Resort Municipality of
WHISTLER

Strategic Planning

Balance Model Initiative

As presented at Committee of the Whole - 21 December 2021

(Plus, now includes detailed current state assessment)

Objective for today

To share an update on progress as it relates to a key objective of the OCP:

*Strive to achieve and maintain a **comfortable, balanced resort and community capacity**, supporting a progressive sustainable tourism-based economy while protecting the natural environment and reinforcing Whistler's mountain community character*

Agenda

- **Recap** on approach and timelines
- Highlights of performance compared to OCP (data & facts!)
- Approach to future scenario modelling and analysis
- Community Engagement

Purpose

The Balance Model seeks to support understanding of the tradeoffs that exist between the four pillars of the vision, where current constraints exist, and provide insights to strategic thinking for <u>how to achieve sustainable balance moving into the future.</u>

"A place where our community thrives, nature is protected, and guests are inspired" – Community Vision

Context & Analysis Objectives

Prior to COVID, experiences and perspectives have suggested that Whistler may have been nearing its capacity – the Balance Model will use data to investigate these perspectives and enable strategic discussions for proactive management

Perspectives on Whistler's Balance

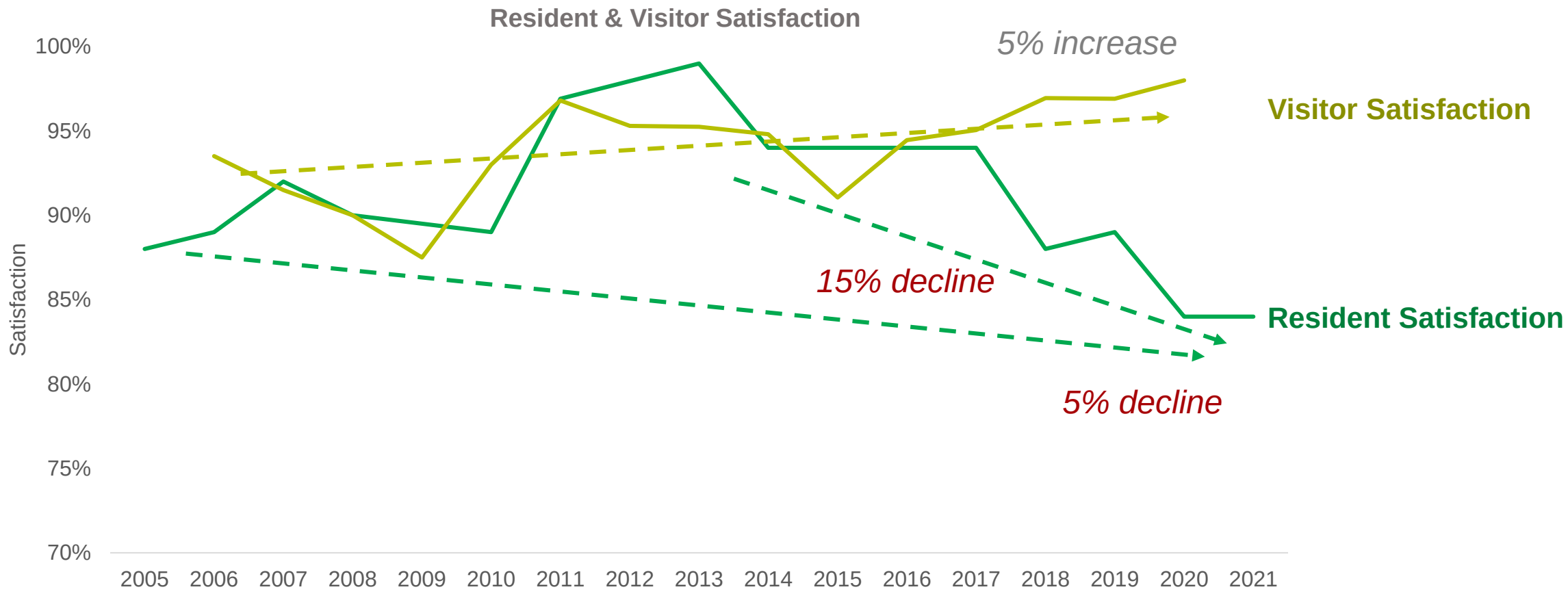
- *Significant investments in tourism have enabled transition to a year round destination and with other factors (eg fx rates), saw rapid economic growth in a relatively short timeframe*
- *Residents are feeling increased pressures from resort attracting more people, including access and affordability challenges*
- *Community amenities & services may not have kept pace with resort development and population growth*
- *Climate Action has not been sufficient to enable the community to meet its targets*
- *Increasing emphasis is needed on protecting Whistler's natural environment as visitor numbers grow*

Balance Model Analysis Questions

- ***Where is Whistler's capacity currently strained, or conversely underutilized?***
- ***How might population change (volumes + mix) and what impacts would that have?***
- ***How might the Whistler Blackcomb Master Plan impact the resort community?***
- ***What tradeoffs may need to be intentionally considered?***
- ***How can we use COVID to rebuild Whistler as a more sustainable tourism community?***

Current Satisfaction Levels

Trends in satisfaction levels highlight the tension and tradeoffs that exist between visitors and residents. We aim to better understand how to strike a balance between these two groups.



Data source: Whistler Community Life Survey / TW Intercept Survey

Project Outcomes & Timelines

Overall the Balance Model seeks to understand the *quantifiable* relationships and *tradeoffs* between population growth and achievement of the community vision.

Completed Fall 2021

Current State Assessment

↘ *Where are we today? How did we get here? What have been the historical trends leading here?*

Winter 2021/22

Potential Future Scenario Modelling

↘ *What can we expect given different scenarios of future population changes?*

Spring 2022

Strategies and Actions for Vision

↘ *What actions can we take to ensure balance across the four pillars and enable achievement of Whistler's vision?*

Agenda

- Recap on approach and timelines
- **Historical and Current State Performance**
- Approach to future scenario modelling and analysis
- Community Engagement

Current State Assessment

Work undertaken:

- Established methodology for determining Whistler's total population and by segment

- Detailed analytical research for quantifying performance for key indicators relating to OCP Vision Pillars
  - Community
  - Environment
  - Economy

- Assessed physical carrying capacity across various infrastructure constraints

Key Definitions

Balance Model – A *management tool* that will provide RMOW insight into how future population changes may impact the community and where capacity and performance constraints may exist.

Population segments – Subsets of Whistler's resident and visitor population.

Key Definitions

Influencers – Factors that may have had an influence on historical growth in Whistler and may influence future growth.

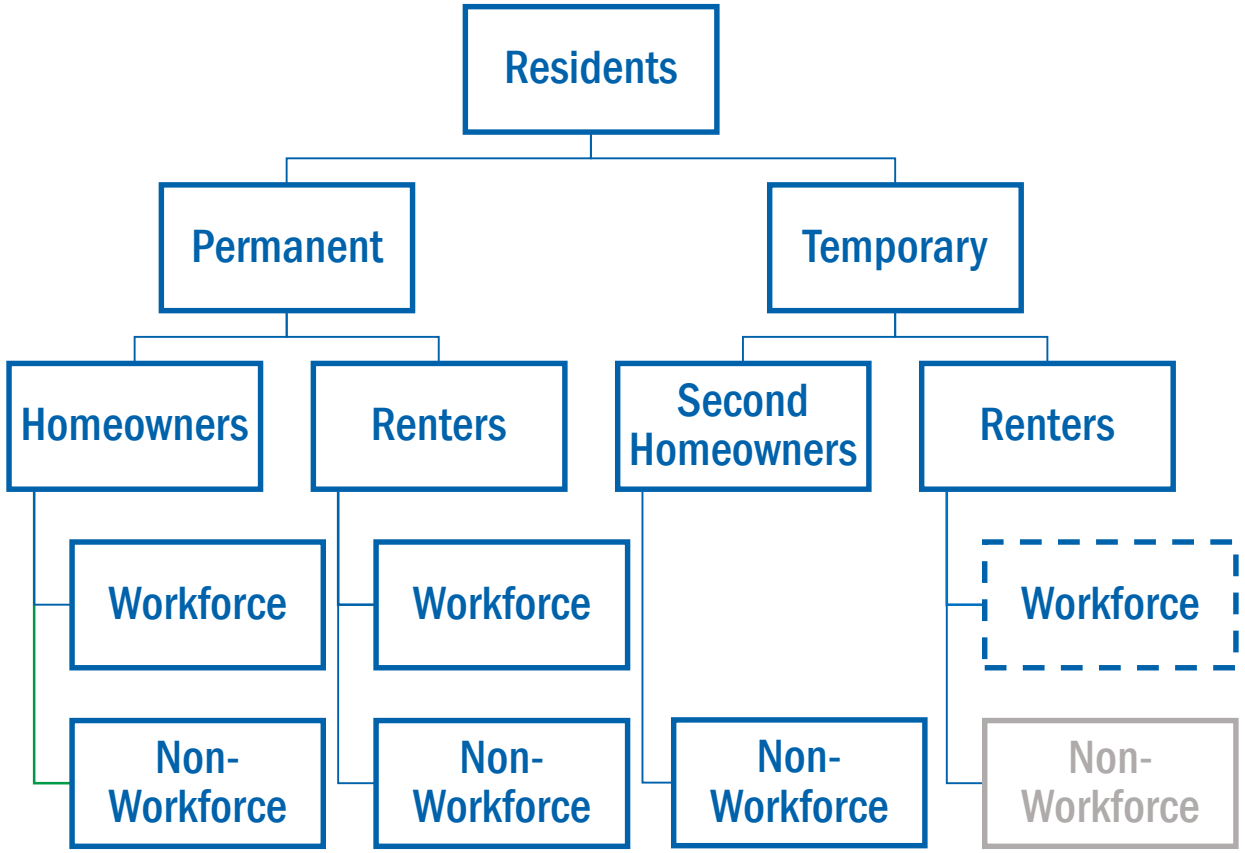
Indicators – A measure of community performance and carrying capacity that is affected by population.

POPULATION TRENDS

Growth over time

Resident Segments

Residents are segmented into three levels: permanent and temporary populations, homeowners and renters, & workforce and non-workforce.

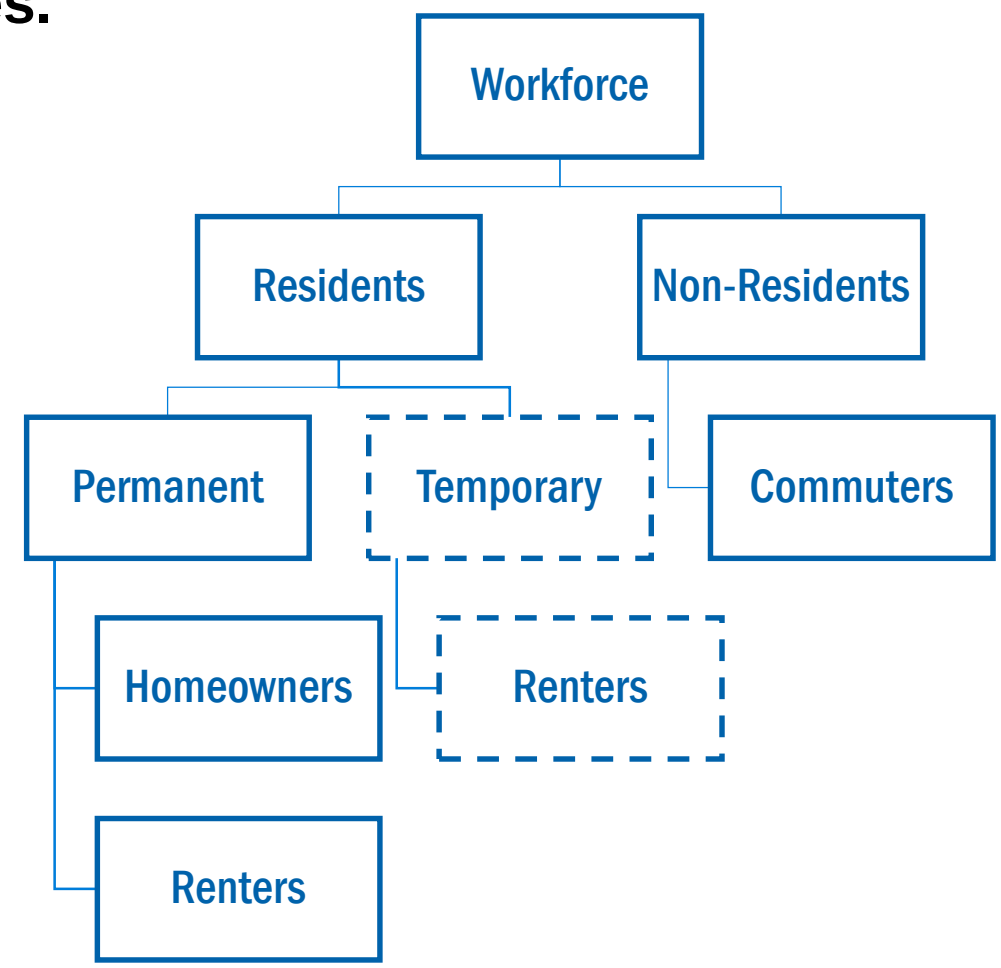


Notes

- *Refer to Appendix for detailed methodology on defining and estimating population segments*

Workforce Segments

Whistler's workforce includes both temporary and permanent residents that are employed in Whistler's local economy, as well as commuters from neighbouring municipalities.

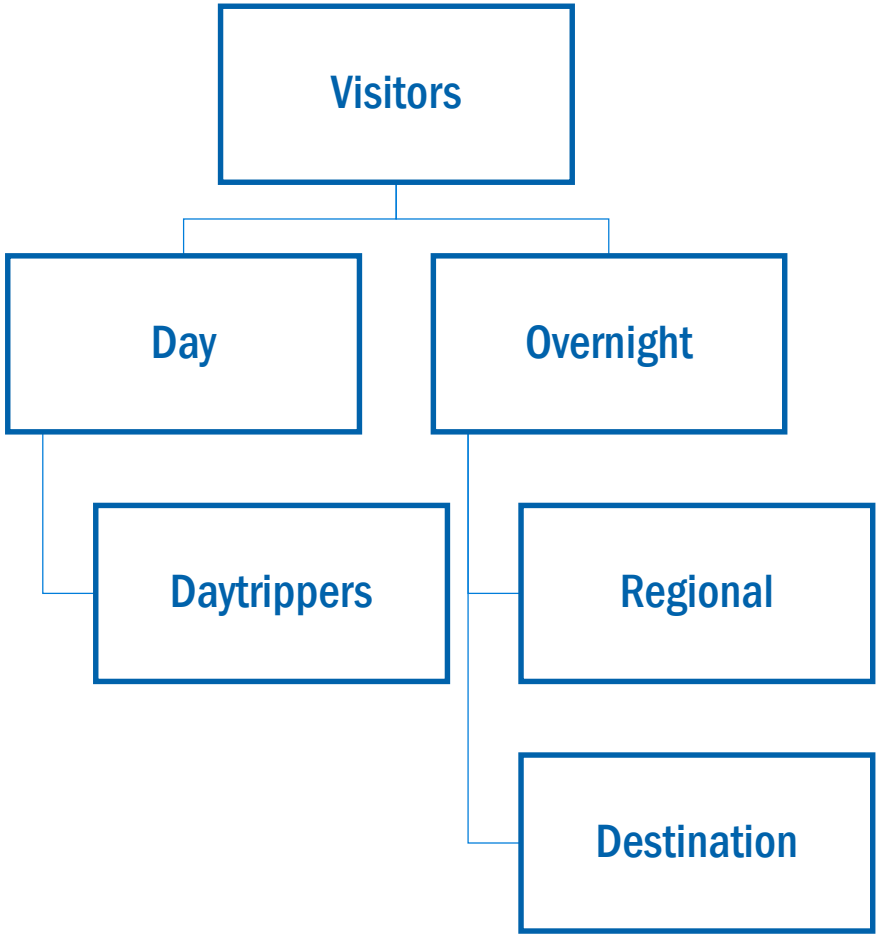


Notes

- *The workforce are those that work in Whistler and are employed in the local economy*
- *Individuals who live in Whistler and work remotely (for a business or organization outside of Whistler), or commute to other locations would not be considered a part of the local workforce*
- *2020 estimates for Whistler's temporary workforce are not available at this time (dashed box)*
- *Refer to Appendix for detailed methodology on defining and estimating population segments*

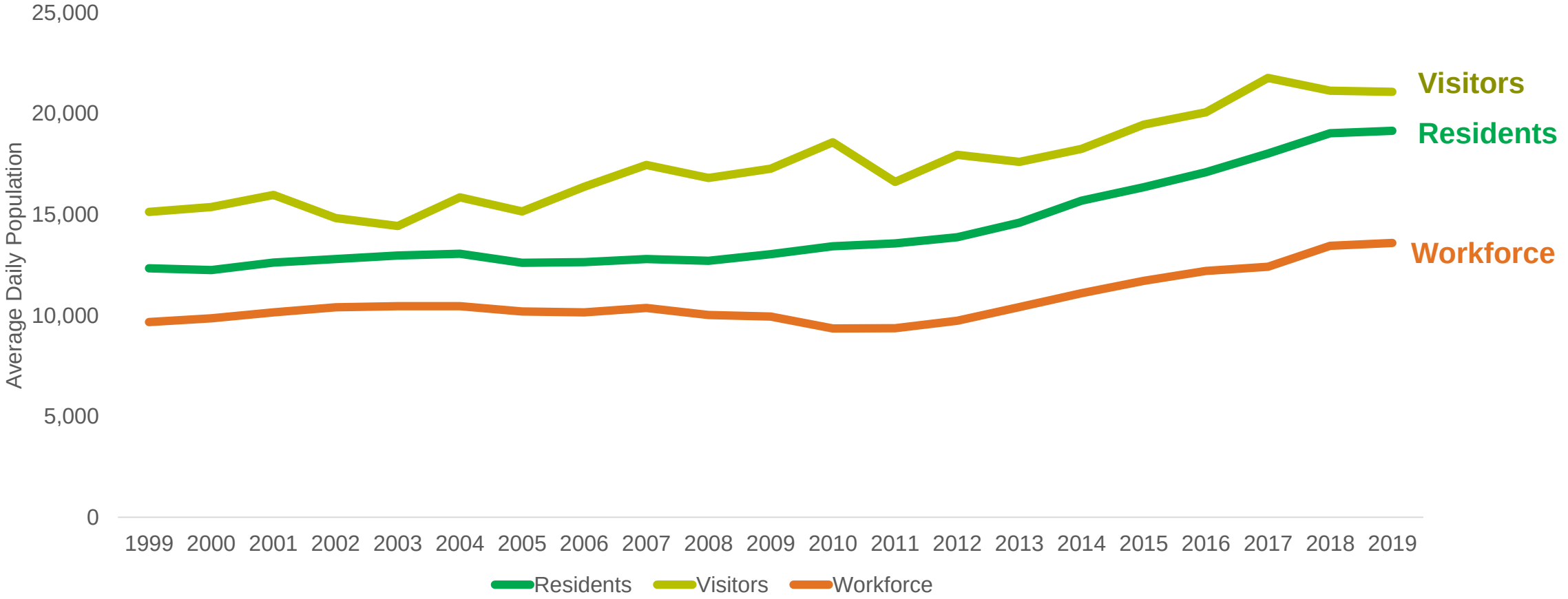
Visitor Segments

Visitors are categorized into day trippers and overnight guests, as well as by their origin – whether they are visiting from within the region (BC and Washington state) or from further away (i.e. destination visitors).



Overall Growth

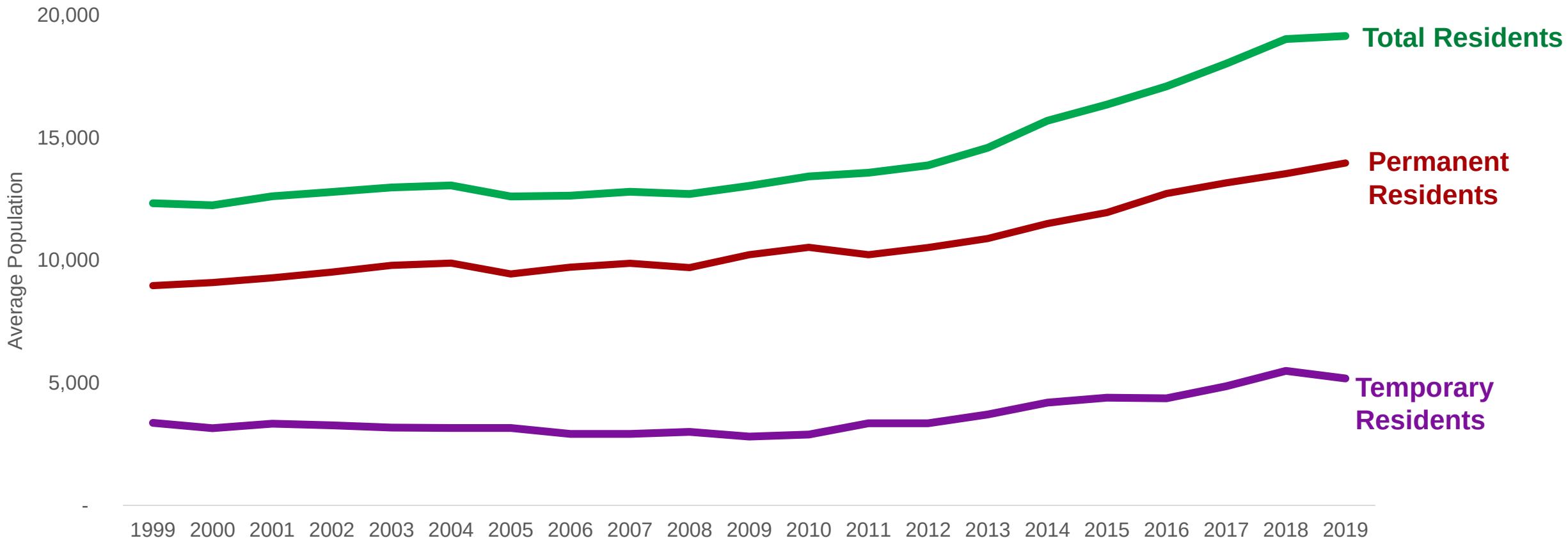
Visitation has been a key driver of growth in total resident population as higher visitor levels have created more jobs and increased demand for more workers.



