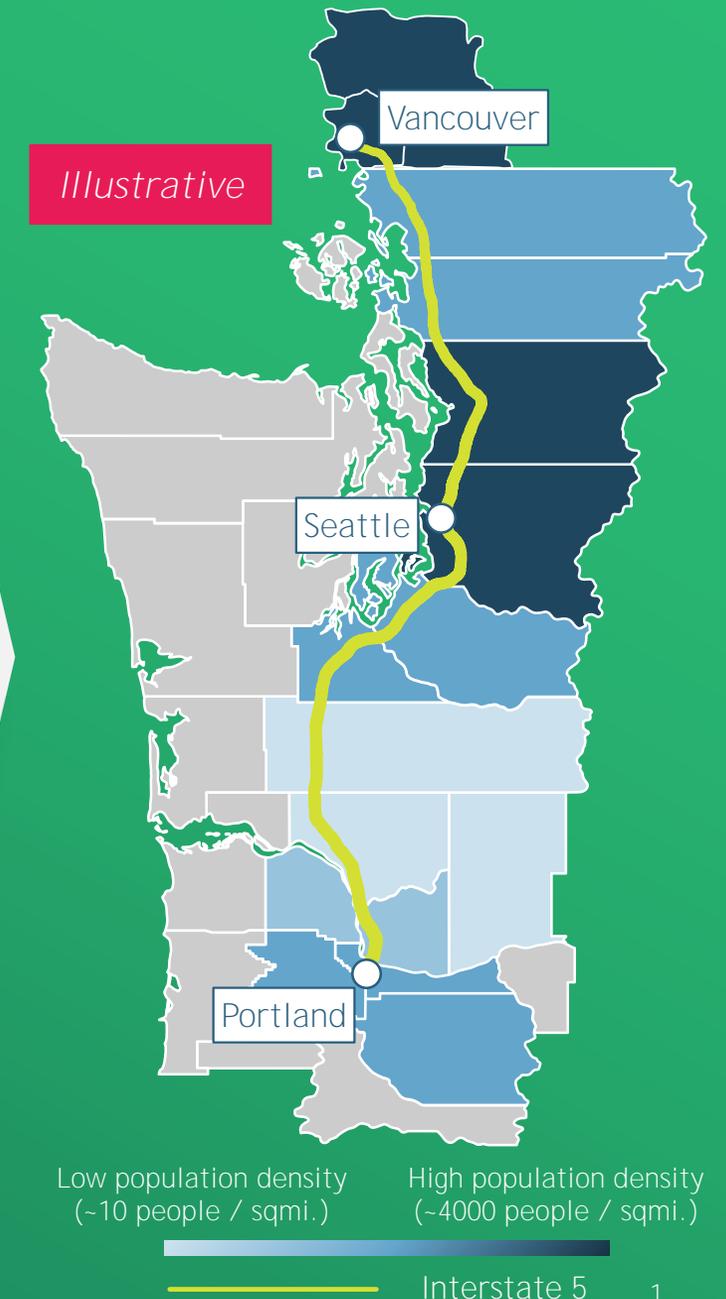
# Context: Cascadia Innovation Corridor

Challenge Seattle and the Business Council of British Columbia have partnered together to realize the vision of Cascadia

Together the organizations have assembled the **region's top business, research and community leaders** who share a common vision of maturing the Cascadia Innovation Corridor into a single sustainable region, with a **shared sense of identity, growth, employment and connectivity**

The Cascadia Innovation Corridor Steering Committee will leverage key assets and infrastructure to support a strong cross-border economy and **position the region as a global innovation hub**

Note: Illustrative representation of Cascadia depicted by county / regional districts  
Source: Cascadia Innovation Corridor



# Report overview

1

## Intro and purpose

Global leader in high growth, knowledge base economies w/high quality of life

With that comes real challenges to sustainable growth

Embrace a new, integrated vision of the future, a first for any mega-region

2

## Benchmarks, projections

Focus on elements of sustainable growth that can best be addressed at mega-region level

Benchmark other mega-regions, good and bad examples

CIC<sup>1</sup> 2050 projections against benchmarks

3

## Hub and spoke vision

Evaluating options to enable growth

Vision: high density hub cities connected by transit with robust industry clusters