Data sources: Census data, Statistics Canada, Tourism Whistler – refer to Appendix for detailed methodology

Resident Growth

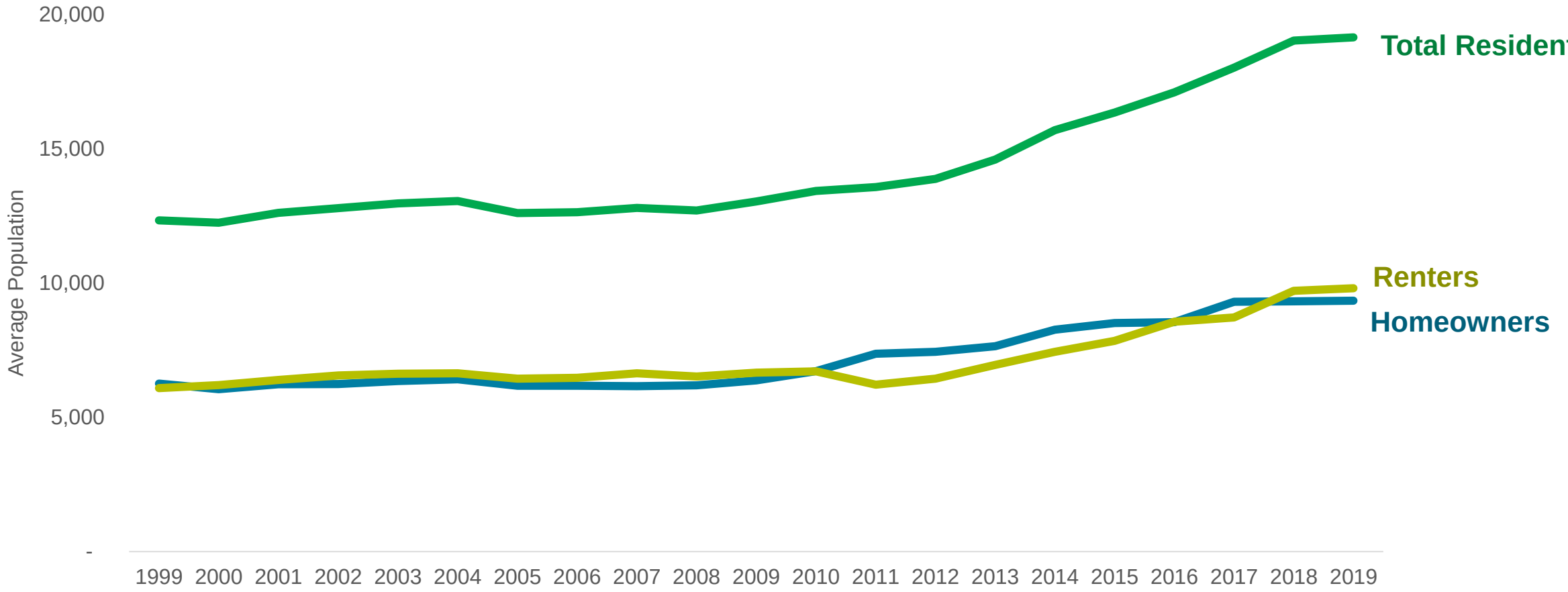
Labour demand has been supported by temporary workers who bring new energy each season.



Data sources: Census data, Statistics Canada, BC Assessment – refer to Appendix for detailed methodology

Tenure Trends

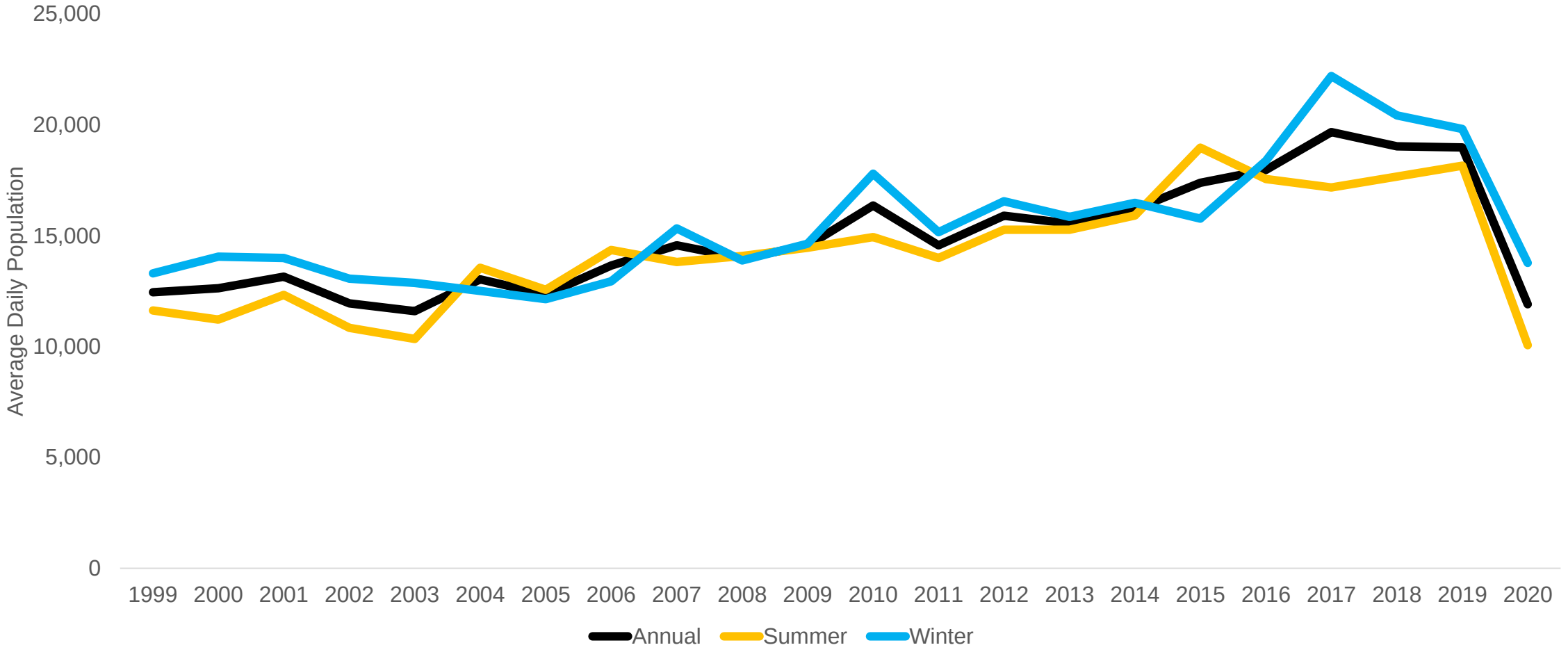
Resident population growth is also influenced by availability of housing – evident in the post 2010 years with additional homeownership opportunities, while additional workforce managed to find rental accommodation in both market and new WHA inventory.



Data sources: Census data, Statistics Canada, BC Assessment – refer to Appendix for detailed methodology

Trends in Visitation

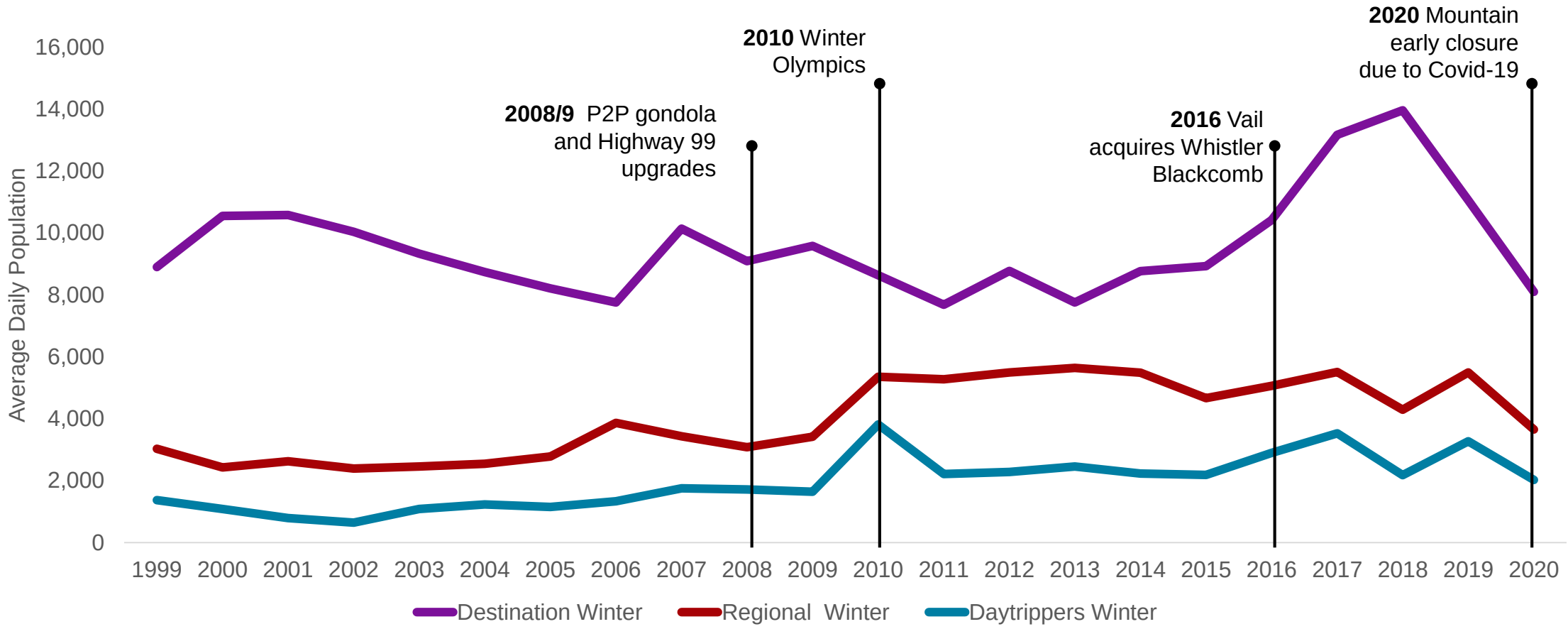
Whistler has successfully promoted year round visitation with investments in major new product offerings over the years, to reduce reliance on a single season and support a more sustainable year round tourism community



Data source: Tourism Whistler – refer to Appendix for detailed methodology

Trends in Visitation - Winter

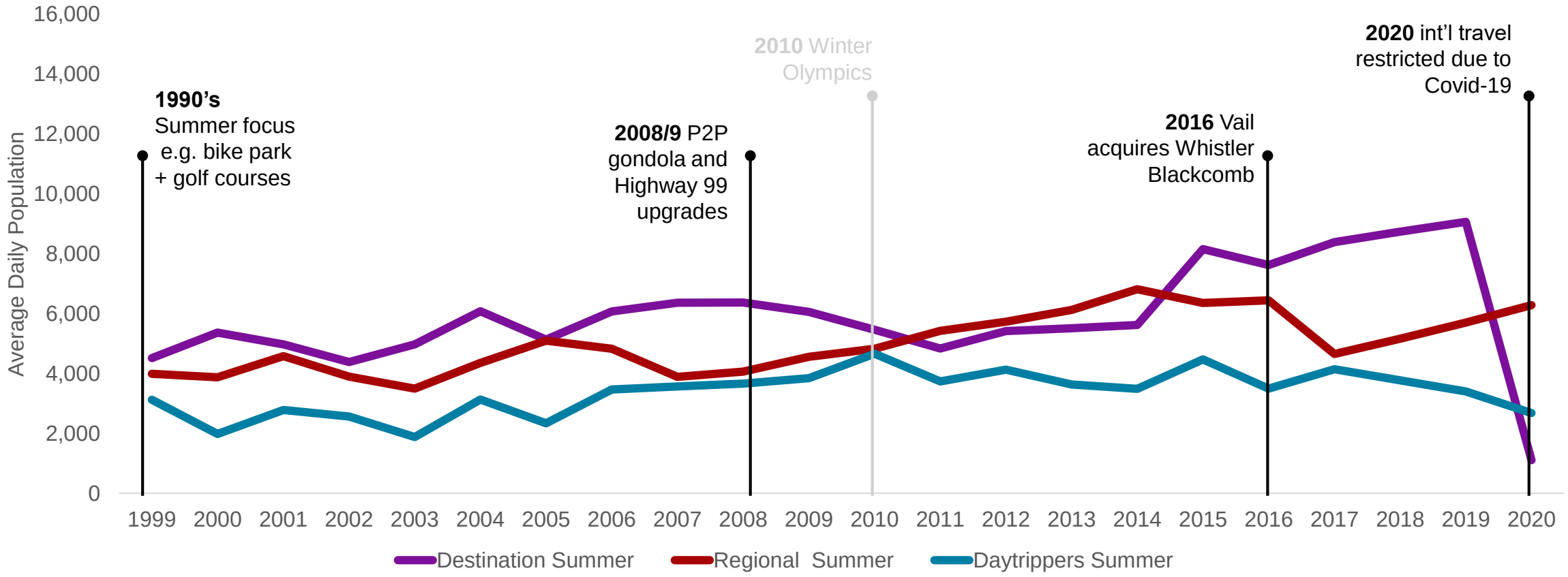
Destination guests have remained the largest component of winter visitors, though regional winter visits have been climbing recently with Sea to Sky highway upgrades.



Data source: Tourism Whistler

Trends in Visitation - Summer

While summer visitation is lower than winter, it has been steadily growing in the last decade due to various investments. Due to international travel restrictions through COVID, Whistler has become an attractive nature based outdoor destination for regional travelers.



Data source: Tourism Whistler

Interesting facts

- For every **100,000 person increase in Vancouver's population**, Whistler has seen, on average, close to **400 additional regional visitors** staying overnight per day

- For every **1 million additional YVR arrivals**, Whistler has seen, on average, over **300 additional destination visitors per day**

- And for every **1,000 additional daily visitors**, average throughout the year, Whistler employed **an additional 600 new workers*** in resort.

- All of whom need accommodation, amenities and services, etc.

Source: RMOW Balance Model – historical analysis 2000-2019

* Note: this is number of people working as opposed to number of FTE jobs

Performance against the OCP

Refer to whistler.ca/ocp for the full Official Community Plan

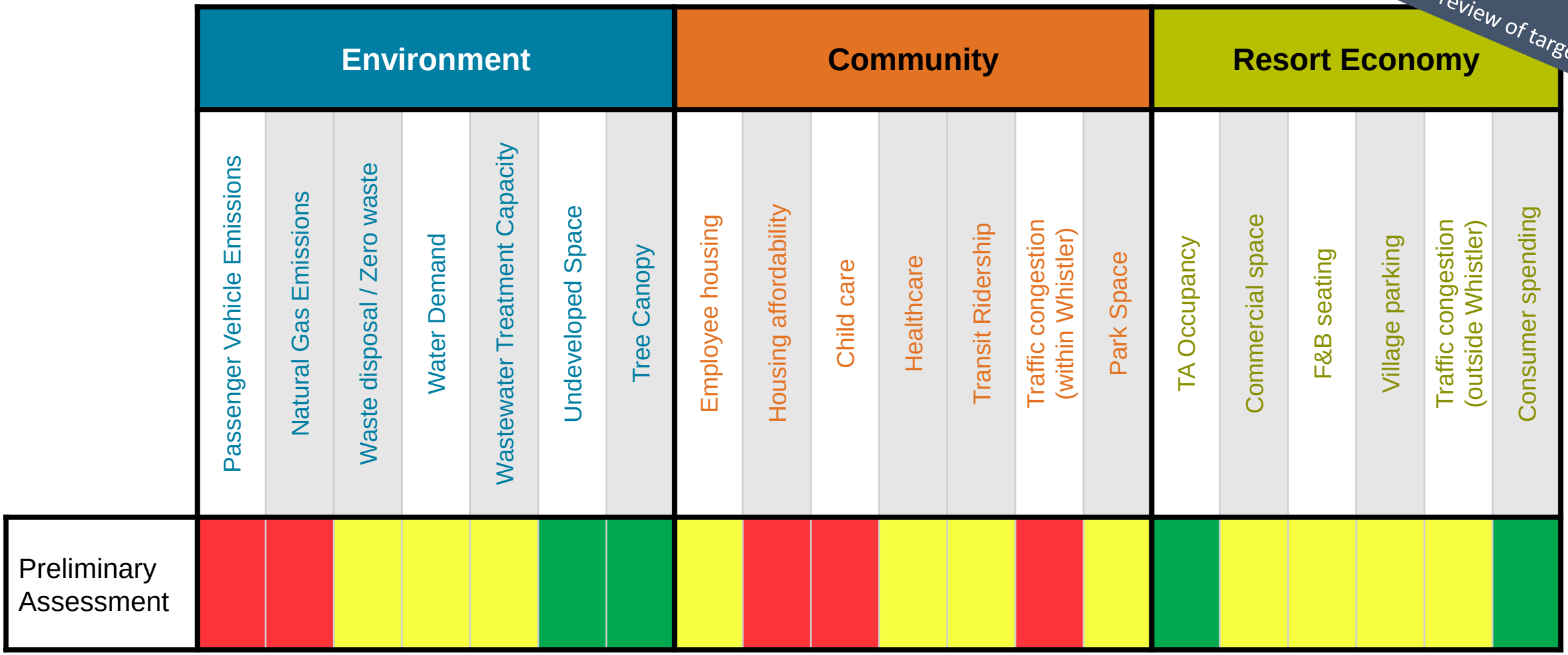
Vision Pillars of the OCP

The Balance Model assesses performance via quantitative indicators across the vision pillars of the OCP. Qualitative indicators will be considered when discussing strategies & actions.

Environment	Community	Resort Economy	Sense of Place
Passenger Vehicle Emissions	Housing Availability	Tourist Accommodations	Sense of place is a very qualitative pillar so this is an intangible element to be considered as part of strategic planning.
Building Emissions	Employee Restricted Housing	Hotel Occupancy	Some elements of Sense of Place may be captured by the combination of indicators across Environment, Community, and Economy
Undeveloped (Natural) Space	Affordability	Spend per day	
Tree Canopy	Childcare	Commercial Space	
Water Use	Healthcare	F&B Capacity	
Waste Disposed	Self Rated Health Status	Skier Visits	
	Recreational Facilities	Village Parking	
	Transit Ridership	Traffic and Congestion outside of Whistler	
	Traffic Congestion within Whistler		
	Public park space		

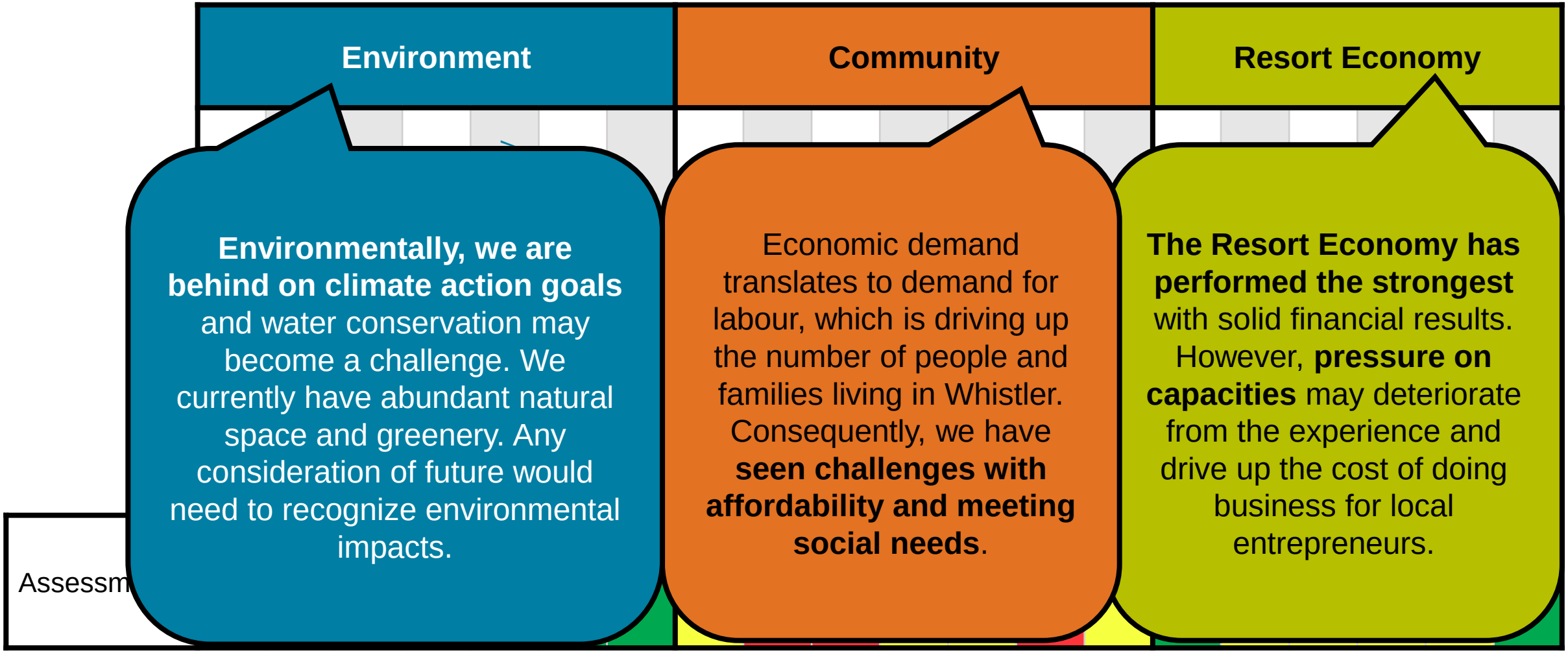
Summary of performance indicators

DRAFT
Subject to review of targets



* Note: Preliminary assessment is an overall perspective although recognizing that performance may vary in peak Summer or Winter seasons.

Summary of performance indicators



ENVIRONMENT: CURRENT STATE

Environment

OCP Vision Characteristics

- **Respect** *… steward natural areas as foundation of our community…*
- **Protection** *…our development footprint is limited…*
- **Access** *…where natural areas are accessed …we do so in a responsible way*
- **Resources** *…natural resources and energy are conserved...*
- **Climate** *…GHG emissions are being systematically eliminated…*

Refer to whistler.ca/ocp for the full Official Community Plan

How We Measured Performance

Environment Indicator	Data
Passenger Vehicle Emissions	• Emissions from passenger vehicles • Traffic Volumes • Share of electric / zero-emission vehicles
Building Emissions	• Emissions from electricity and natural gas consumption
Undeveloped (Natural) Public Space	• Natural / Undeveloped municipal lands
Tree Canopy	• Percentage of Area with tree canopy coverage
Water Use	• Daily maximum and average water inflows at the Wastewater Treatment Plant (WWTP) • Daily maximum and average water outflows
Waste Disposal	• Solid waste disposed to landfill

Key Takeaways

Overall: Whistler needs to pursue major change to meet environmental targets, which has already begun recent 2020 Climate Action Big Moves Strategy.

Whistler's natural resources are currently in good supply but may soon reach concerning levels without more conservation efforts.

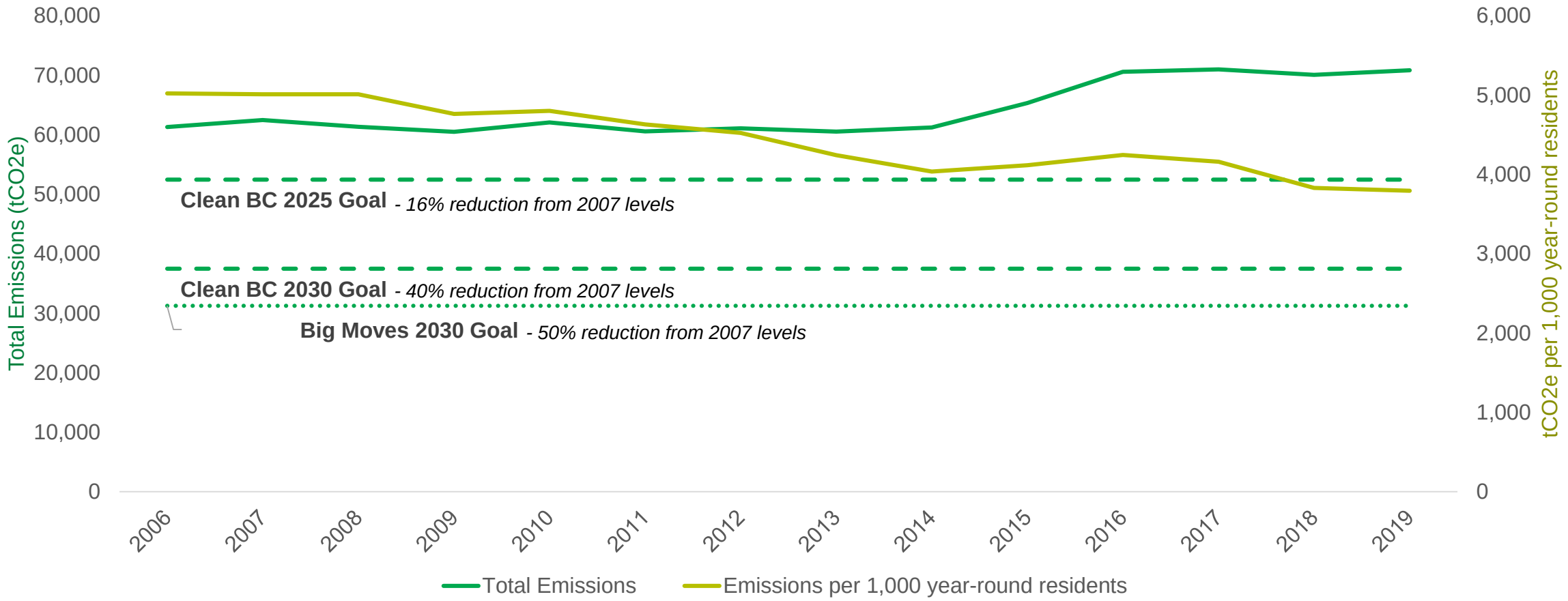
1. The majority of Whistler's GHG emissions result from passenger vehicles and natural gas. Whistler has not yet sufficiently abated either of these activities and major challenges exist to meet established targets.

2. Whistler has high tree canopy and a supply of undeveloped private and municipal owned natural lands. The establishment of targets will help inform decisions as Whistler faces increasing demand for competing land uses.

3. Whistler's water supply is reaching concerning levels given the capacity of the water sources. Initiatives for conservation need to be deeper than temporary restrictions, for example putting a price on water use.

Passenger Vehicle Emissions

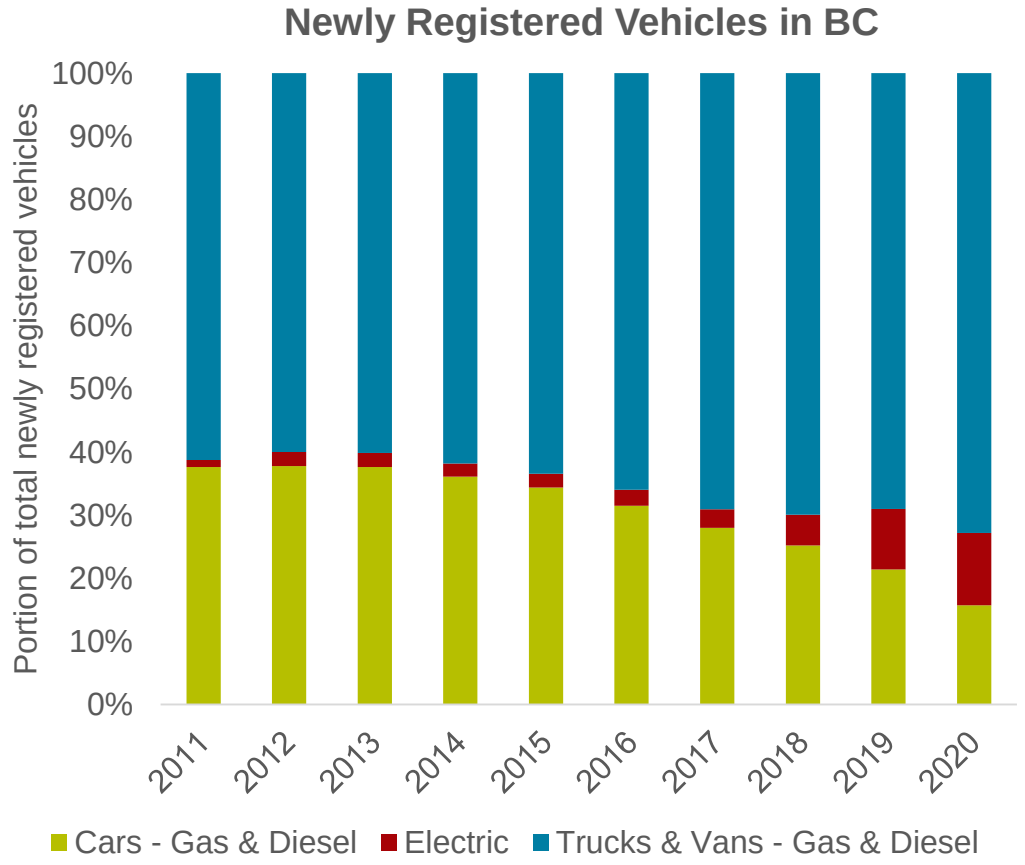
Per capita efficiencies in passenger vehicle emissions have not been sufficient to counteract total growth in overall passenger vehicle emissions.

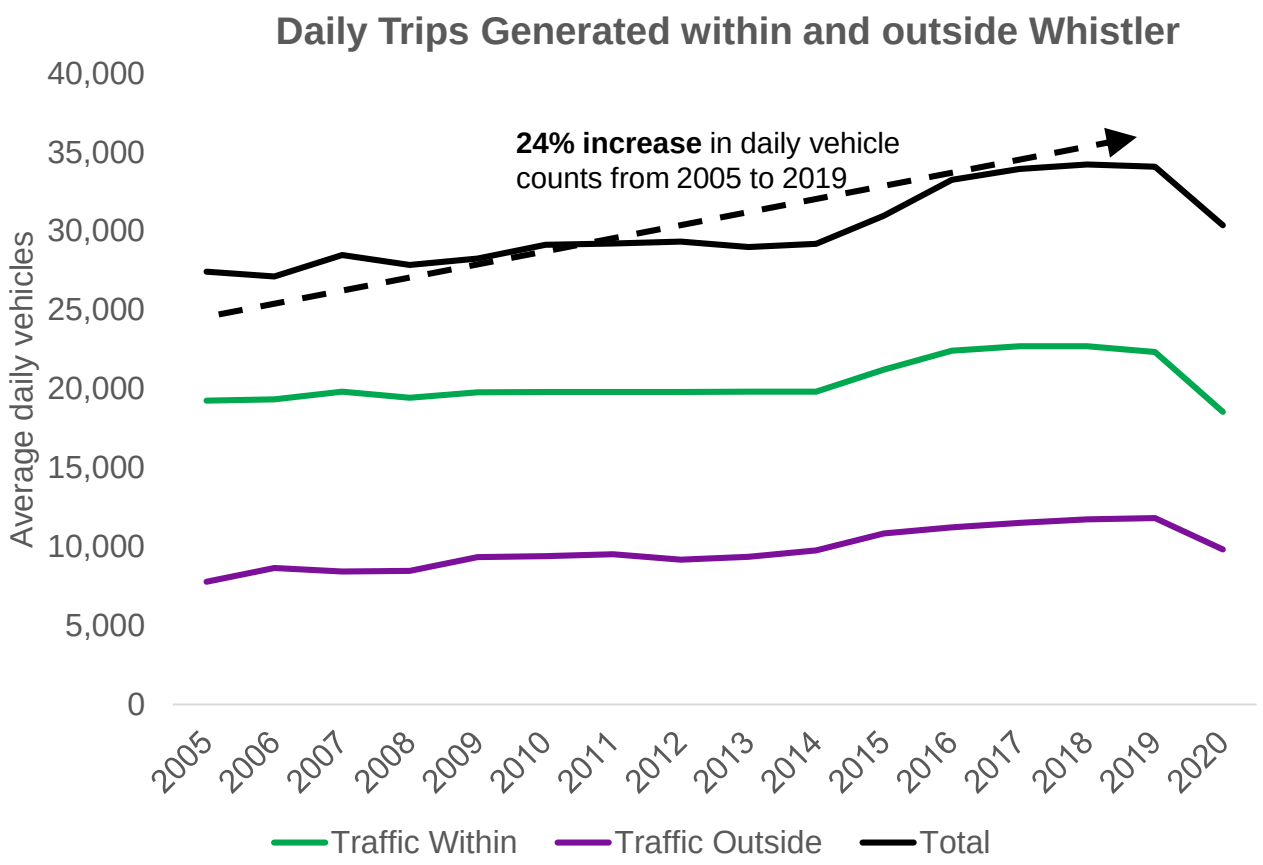


Data Sources: 2019 Community Inventory, Clean BC, RMOW Big Moves Climate Action Plan

Vehicle Use & Emissions

An increasing portion of electric vehicles may have incrementally improved emissions per capita. However, it does not counteract the impacts of increasing proportion of trucks, and increasing levels of traffic.

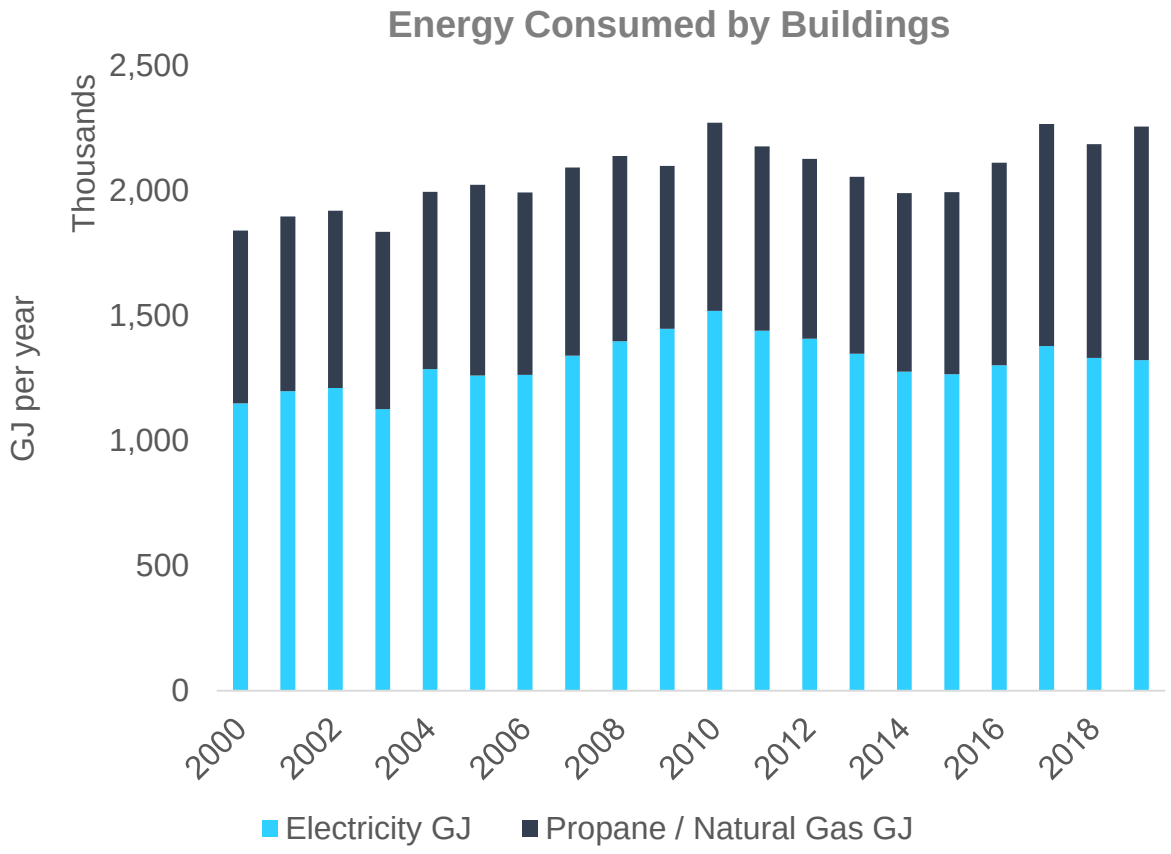


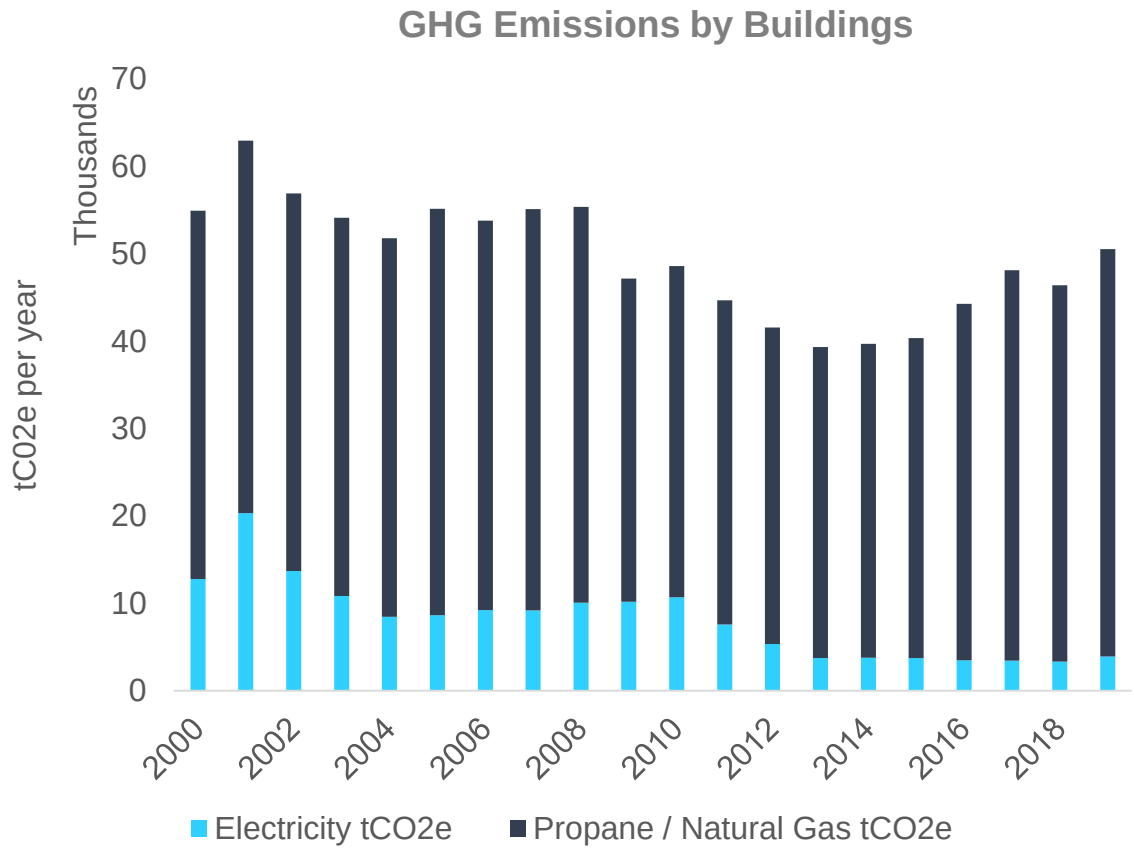


Data Sources: Statistics Canada, Ministry of Transportation & RMOW Infrastructure Services

Electrification

There is potential to further shift usage from gas to electricity. Recent progress has been made and continues via retrofit incentives and RMOW adoption of the BC Energy step code.