Cost and benefit

- High speed transit
- Housing
- Jobs
- Emissions

4

## Next steps, conclusion

Summary of challenges and exciting view of what's possible if we work together to achieve, including who needs to do what to realize the vision

High-level roadmap of actions to accomplish

1. Cascadia Innovation Corridor (CIC)

# Cascadia has grown tremendously and will continue to do so

	1990		2020		2050E
Population	5.7M	>	9.3M	>	12-13M
GDP	\$200B	>	\$740B	>	\$1.5T+
Median income	\$34k	>	\$84k	>	\$150k+

Since 2000, GDP, income, and population have grown 2X+ faster than Canadian or US average

However growth doesn't come without its challenges

How can our mega-region serve as a sustainable model for high growth, knowledge-based economies?

Note: Dollar figures in 2010 real USD  
Sources: Statistics Canada, Federal Reserve Bank of St. Louis, US Census Bureau, Bureau of Economic Analysis, Puget Sound Regional Council, Oregon Metro, Government of Metro Vancouver, BCG analysis

# On current trajectory, Cascadia will face substantial challenges by 2050

30%

Increase in congestion

*Even accounting for autonomous vehicle impact and ST3 investments*

21%

Increase in % income spent on housing

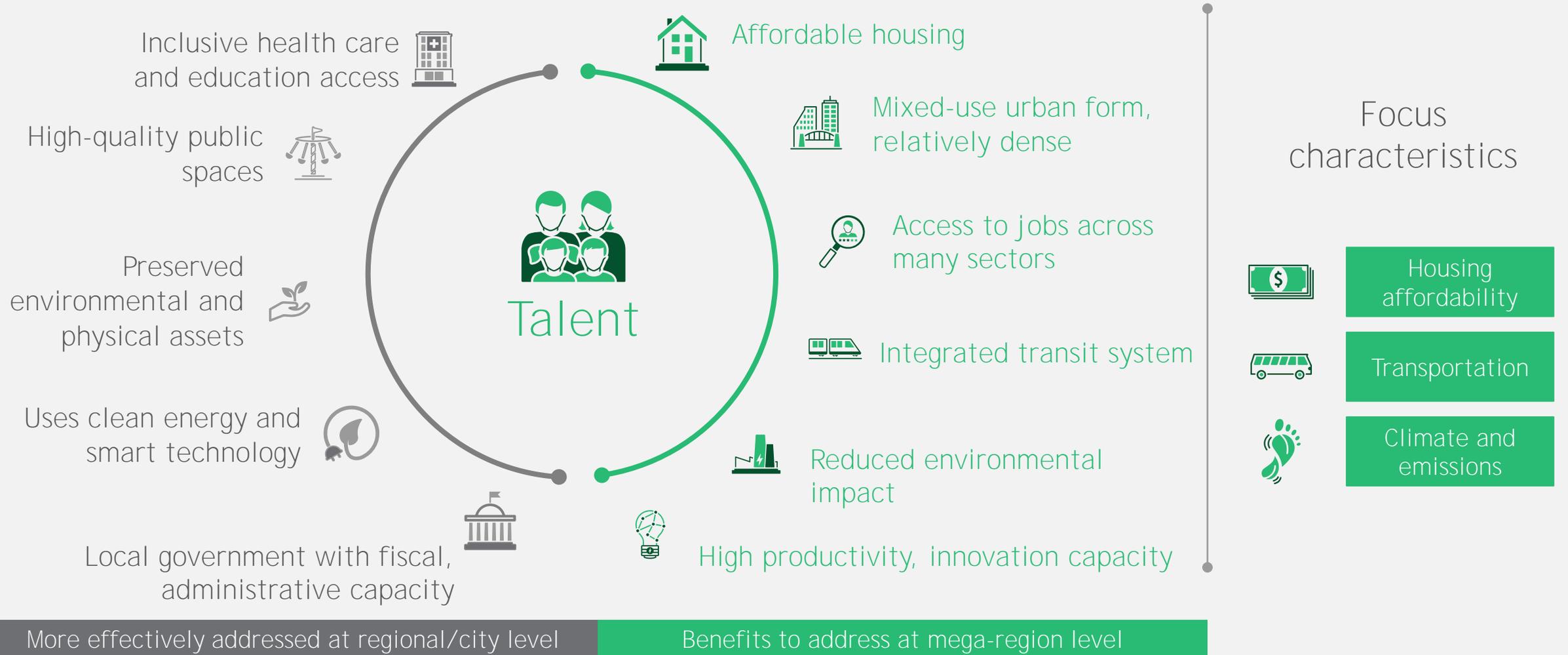
*Exceeds SF's current levels*

73%

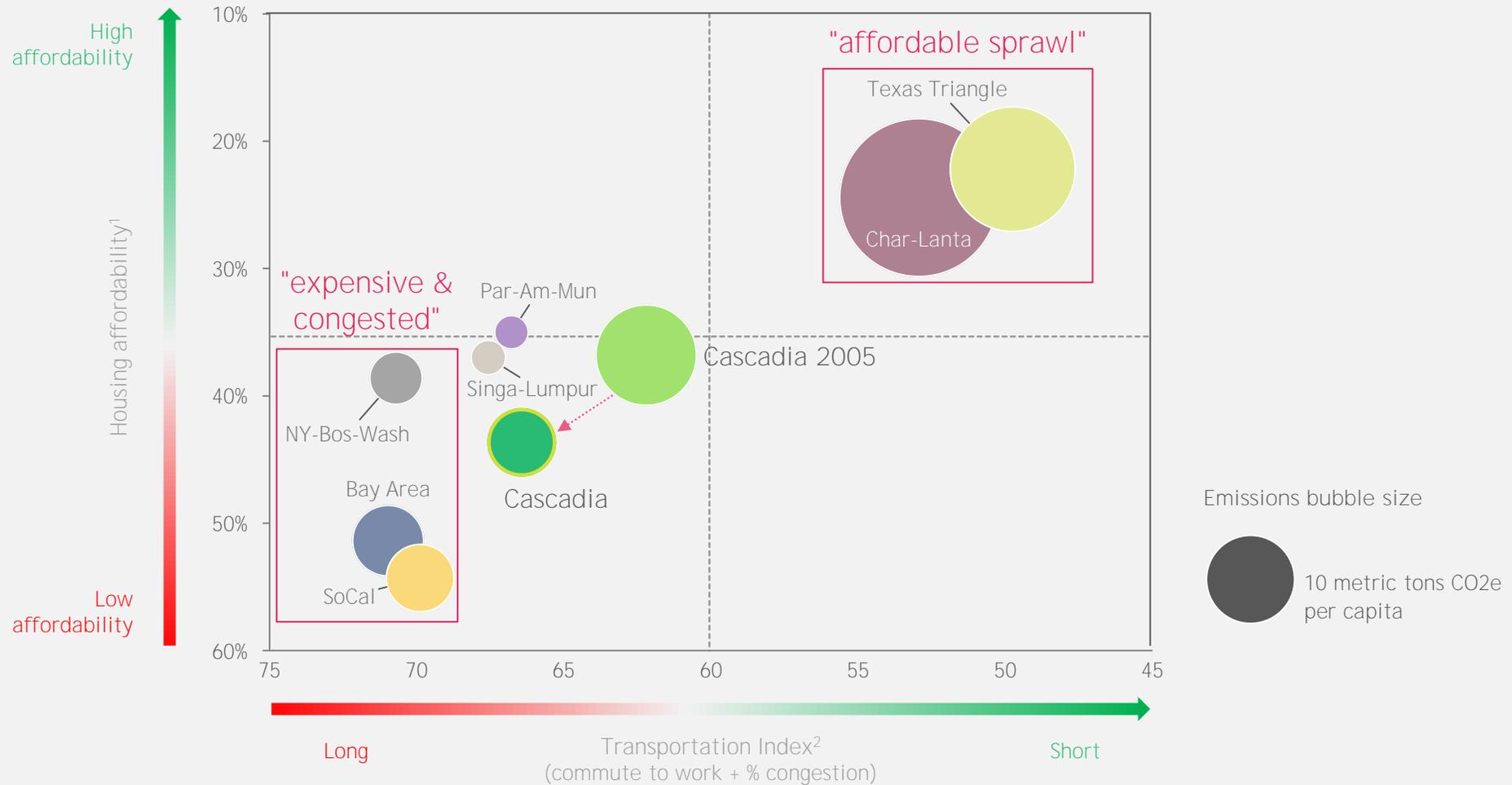
Gap to transportation emissions goal

*Our share of goal to limit global average temperature increase to 1.5° C*

# No other mega-region has defined a comprehensive sustainability vision - recommend Cascadia build on the World Bank framework