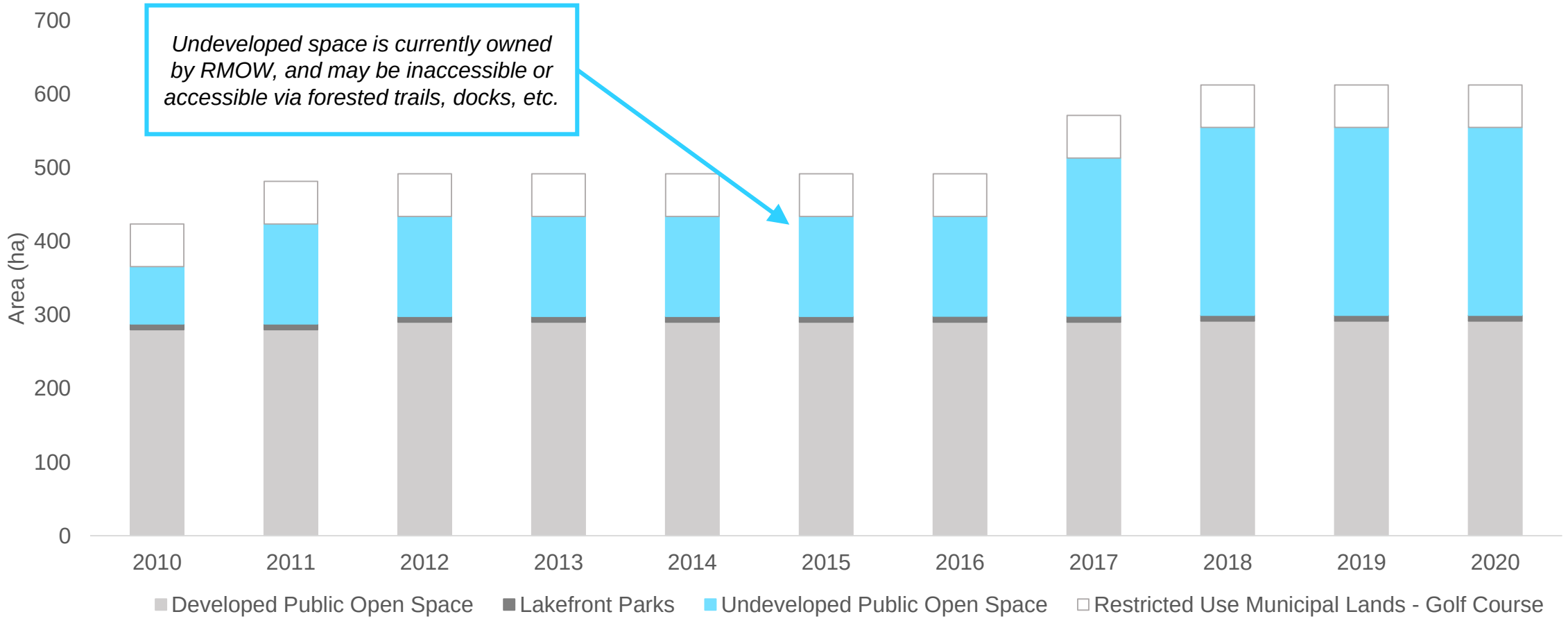




Data source: RMOW 2019 Community Inventory

Natural / Undeveloped Space

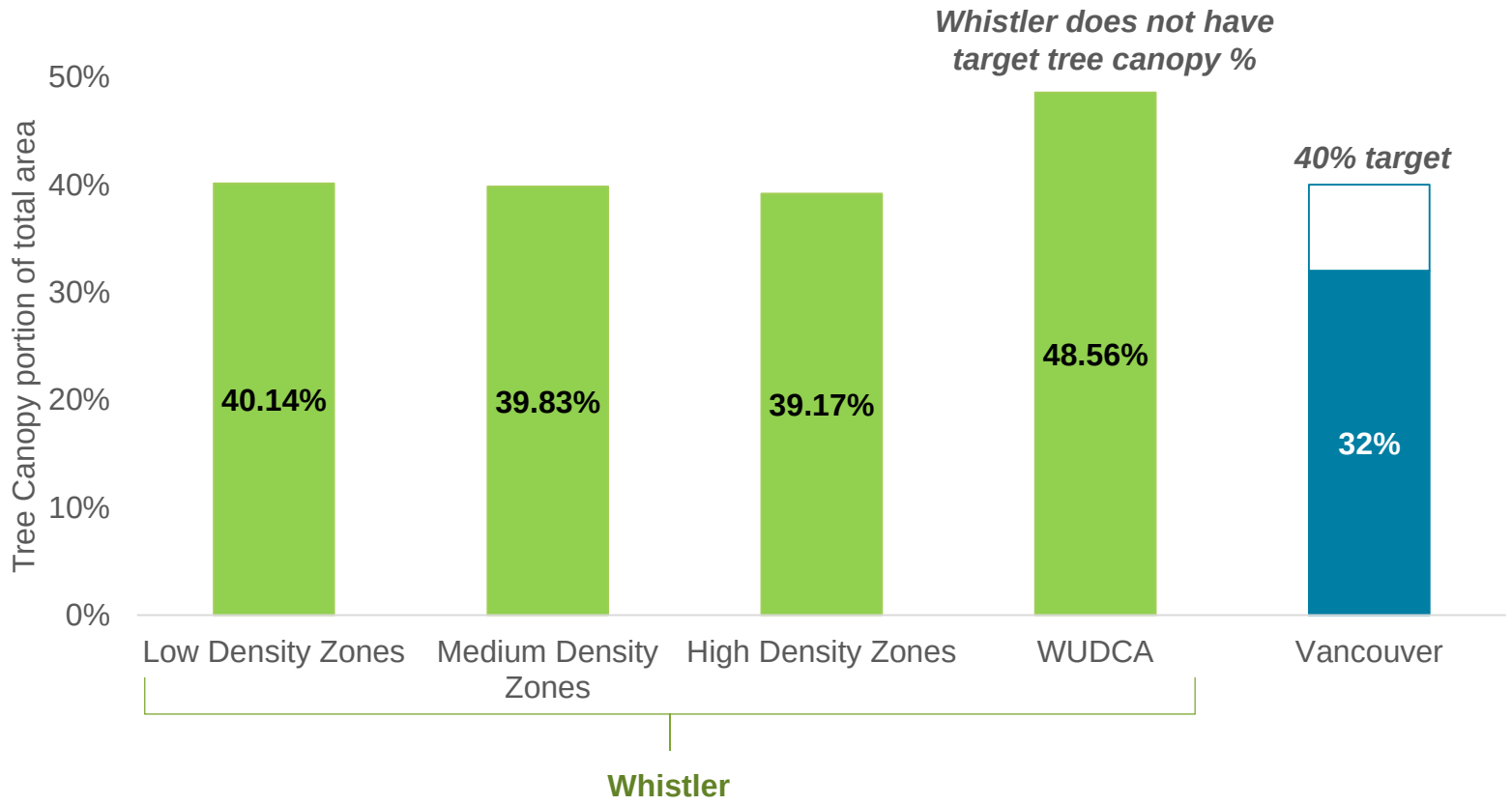
Preservation of natural space is a direct tradeoff with potential future park development. Optimizing existing available developed lands, or light-touch development are options to help to protect natural spaces.



Data source: RMOW GIS

Tree Canopy Coverage

Whistler's canopy coverage is quite high, though continued development by expanding residential zones will impact this. With limited difference in tree canopy between density in built environments, opportunities exist to increase density while retaining existing coverage.



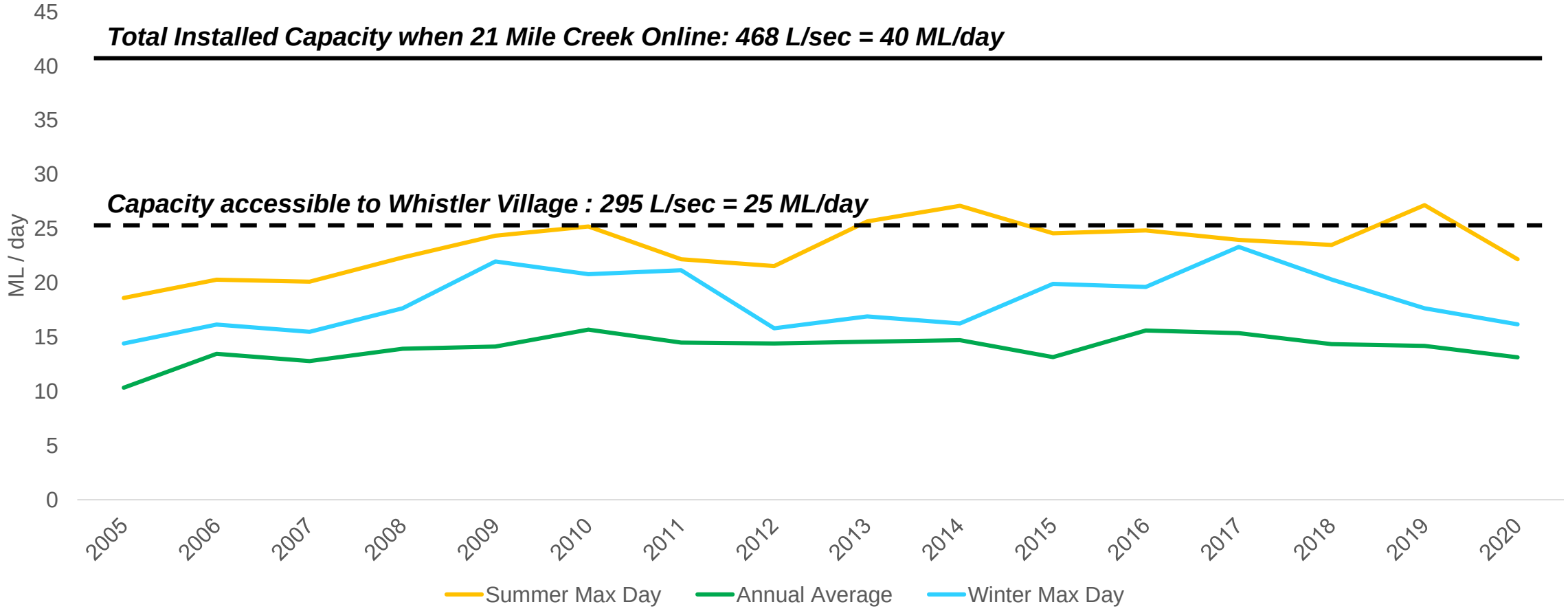
Density Legend:

Density	Selected Zones
Low	*RS1*
Medium	*RM1-4, RM9-12*
High	*RM6, RM7, RM13, RM14*

Data source: RMOW GIS
Note – WUDCA stands for Whistler Urban Development Containment Area

Water Supply - Inflows

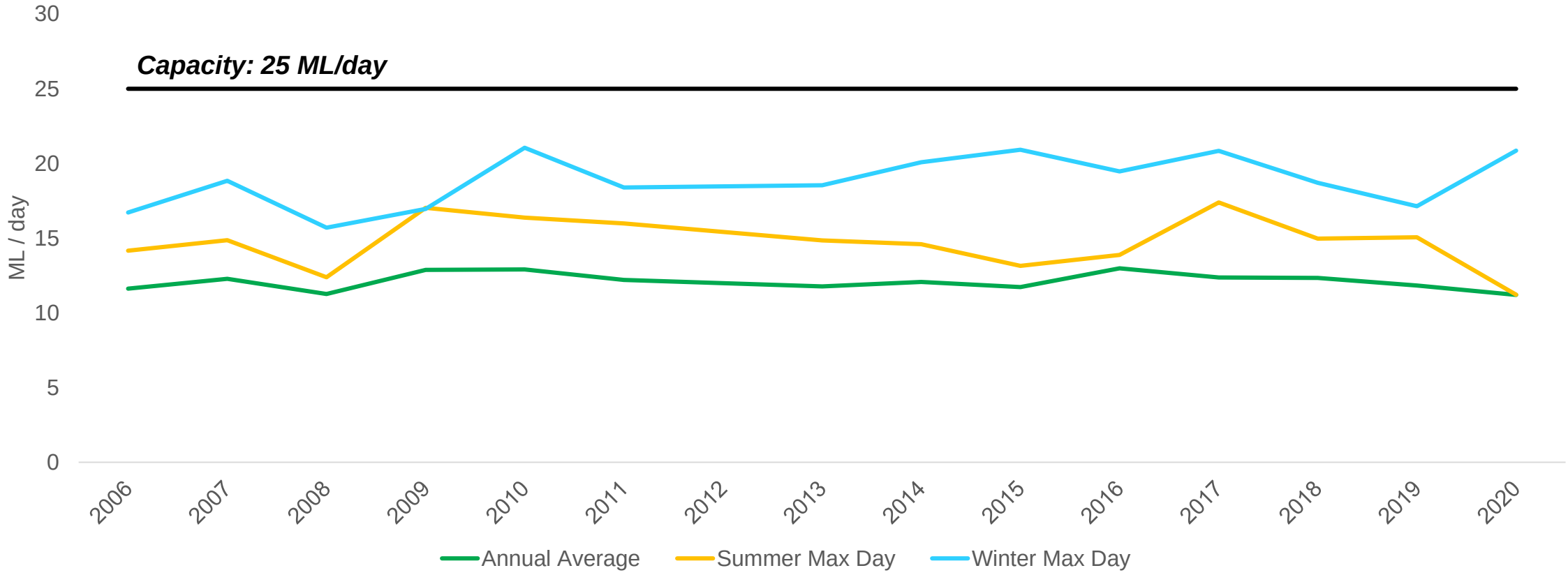
Water flows are concerning considering the supply available to the Village – particularly in the summer. Metering is currently being considered as a method to obtain more detailed water consumption data and incentivize conservation.



Data source: RMOW Infrastructure Services

Wastewater Treatment - Outflows

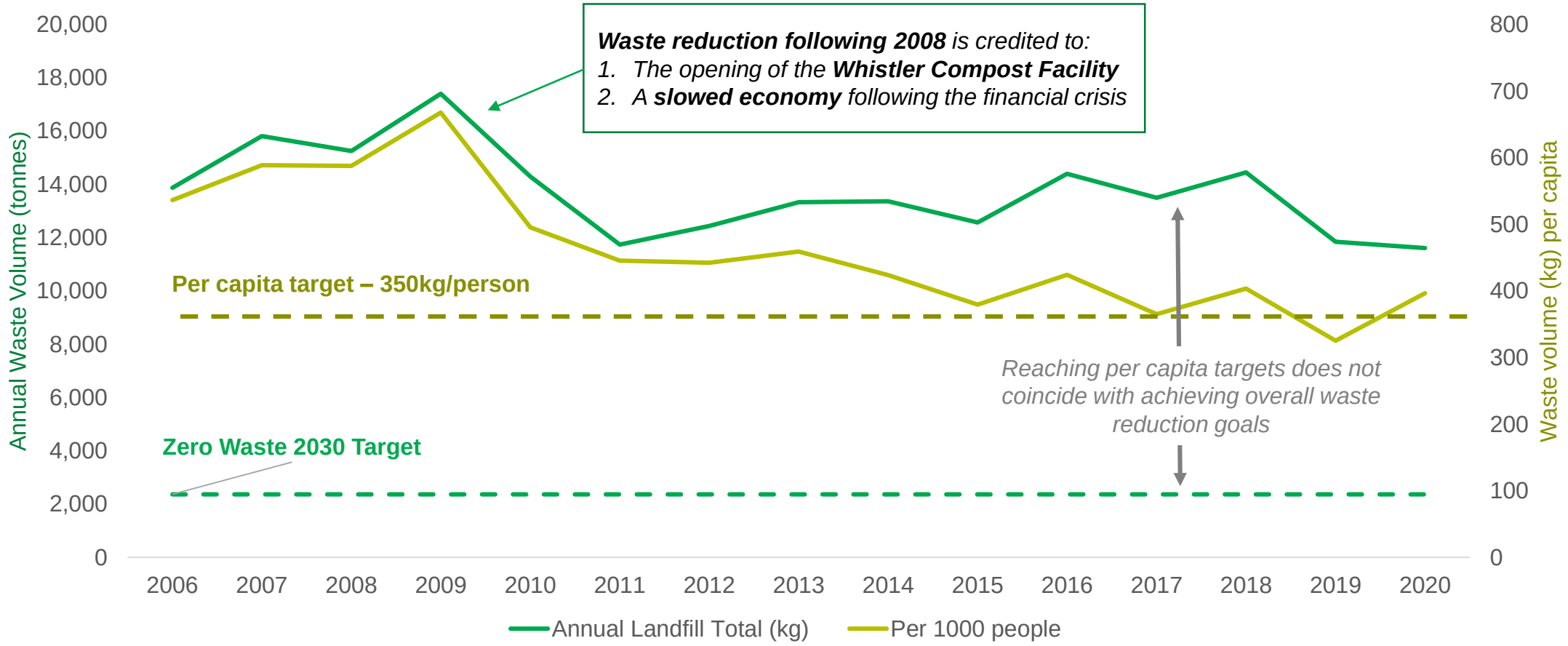
Maximum winter wastewater flows are at a concerning level relative to capacity of the plant. Ongoing annual investments into and management of rainwater infiltration has helped alleviate capacity concerns.



Data source: RMOW Infrastructure Services

Landfill Waste & Targets

Although per capita targets have been realized in waste reduction, Whistler is still a ways off the Zero Waste 2030 target, suggesting the need for revised per capita targets.



Data Sources: RMOW Infrastructure Services, Clean BC, RMOW Big Moves Climate Action Plan

COMMUNITY: CURRENT STATE

Community

OCP Vision Characteristics

- **Quality of Life** — ***…We enjoy good health and high quality of life…***
- **Inclusive** — ***…all ages, identities, abilities and incomes are welcome, included, and share our love for nature, active recreation…***
- **Connected** — ***Community connections are strong and interactions with visitors are valued as an extension of the community…***
- **Conduct** — ***Everyone is treated with fairness, respect and care…***
- **Participation** — ***We are able to meaningfully participate in community decisions, collaborating to achieve our Community Vision…***
- **Partnerships** — ***We have established strong partnerships with the Squamish Nation, Lil'wat Nation, other levels of government and community stakeholders…***

Refer to whistler.ca/ocp for the full Official Community Plan

How We Measured Performance

The following indicators were used to measure the capacity and performance of Whistler in terms of Community.

Community Indicator	Data
Housing Availability	• Developed and undeveloped market, RTA, and employee restricted bed units
Employee Restricted Housing	• Living Wage • Extreme Core Housing Needs
Housing Affordability	• Living Wage • Extreme Core Housing Needs
Childcare	• Licensed childcare spaces available per child population
HealthCare	• Total Physicians available per capita • Resident satisfaction with health status
Recreational Facilities	• Passes purchased at Meadow Park
Transit Ridership	• Community and free shuttle transit ridership and service hours
Traffic Congestion	• Hourly northbound and southbound vehicle counts at Brio
Public Park Space	• Municipal Lands developed as public parks • Lakefront portion of public parks

Key Takeaways

Overall: Community resources are under pressure, impacting the livability and prospects for both permanent and temporary residents.

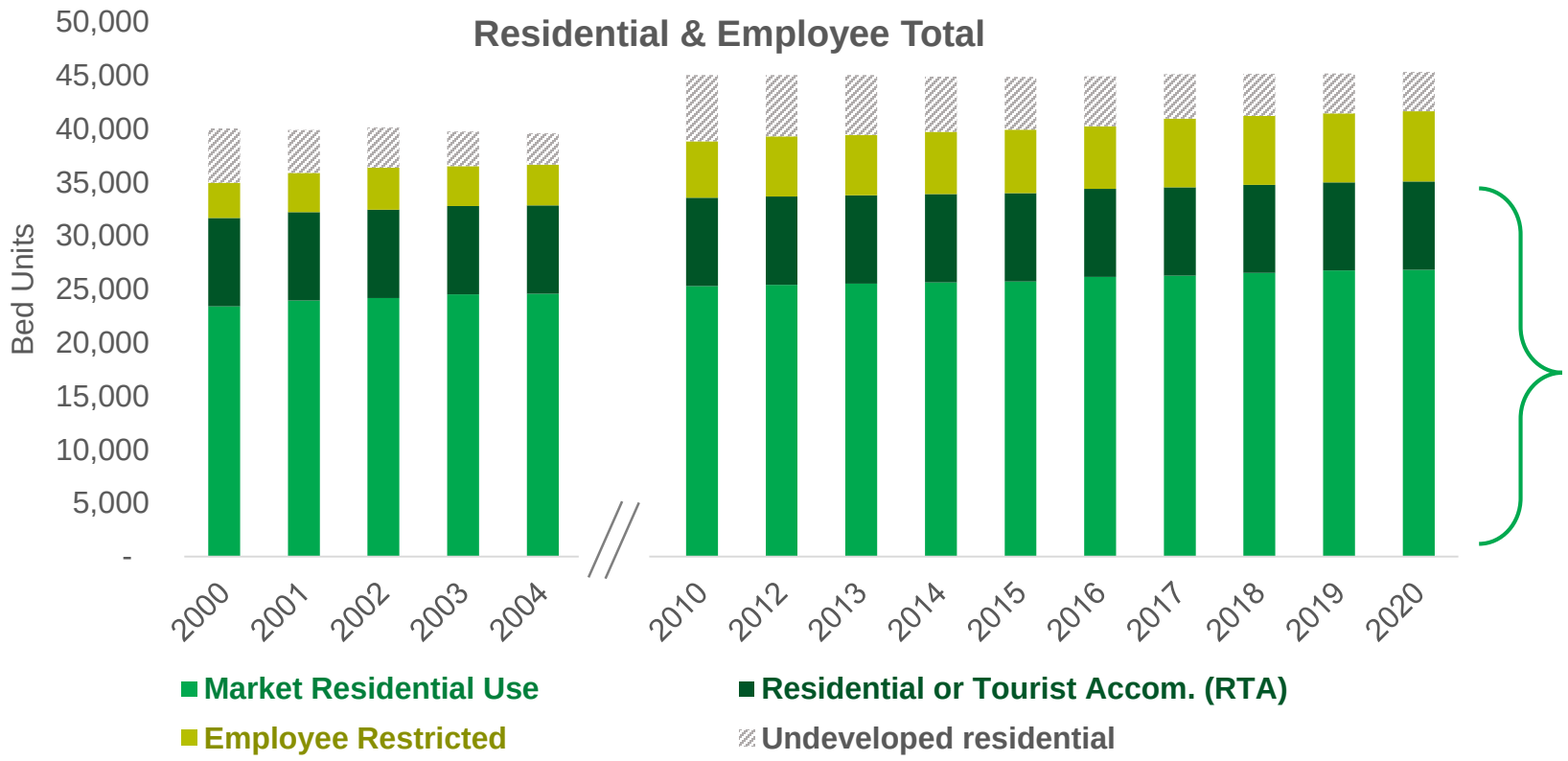
1. Whistler's workforce faces pressure with housing availability. There is increasing reliance on market housing for rental, while supply is very limited, which has resulted in increasing households categorized in the 'extreme core housing need.'

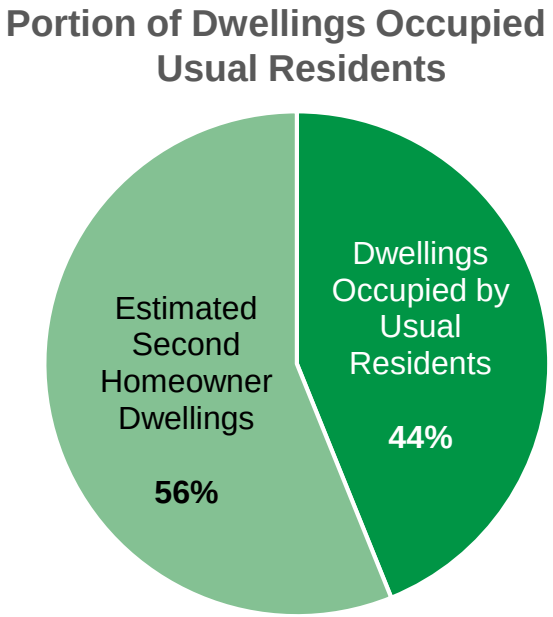
2. Social and wellness services including licensed childcare, healthcare, and recreation facilities are identified to be in short supply to meet resident needs with capacity restrictions already in place.

3. Congestion of parks and highways may be impacting the experience for residents. Uptake of local transit has slowed down, which may indicate an opportunity to further address congestion and accessibility through expanded service hours.

Housing Availability

The actual availability of Whistler's housing stock for residents is dependent on second homeowner uses. It is currently estimated that over half of the housing stock is used by second homeowners.

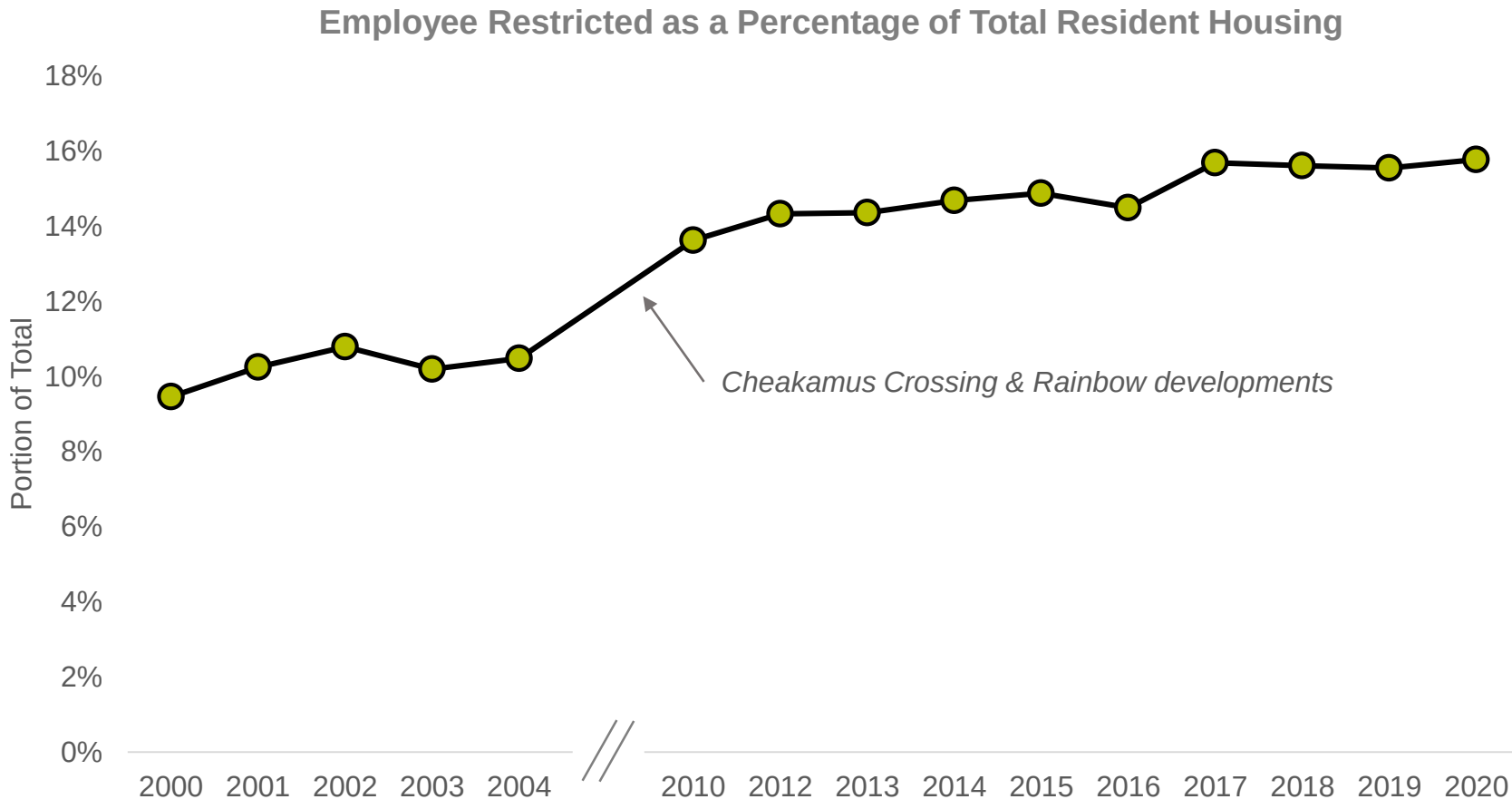


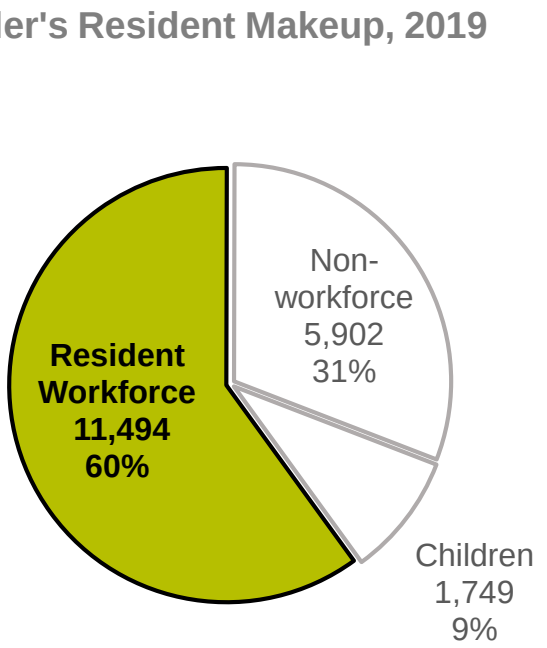


Data sources: RMOW Planning Department, Census

Employee Housing

The resort workforce represents 60% of Whistler's total resident population, while employee restricted housing accounts for <20% of the available bed units (incl. RTA)

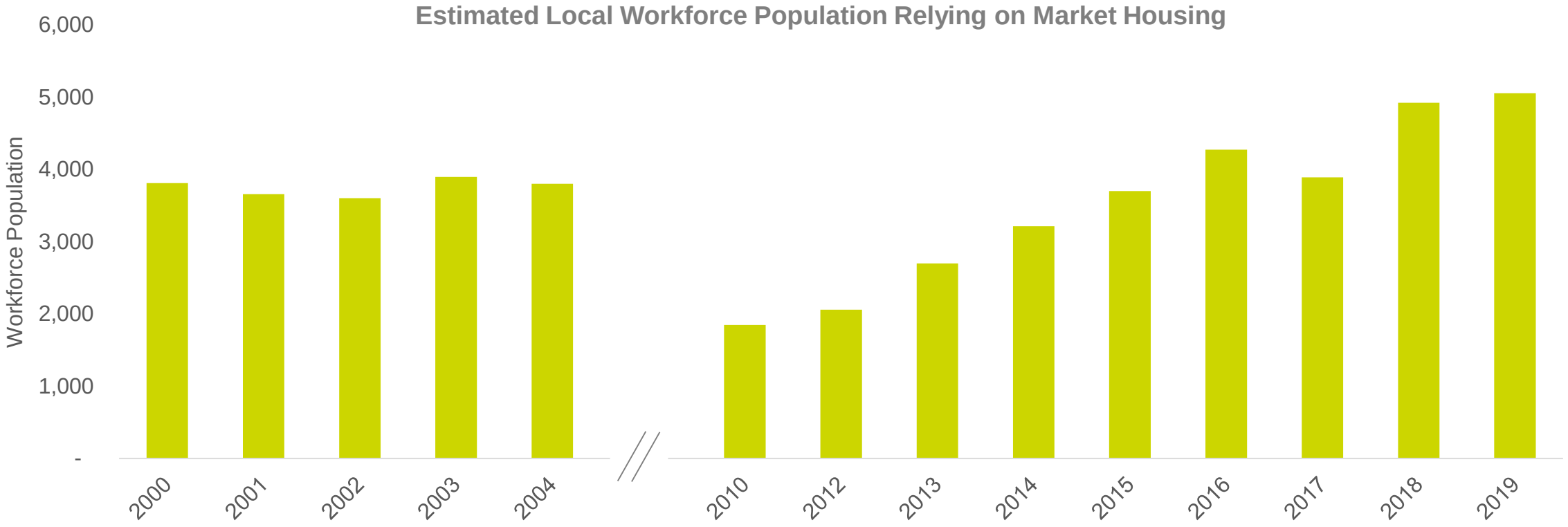




Data source: RMOW Planning Department

Workforce Reliance on Market Housing

In 2019, at least 44% of Whistler's local workforce relied on market housing, equivalent to 14% of the market beds – a growing reliance over time. A housing survey is currently in progress to uncover the proportion of market housing that is owned vs. rented by members of the workforce.

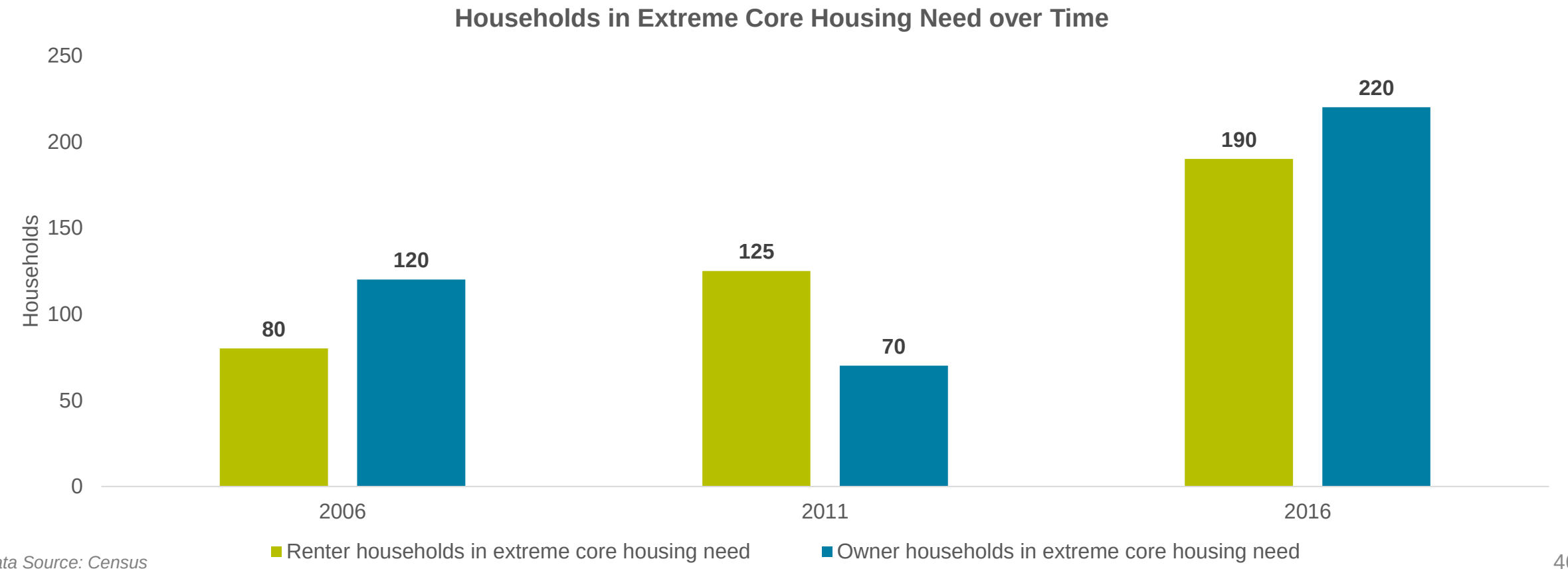


Data source: RMOW Planning Department

Housing Affordability

An increasing number of households report their housing costs as more than 50% of gross household income, in '*Extreme Core Housing Need*'.

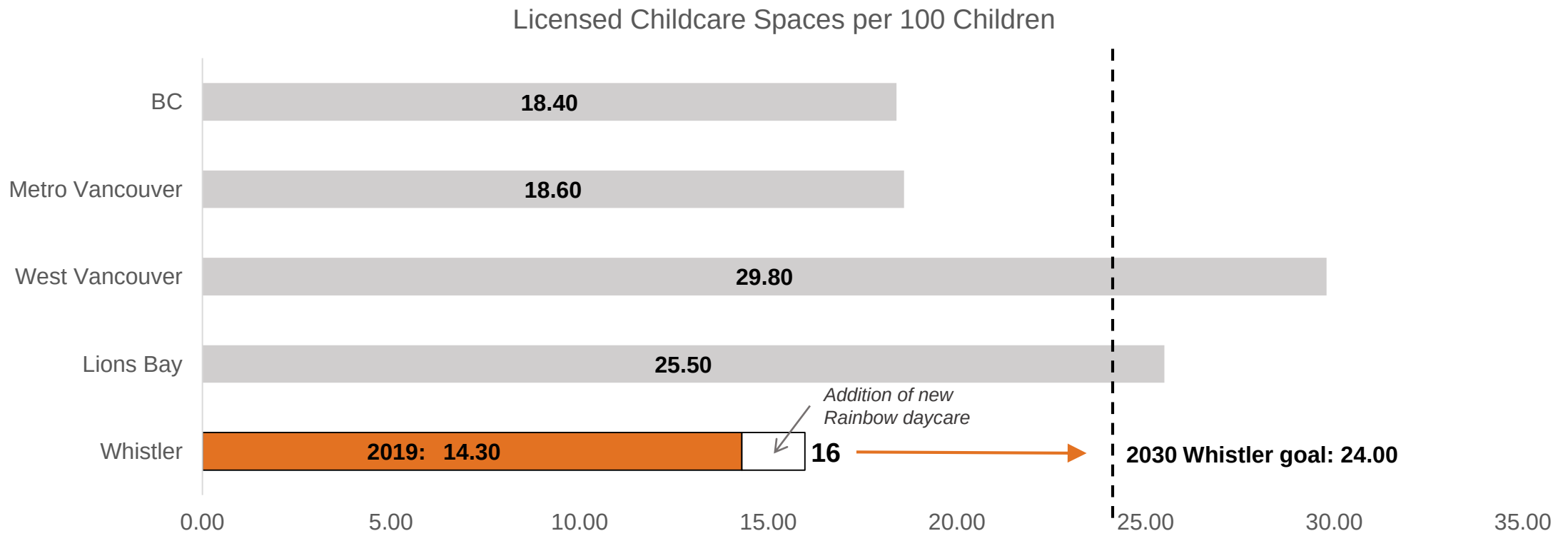
Rental households in '*extreme need*' have more than doubled over the prior decade, as rental inventory has not changed much. Ownership increases indicate possible reliance on external help (e.g. parents or mortgage helper tenants)



Data Source: Census

Licensed Childcare

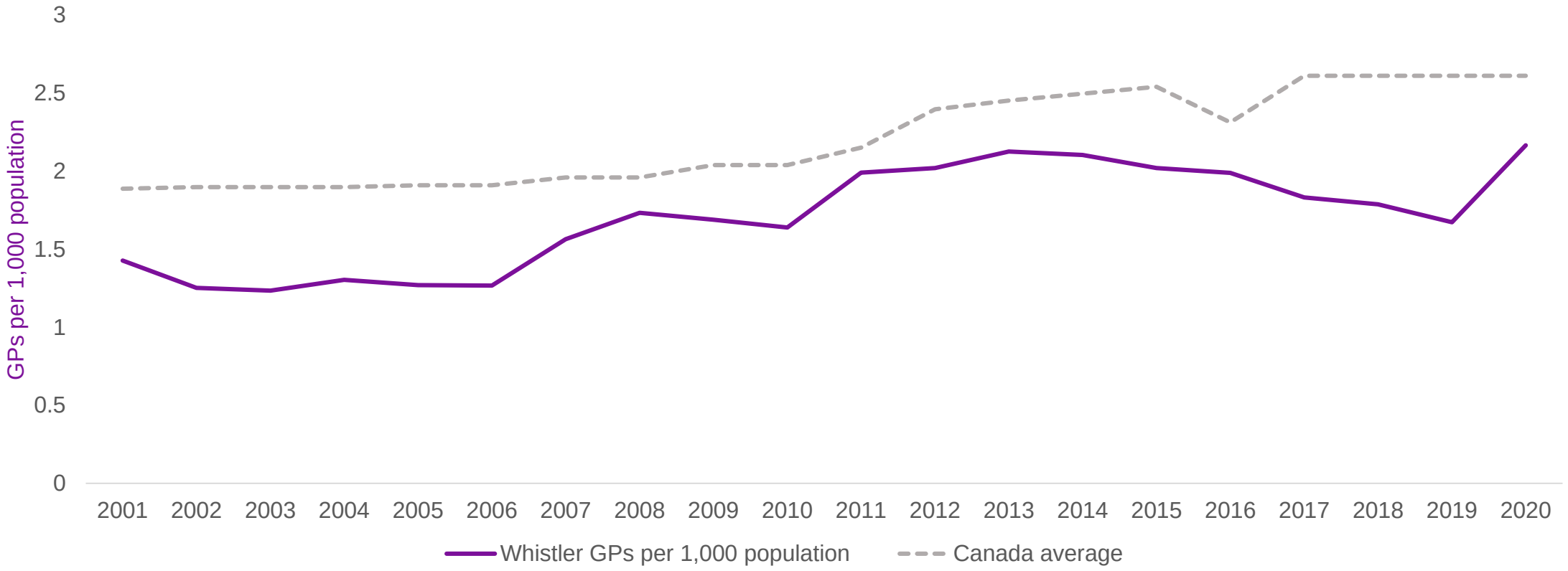
Whistler has limited access to licensed childcare (i.e. early childhood education) as compared with some of its neighbours. Therefore, parents rely on other (unlicensed) childcare options, which may not provide the same level of health, safety, and educational development for children.



Data sources: RMOW Whistler Childcare Planning Project, Metro Vancouver 2019 Survey of Licensed Childcare Spaces and Policies in Metro Vancouver

Access to Healthcare

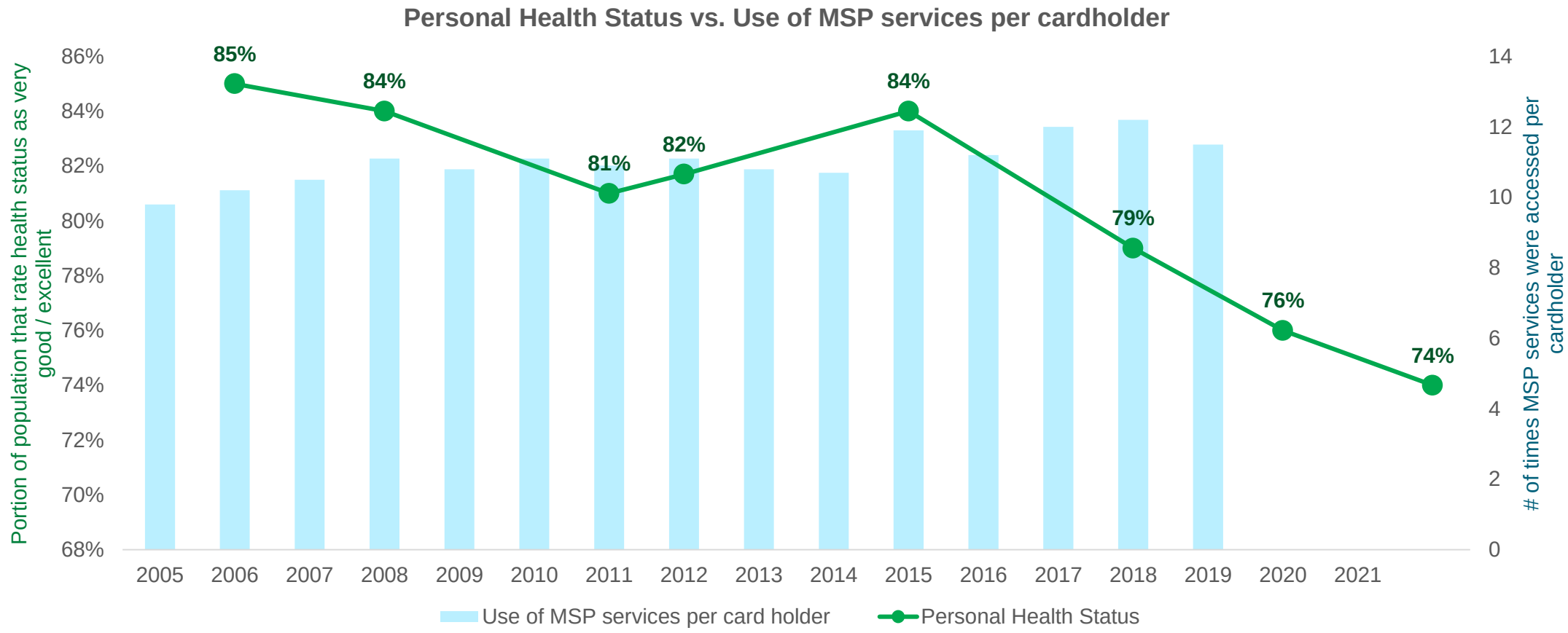
Whistler consistently lags behind the national average in terms of GPs per population. More work is required for Whistler to determine its own target level of GPs per capita based on the unique needs of its younger than average population.