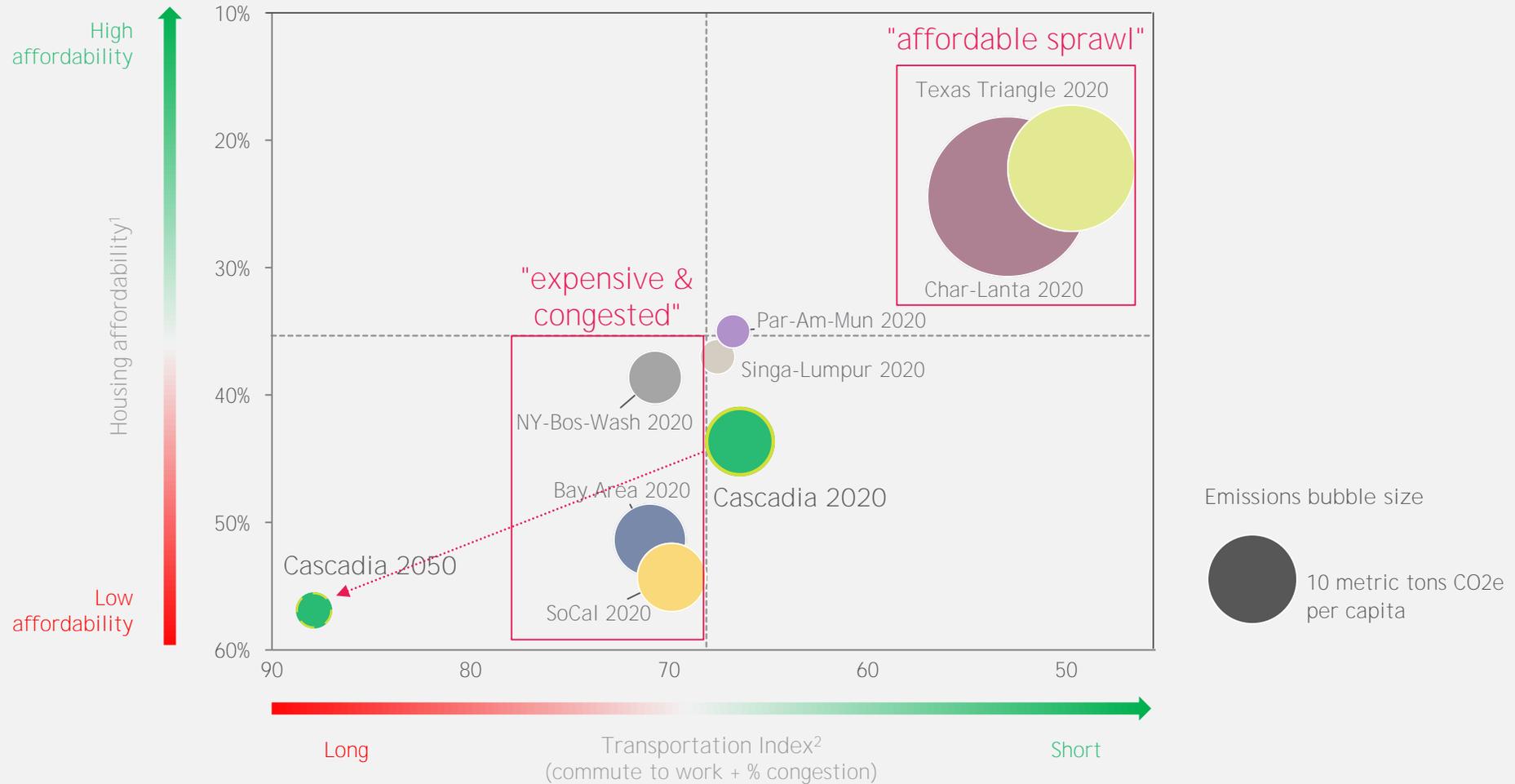
# Knowledge-based mega-regions develop into 2 types