Data sources: MSP data for BC physicians, Worldbank for Canada average

Use of Medical services & Self Rated Health Status

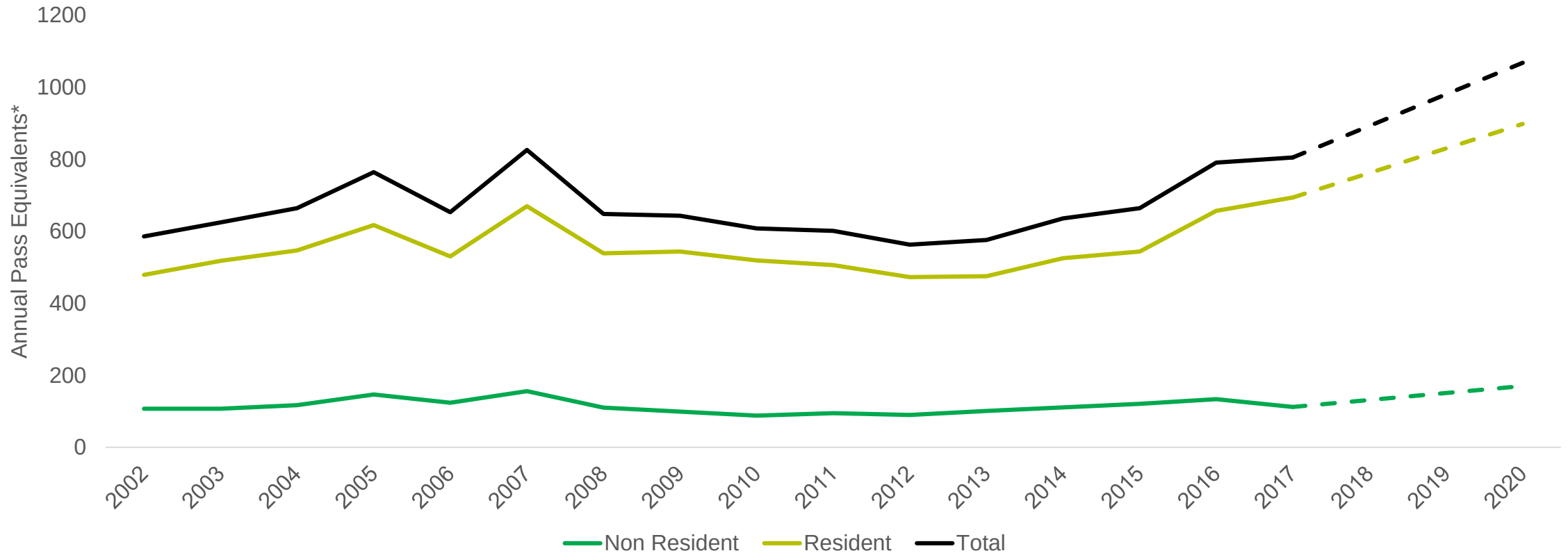
Overall, residents have rated their health status fairly high though recent declines may be concerning. Utilization of MSP services have been fairly consistent year over year with only minor increases, suggesting health status may be impacted by other factors.



Data source:: Whistler Community Life Survey

Recreation Facilities

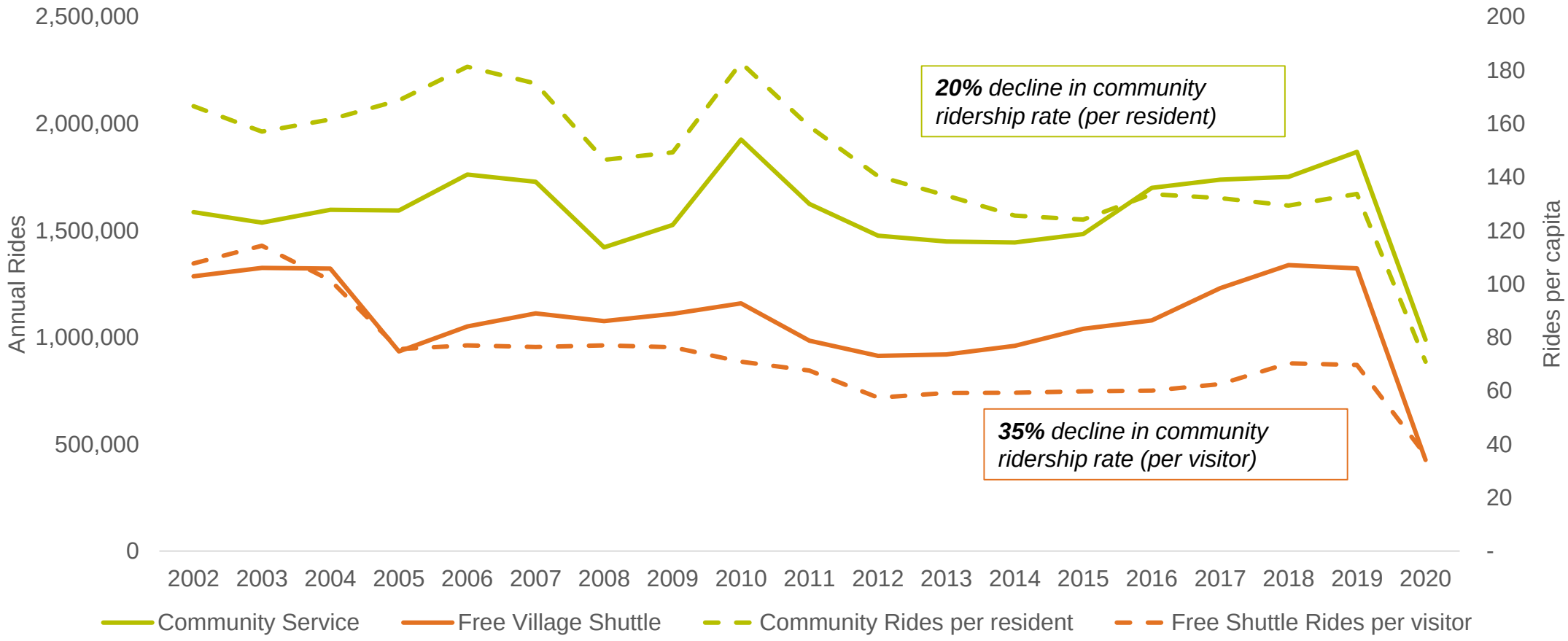
Meadow Park offers indoor recreation facilities to residents and visitors, with resident priority recently implemented for programming. Both arena and pool user groups are currently limiting their registrations due to insufficient capacity.



- *Data Source: RMOW Department of Recreation*
- **Passes sold were converted to annual equivalents via weighting – for example, a 3-month pass is ¼ of an annual equivalent*
- *2018/19 data was unavailable due to a system change*

Transit Ridership

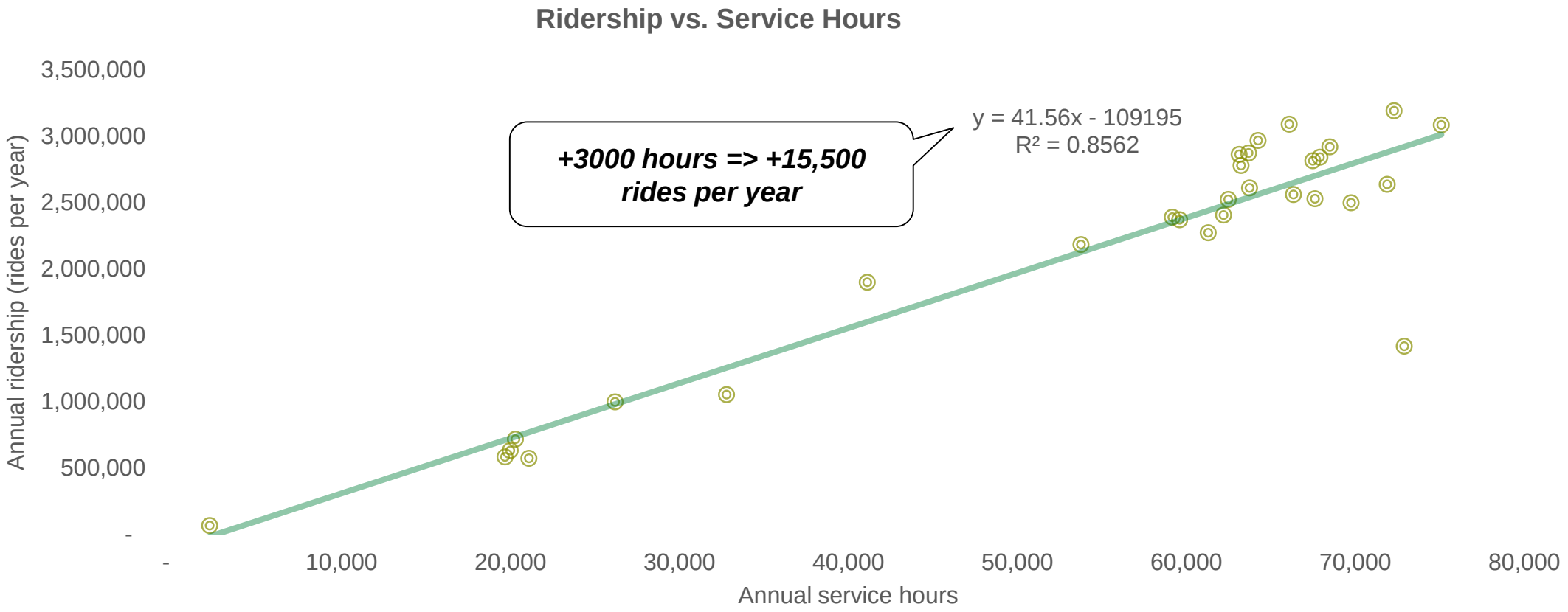
Community uptake of transit has slowed, as evidenced by declining ridership per capita. In 2011 the sharp decline in ridership resulted from a 20% cut to service levels.



Data source: RMOW Infrastructure Services

Service Hours

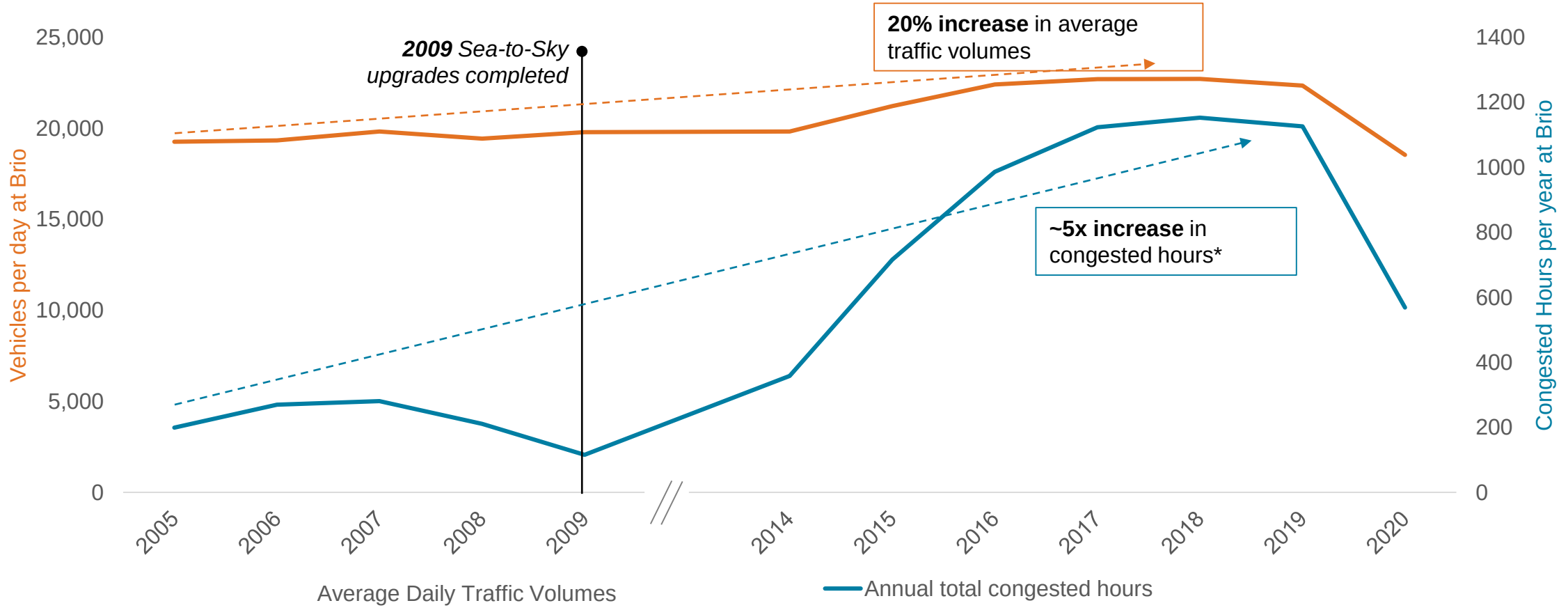
There is a strong relationship between service hours and ridership, suggesting that the RMOW may be able to increase ridership through improving frequency and convenience of service. RMOW is currently working to add 3000 service hours.



Data source: RMOW Infrastructure Services

Traffic and Congestion Within Whistler

As traffic volumes have been steadily rising, congestion* has become more severe, suggesting the highway within Whistler has reached its capacity during peak times.**



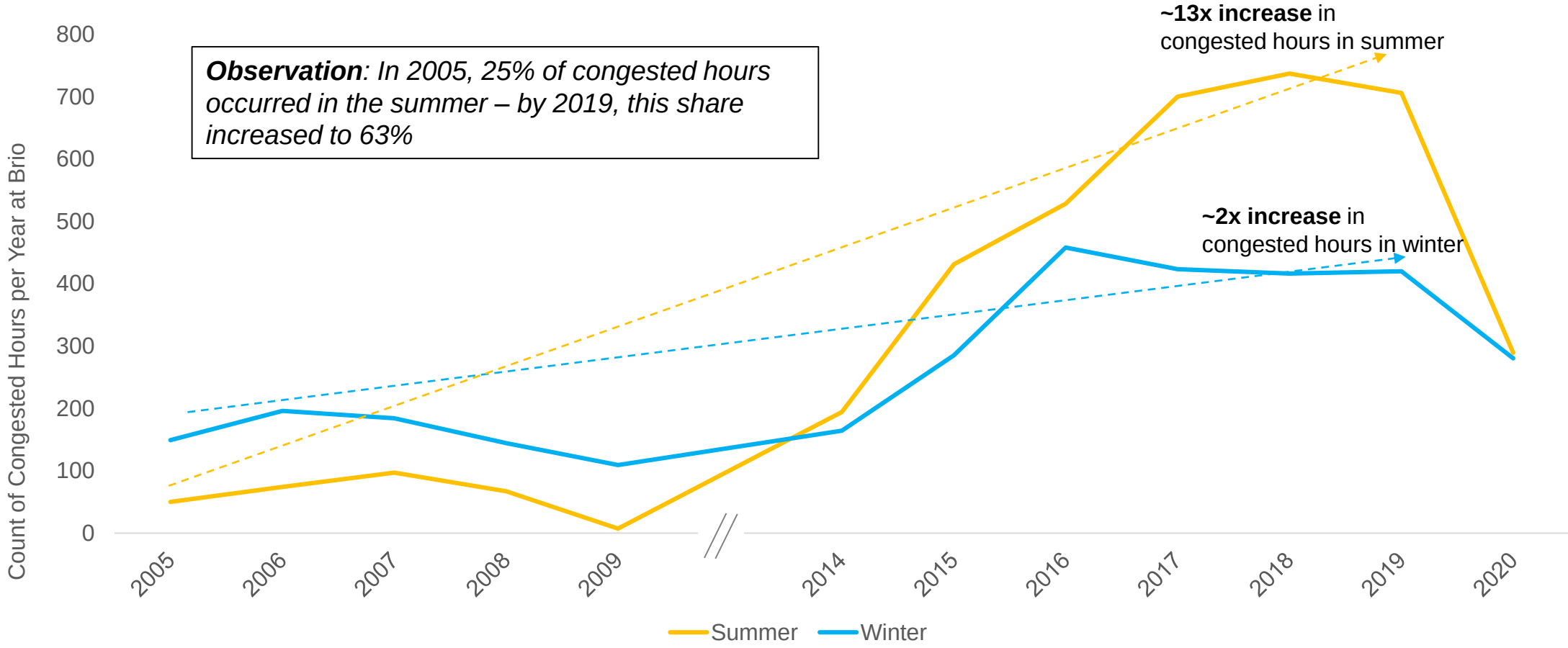
Congestion was defined as hours where there were 1000+ vehicles in a single direction on the highway – as this is consistent with traffic volumes during peak times

The theoretical capacity of the highway was determined to be 1500 vph, though these levels are rarely experienced

Data source: Ministry of Transportation traffic counter at Brio, provided by RMOW infrastructure services

Seasonal Congestion

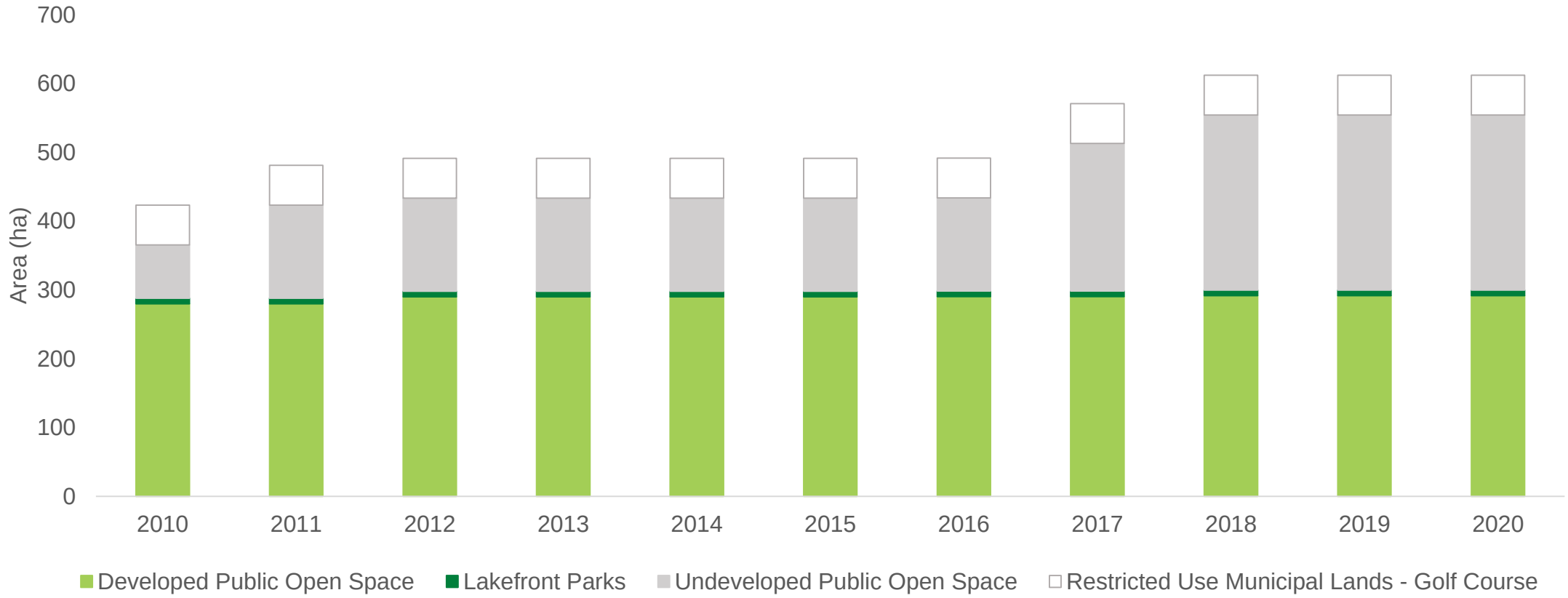
While congestion has increased for both seasons, it is now relatively more pronounced in summer months.



Data source: Ministry of Transportation traffic counter at Brio, provided by RMOW infrastructure services

Public Parks

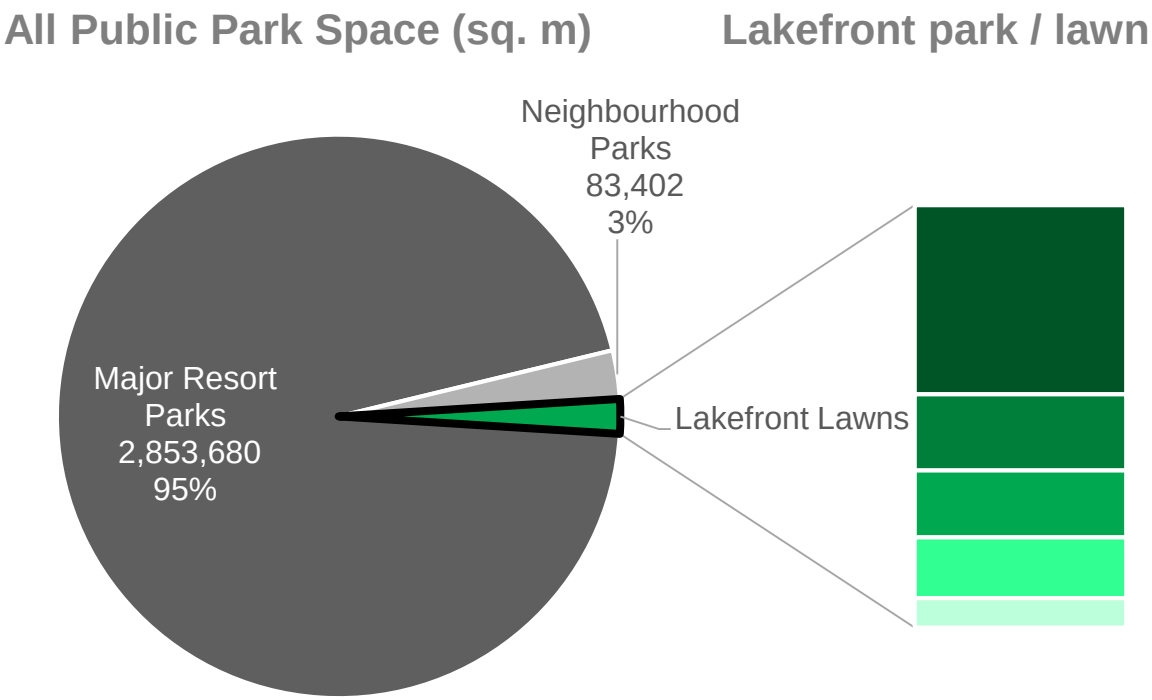
Accessible Park space has been static over the past decade, potentially resulting in overcrowding as population has grown. Additional municipal lands may be available, though are more challenging to develop and difficult to access – with potential implications for environmental elements.