1. Median monthly housing payment (US assumptions) / median monthly gross income 2. Composite of two transportation metrics: mean total commute to work in minutes and percent congestion (ratio of free-flow commute time to peak-hour commute time)

Sources: US Census; Real Estate Board of Great Vancouver; Statistics Canada; TomTom Traffic Index; Texas A&M Travel Institute; Zolo; Numbeo (adjusted); Brussels Institute for Statistics & Analysis; Conseil General de L'Environnement et du Developpement Durable; Department of Statistics Malaysia; The Edge Markets; Department of Statistics Singapore; Today Online; BCG analysis

# Cascadia 2050?

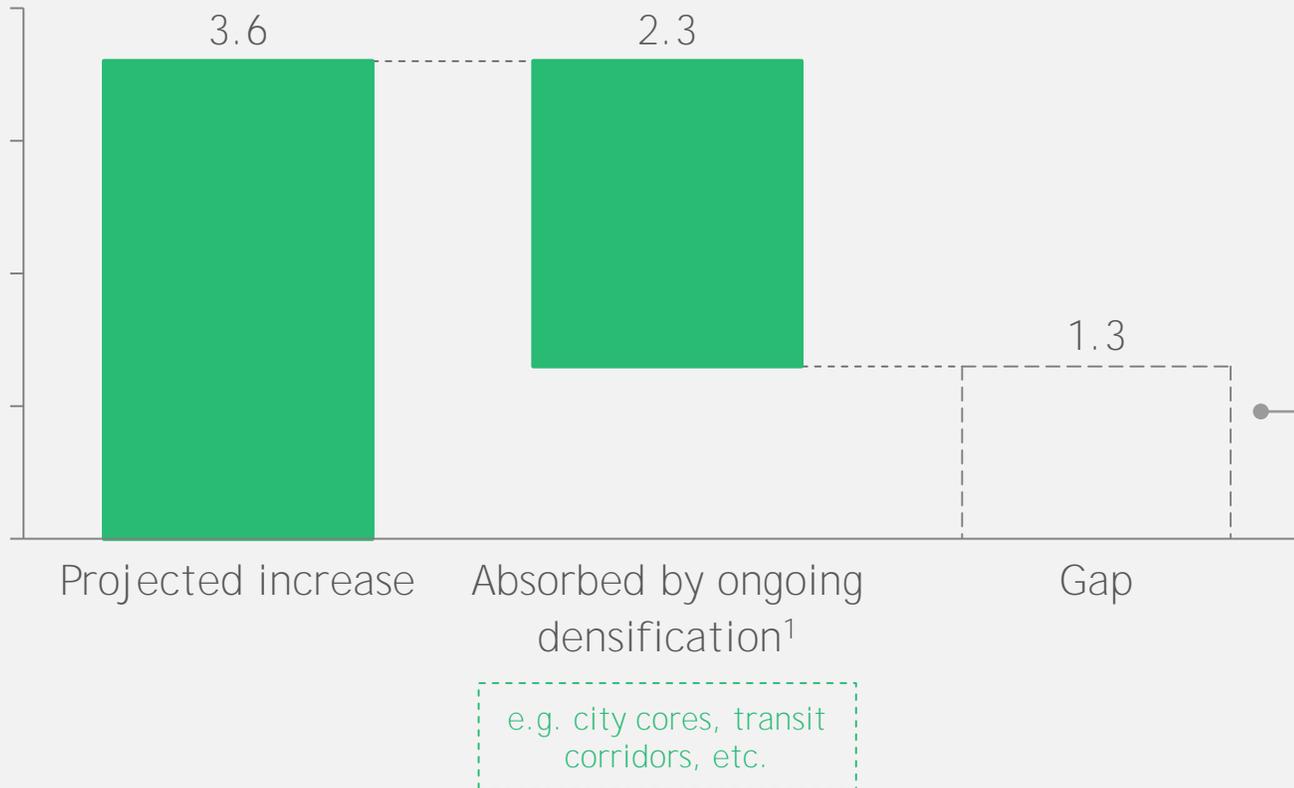


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# Status quo densification is not enough to absorb Cascadia population influx by 2050