Data source: RMOW GIS

Lakefront Park Space

Lakefront lawn area draws the most park visitors, but it only accounts for 2% of total park area. Additional opportunity for lakefront access is limited but may be possible through 'light' touch development.

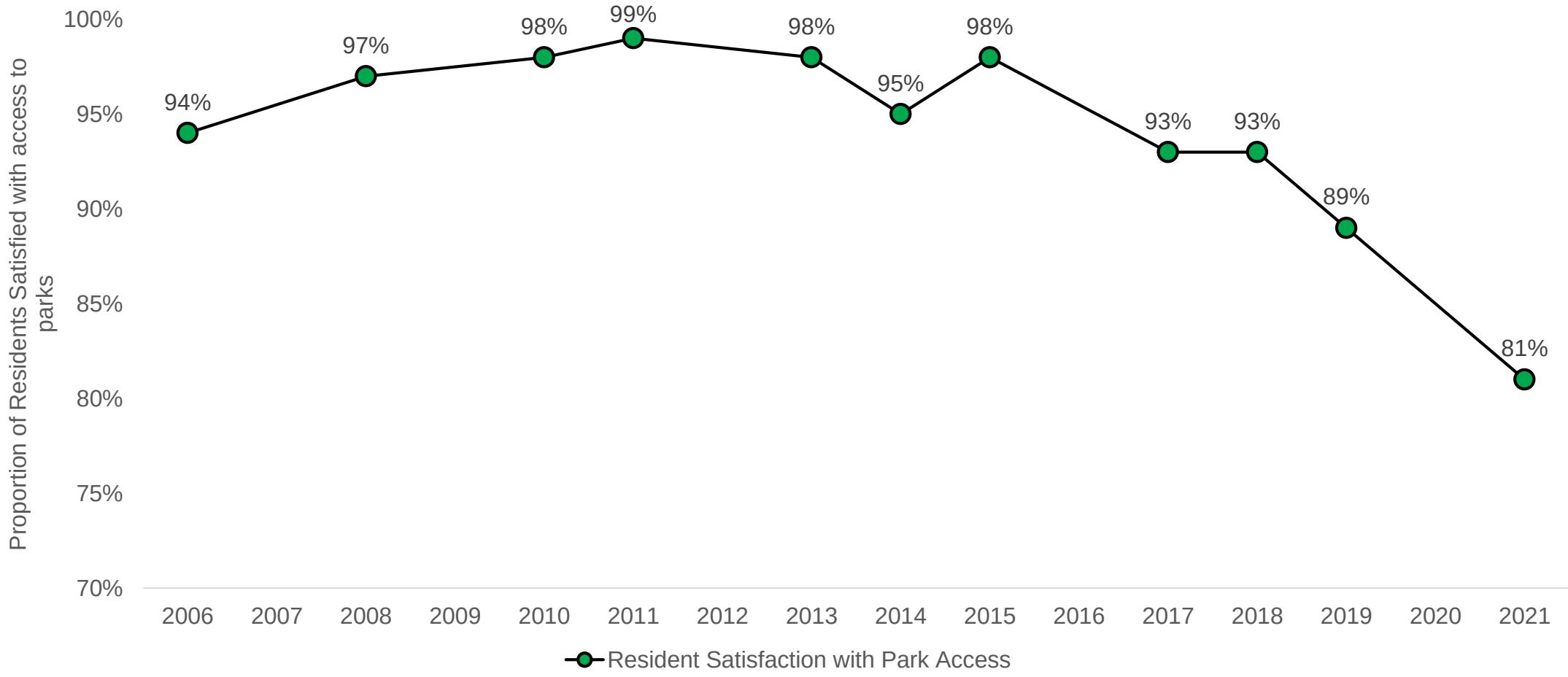


Lakefront Park	Total Park Space	Lakefront Lawn Area	Lakefront Portion of Total
	Square meters		
Rainbow	57,732	26,510	0.9%
Lost Lake	2,181,834	10,667	0.4%
Alpha	23,623	9,380	0.3%
Wayside	12,883	8,546	0.3%
Lakeside	18,787	4,135	0.1%
Lakefront Total	**2,272,856**	**59,238**	**2%**

Data source: RMOW GIS

Parks Satisfaction

While satisfaction levels are overall quite high, they have been trending downwards in recent years. This may be a result of overcrowding and access to parks.



Data source: Whistler Community Life Survey

ECONOMY: CURRENT STATE

Tourism based Economy

Vision characteristics

- **Resilient** — ***Our tourism-based economy is strong, diverse and resilient. Economic opportunities and employment support high quality of life.***
- **Experience** — ***Whistler offers diverse, year-round and authentic experiences that offer exceptional value and sustain visitation.***
- **Dependence** — ***Economic activity depends on and respects the natural environment, our unique mountain culture and the people of our community.***
- **Local** — ***Locally owned businesses are essential and thrive.***
- **Renewal** — ***Innovation, renewal and reinvestment in Whistler's infrastructure and offerings support livelihoods, quality of life and the visitor experience.***

Refer to whistler.ca/ocp for the full Official Community Plan

How We Measured Performance

Economy Indicator	Data
Tourist Accommodation	• Developed & undeveloped hotel bed units and non-covenanted tourist accommodation
Hotel Occupancy	• Annual and Seasonal commercial occupancy rates
Consumer Expenditures	• Economic spend per day by population segment
Commercial & Industrial Space	• Total area of commercial and industrial space, including vacant space
Food & Beverage Seats	• Licensed indoor and patio seats for liquor and food primary establishments
Skier Visits	• Daily maximum and total annual skier visits to Whistler Blackcomb
Parking	• Daily vehicle counts in Village Day lots during winter season
Traffic Congestion outside Whistler	• Hourly vehicle counts at Alice Lake
Tourism Cost Recovery	• RMOW Tourism expenditures to total funding from tourism sources (RMI & MRDT)

Key Takeaways

Overall: Tourist Accommodations are the backbone that enable Whistler's growing economy, while pace of visitation growth has placed pressure on other resources. Looking forward, we may need to consider the impacts of COVID on visitor demographics and traveler preferences.

1. Whistler has successfully diversified its tourism economy with significant innovation and investment, seasonally and for broader visitor appeal, enhancing resilience.

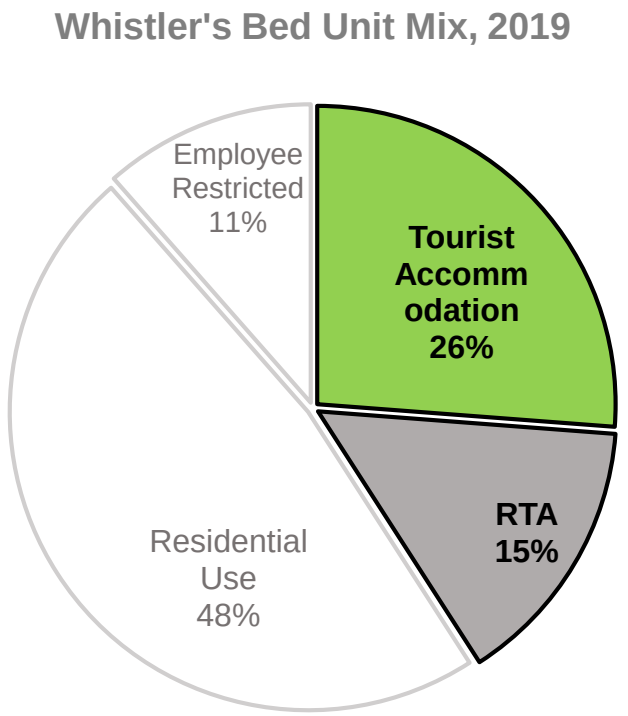
2. Development of tourist accommodations has been key to Whistler's history and current success as a tourist destination. Recent increases in summer visitation have been improving year-round business viability, though consumer expenditures and business viability are impacted by COVID.

3. Commercial space is crucial to supporting both tourist demands and resident livelihoods. Limited supply with increased demand is driving up rents, increasing the cost of doing business. Further review of Whistler's commercial space may be necessary to understand optimal use of existing space.

4. The main way to get to Whistler is by car – and increased levels of visitation are having pronounced impacts on traffic and parking congestion. Additional methods to manage traffic and parking (without increasing capacity) may be needed.

Tourist Accommodation

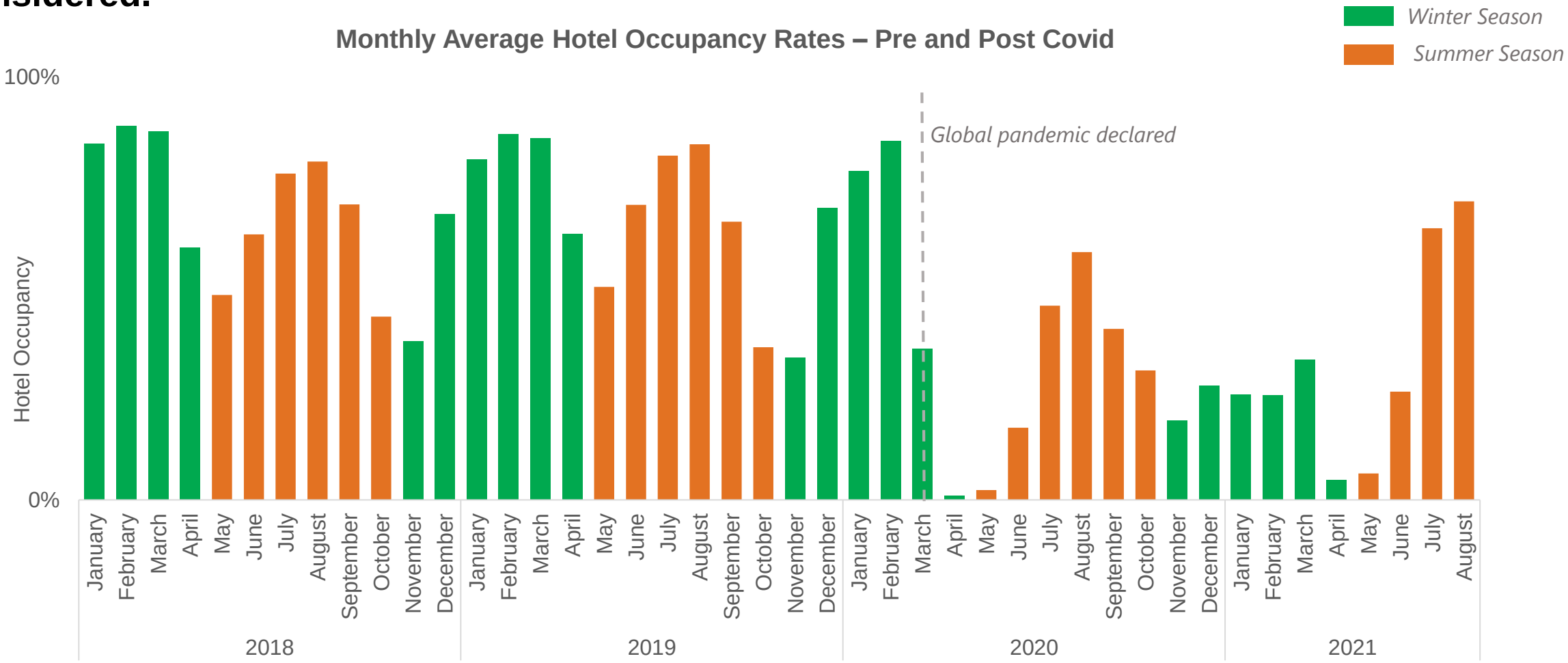
Whistler's tourist accommodation makes up around 40% of total bed units while visitor levels are more than half of total population throughout the year.



Data source: RMOW Planning Department
**RTA units allow both residential and tourist accommodation use.*

Hotel Occupancy

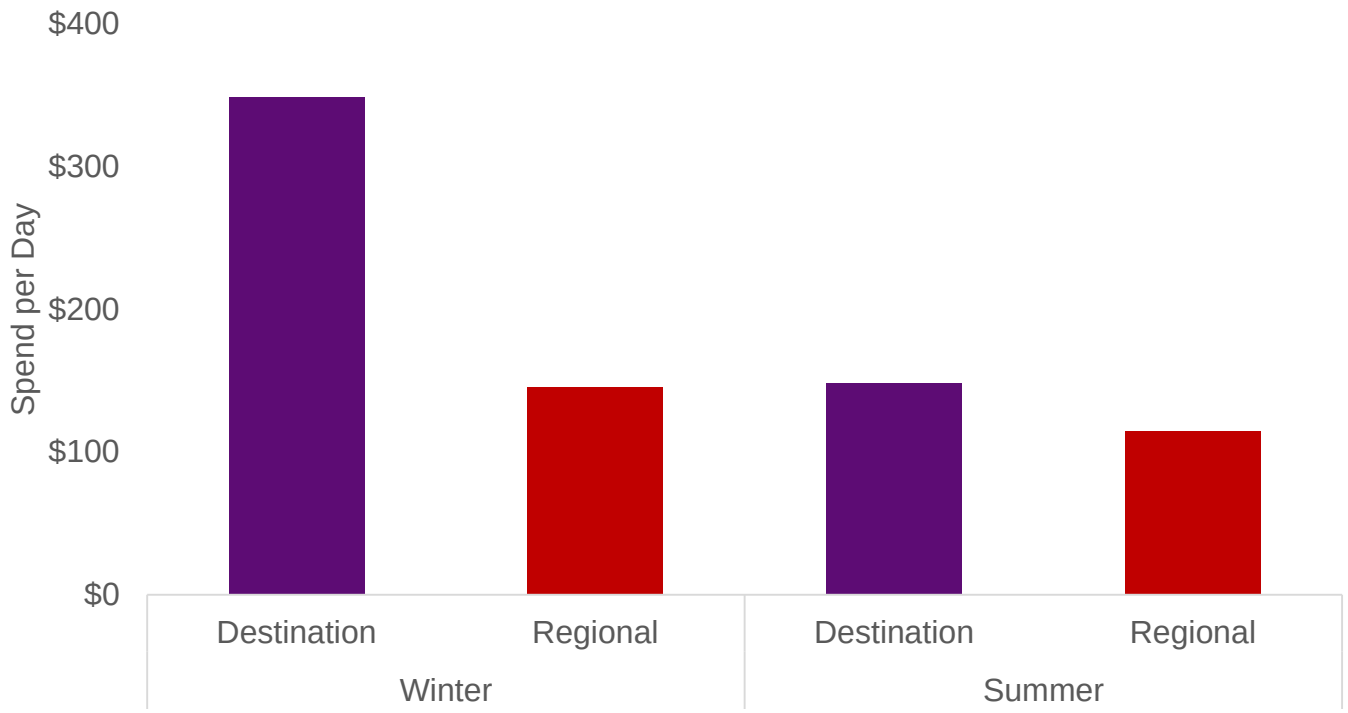
COVID is having an impact on consumer behavior changes, and potentially future trends associated with nature-based locations and climate impacts of long haul flights being more considered.



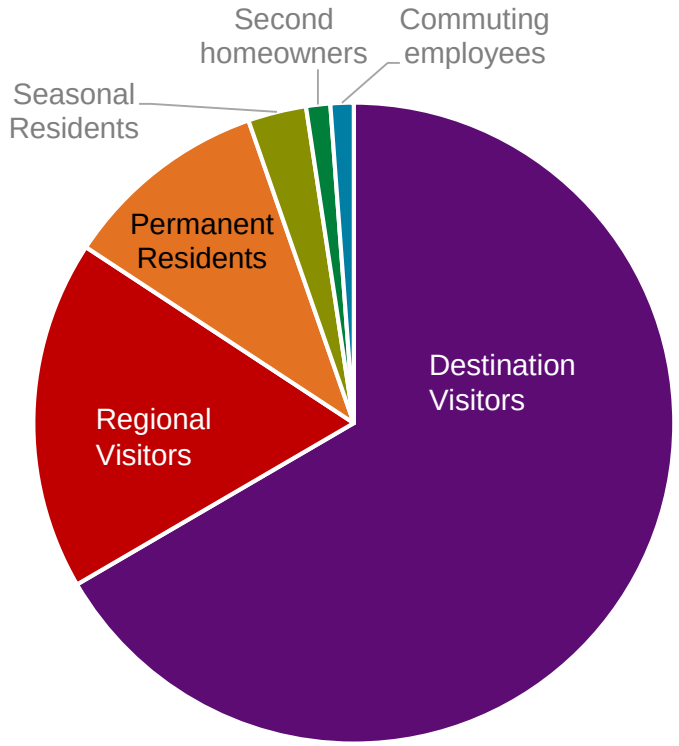
Consumer Expenditures

Pre-COVID, total spending and economic contribution was driven by destination visitors, particularly during Winter. Longer stays support increased daily spend on F&B and retail and activities.

Daily Spend per Person (by Visitor Segment)

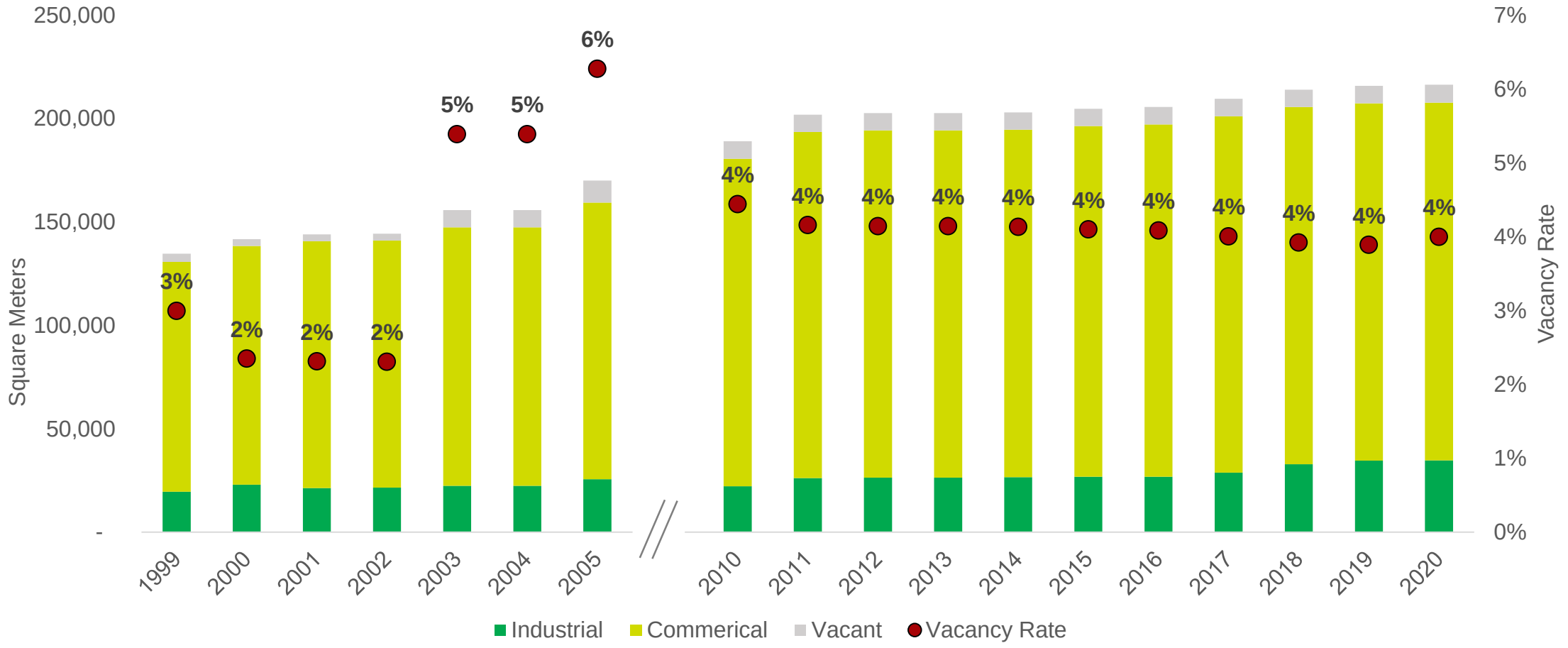


Share of Annual Spend by population segment, ($)



Commercial Space

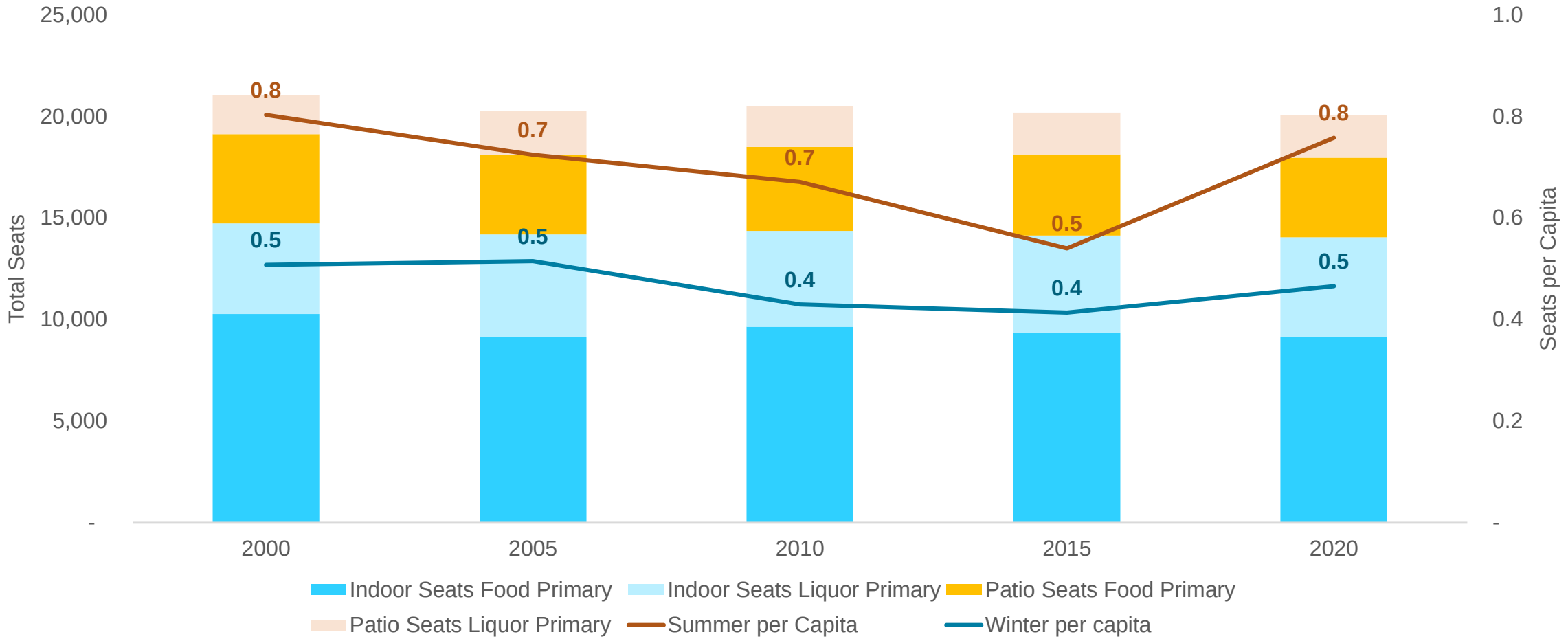
Visitor volumes and spending growth support the financial viability of existing commercial real estate. However low vacancy rates result in escalating triple net rents.