2050 Population Growth (M)



## How can 1.3M people be distributed?

- 1 Sprawl: would require 400+ square miles of additional green space to be developed (size of 8 Seattle's)<sup>2</sup>
- 2 Up-zone: Would require turning 325K single family homes into multi-family dwellings<sup>3</sup>
- 3 Hub city: greenfield cities ~400k people, ~250k jobs, and connected by high-speed transit

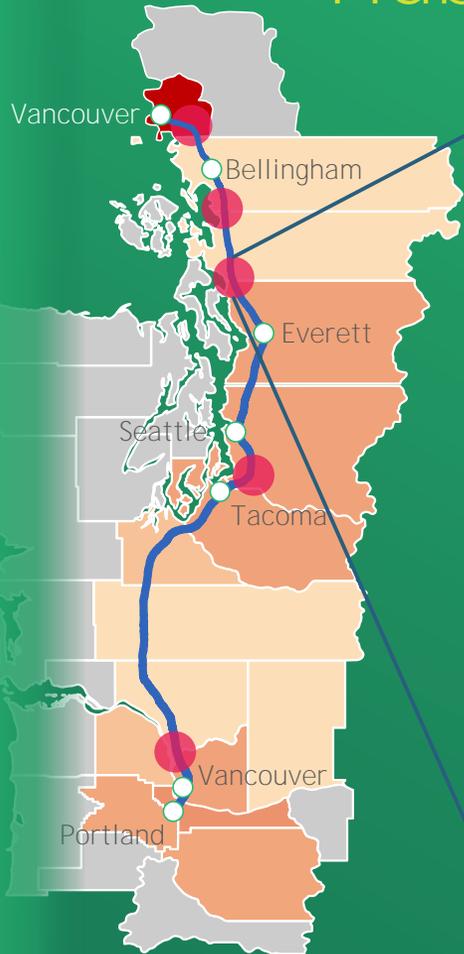
1. Within Vancouver, Seattle, and Portland MSA; projected based on 2010-2020 growth rates for cities as well as available city plans 2. Assumes average density of ~3K per sq. mile 3. Assumes multi family developments can hold 4x the population  
Source: Puget Sound Vision 2050; Metro Vancouver Regional Planning Commission, Oregon Metro Regional Transit Plan, BCG Analysis

# Each path forward impacts affordability, congestion, and emissions differently

	Affordability	Congestion	Emissions
<b>1 Sprawl</b> <ul style="list-style-type: none"><li>Continued development of low to medium density housing across region</li></ul>	 Continuation of current trend; displaces low and middle income	 Increases as more workers commute from farther out (e.g., North Bend is the new Issaquah)	 GHG <sup>1</sup> emissions growing from auto traffic and single family construction
<b>2 Up-zone</b> <ul style="list-style-type: none"><li>Convert single family into dense multi-family housing</li></ul>	 Higher development cost to convert single family units will likely be passed on to consumer	 Requires continuing investment in transit	 Shorter commutes; higher percent lower emission multi-family housing
<b>3 Hub cities</b> <ul style="list-style-type: none"><li>Greenfield development of new high density zones</li><li>Enabled by high-speed transit</li></ul>	 Lower land cost can development	 High-speed transit to urban core; high portion of intra-hub commuting	 Shorter commutes; higher percent lower emission multi-family housing

1. Greenhouse gas emissions

# Hub city vision key enabler of achieving aspiration



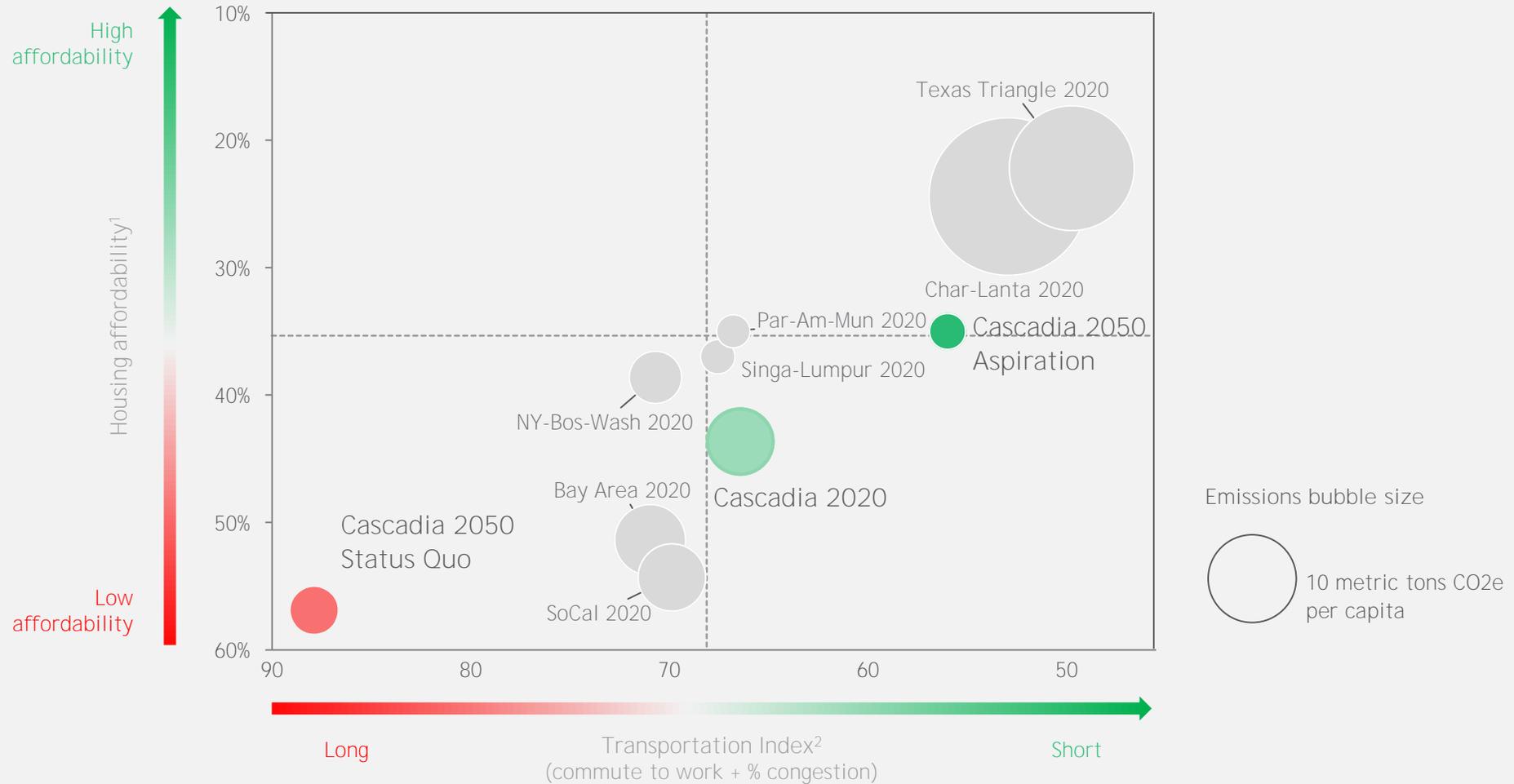
Low population density (7 people / sqmi.) High population density (8800 people / sqmi.)

Hub and transit locations for illustration only



Preliminary rendering only, not for distribution

# A more affordable, less congested, and greener Cascadia in 2050 is possible with decisive action today



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# Illustrative timeline to achieve vision

2025



5 years

- Planning, vision alignment, and mitigation actions from existing cities/ regions
- Hub city selection process initiated
- High-speed transit mode decided

2035



15 years

- Location of hub cities decided and construction planned / underway
- Employers from key industries committed to new hub cities (i.e., bringing jobs and people)
- Post-secondary or research institution committed to new hub city
- Local transit authorities in hub cities spun up and integrated into greater high-speed line

2045



25 years

- High-speed transit fully operational
- Hub cities close to mature with population and industry settled

## Path to achieve 2050 aspiration is hard but achievable

Where to start:

Near-term

Continue to increase density around transit stops

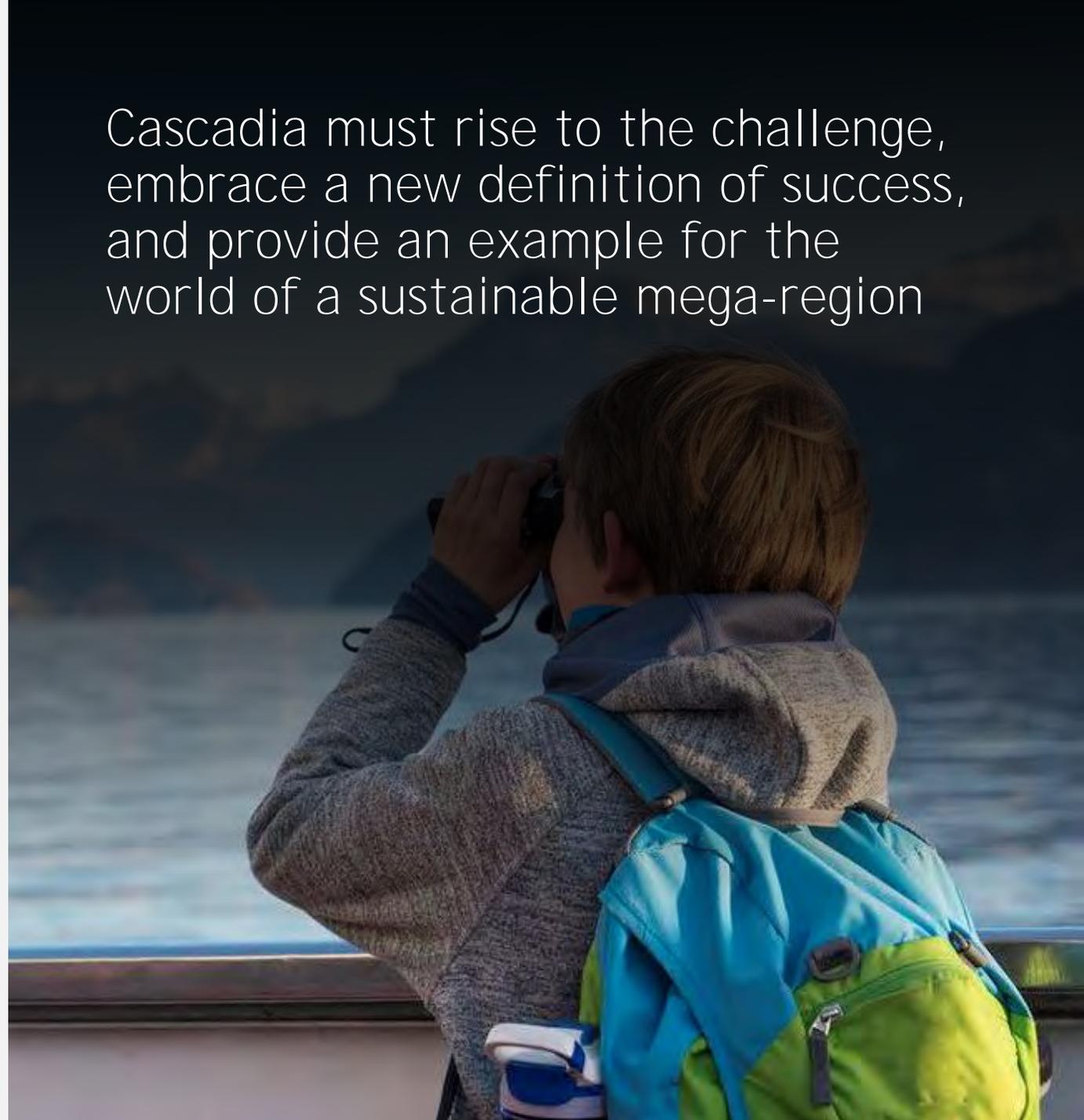
Continue to grow number of jobs and increase density in existing edge cities (e.g. Surrey, Tacoma)

Turn high-speed-transit into reality

Long-term

Develop integrated approach to planning hub cities - transit, housing, and industry

Cascadia must rise to the challenge, embrace a new definition of success, and provide an example for the world of a sustainable mega-region





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