Data source: RMOW Planning Department

Food & Beverage

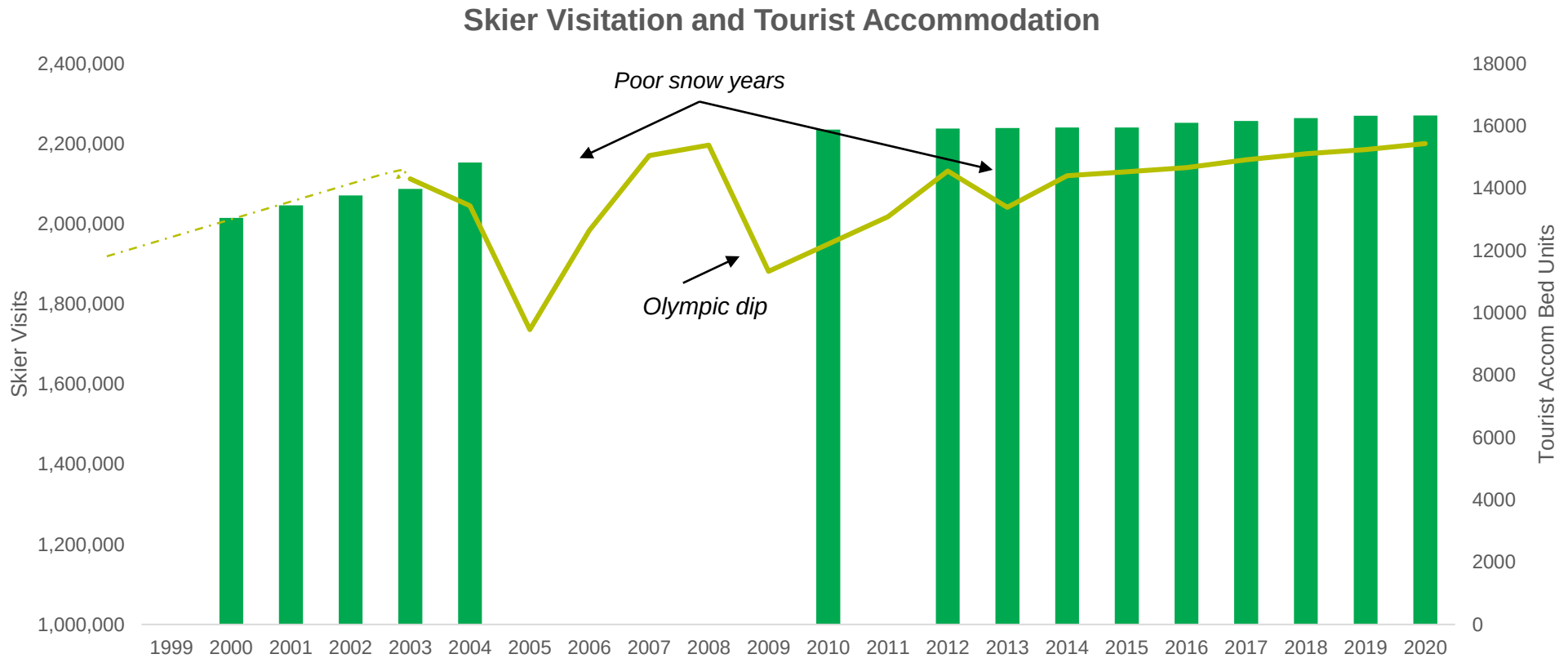
F&B capacity has declined in recent years, resulting in long wait times and earlier reservation requirements during peak periods as visitation grows. This has been further exacerbated during COVID with restrictions limiting capacity.



Data source: Liquor and Cannabis Regulation (LCRB), Province of BC

Skier Visits

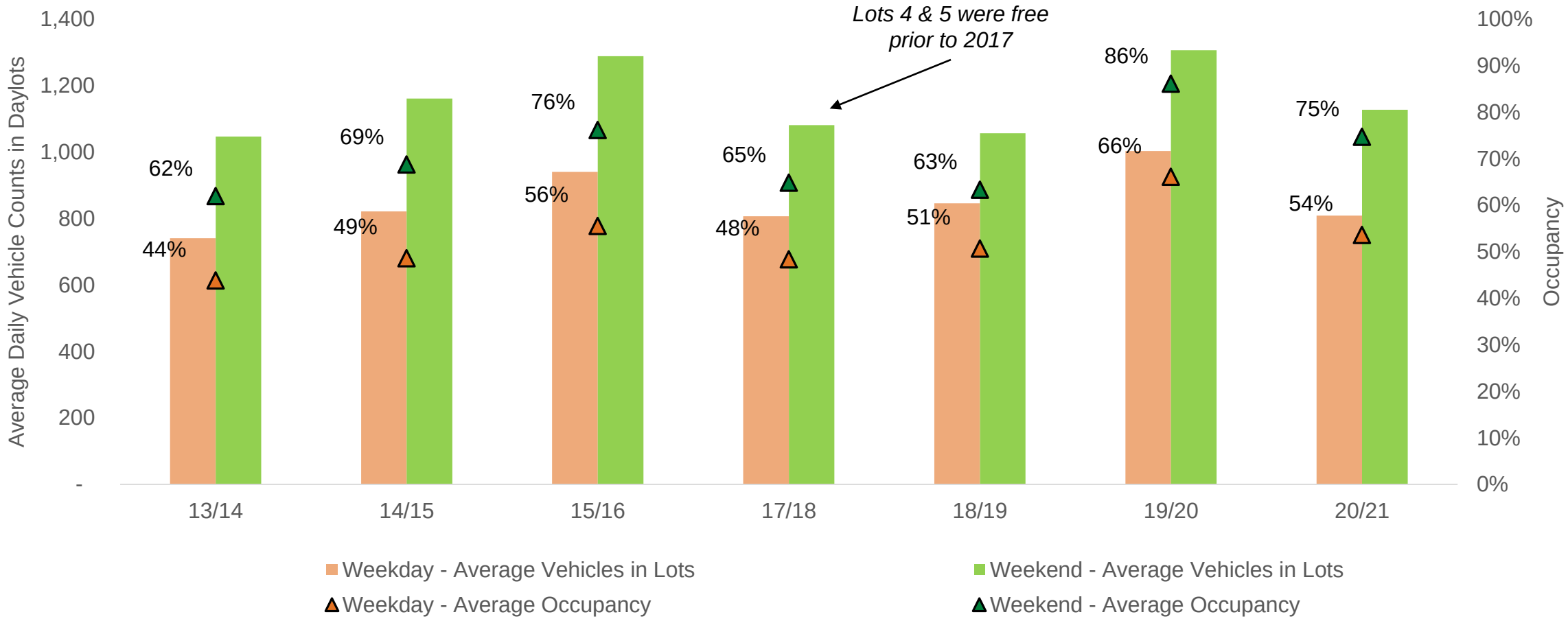
Over Whistler's history, the expansion of tourist accommodation played an important role in increasing skier visits. As hotels near capacity in peak seasons, incremental visits are more likely to come from day trippers, residents, and second home owners.



Data source: Whistler and Blackcomb master plans.

Village Parking

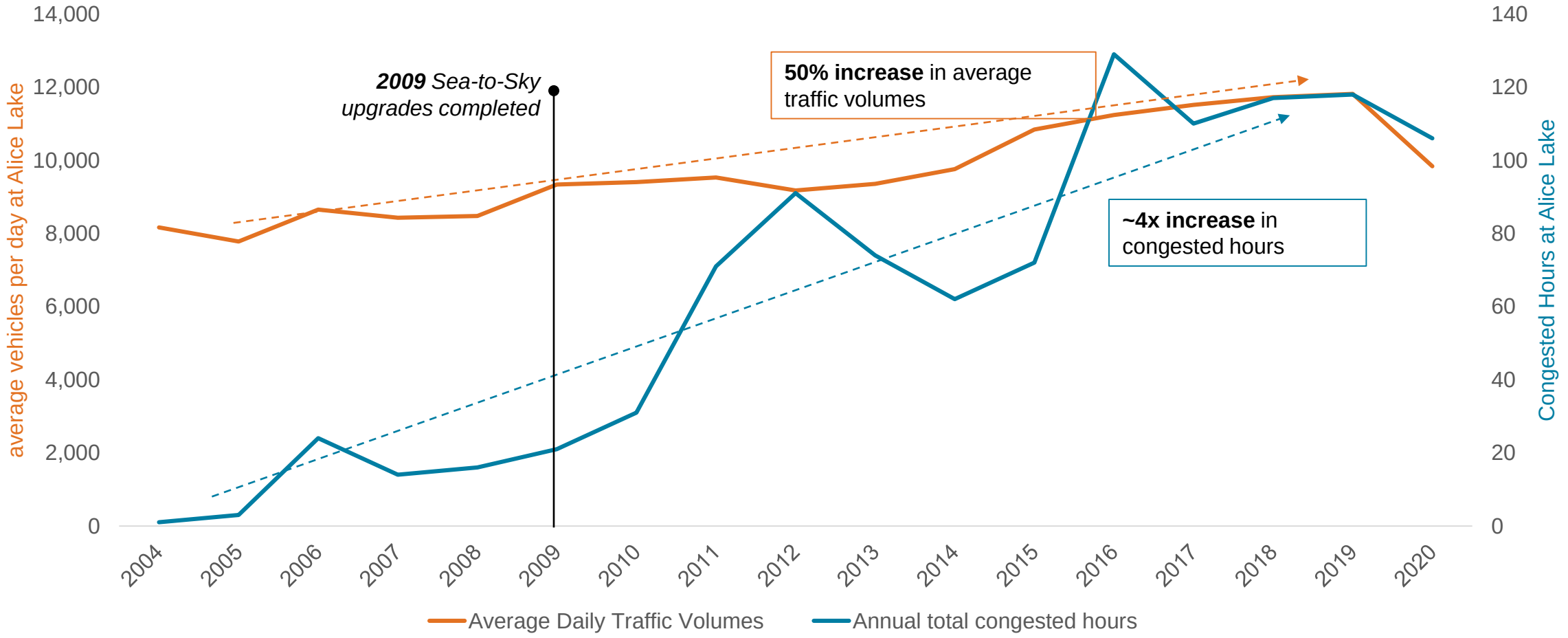
Parking in the village has reached higher occupancy levels and lots are generally full during peak times. Given peak season busyness, methods to manage parking (within the existing capacity) could alleviate high occupancy levels.



Data source: Whistler Blackcomb Daily Parking Lot Counts

Congestion Outside of Whistler

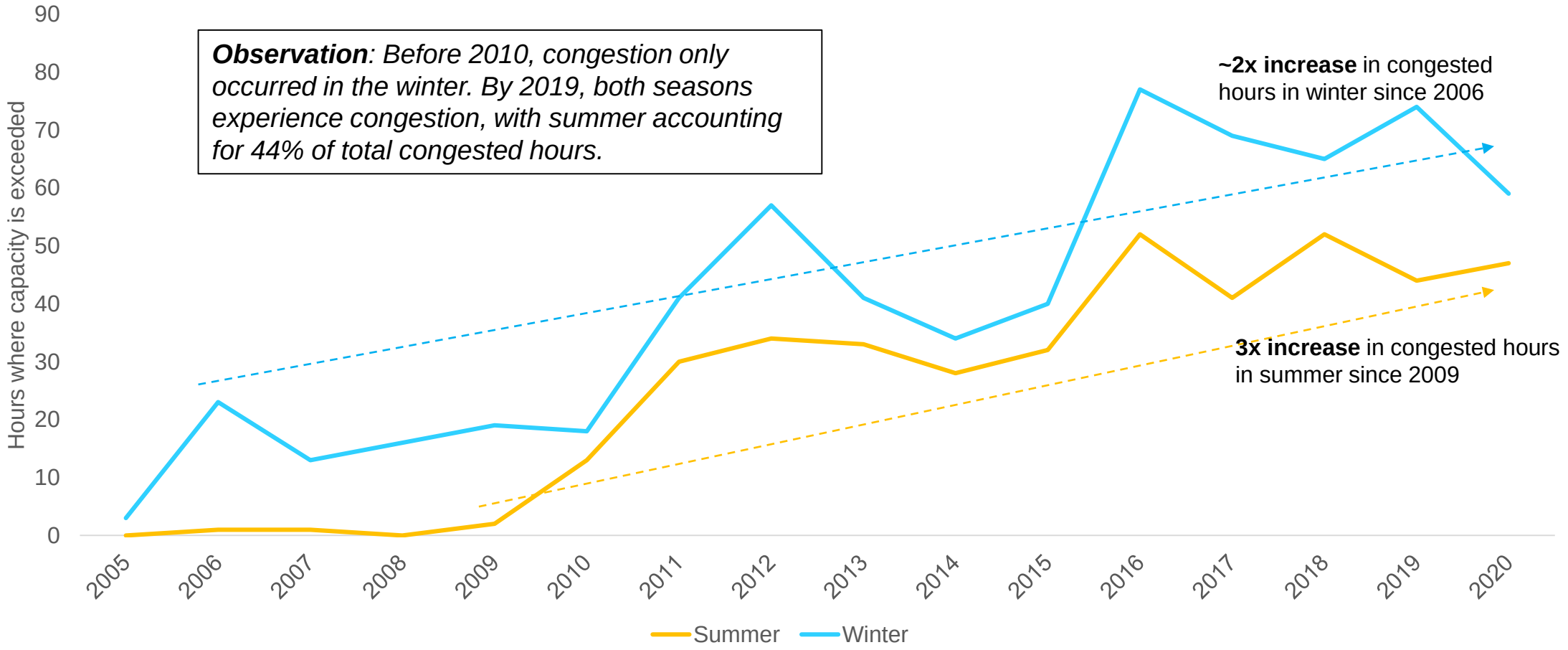
While significantly lower than within Whistler (at Brio), traffic volumes outside of Whistler are causing increasing periods of congestion*,**



*Congestion was defined as hours where there were 1000+ vehicles in a single direction on the highway – as this is consistent with traffic volumes during peak times
*The theoretical capacity of the highway was determined to be 1500 vph, though these levels are rarely experienced
Data source: Ministry of Transportation traffic counter at Brio, provided by RMOW infrastructure services

Seasonal Congestion Outside of Whistler

Historically, congestion at Alice Lake was only experienced in Winter months, though summer months started to see congestion after 2010. With significant increases, it will need to be determined at what point is too much and how to positively impact this experience.



Data source: Ministry of Transportation traffic counter at Alice Lake, provided by RMOW infrastructure services

SENSE OF PLACE: CURRENT STATE

Sense of Place

Vision Characteristics

- **Culture** — ***Our genuine mountain culture pervades the community and is celebrated….enhanced by the rich heritage and culture of the Squamish Nation and Lil'wat Nation…***
- **Landscape** — ***Natural areas are never far from sight and reach….***
- **Balance** — ***Community life and resort visitation are balanced, both occurring within the carrying capacity of our developed and natural environments.***
- **Vibrant** — ***Vibrant community spaces are full of energy and frequent celebration, while not interfering with natural places of solitude and rejuvenation.***

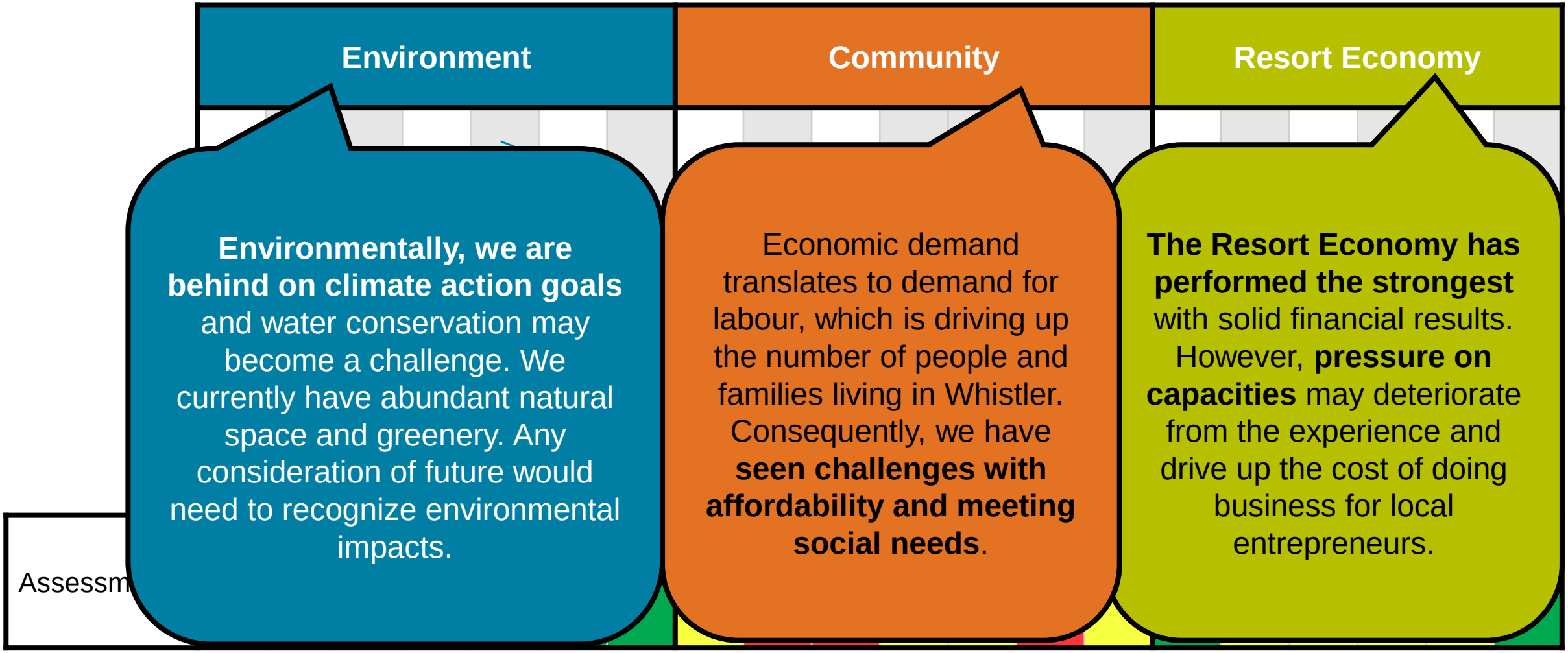
Sense of Place

Sense of place is a very qualitative pillar so this is an intangible element to be considered as part of strategic planning.

Some elements of Sense of Place may be captured by the combination of indicators across Environment, Community, and Economy

THE BIG PICTURE

Summary of performance indicators

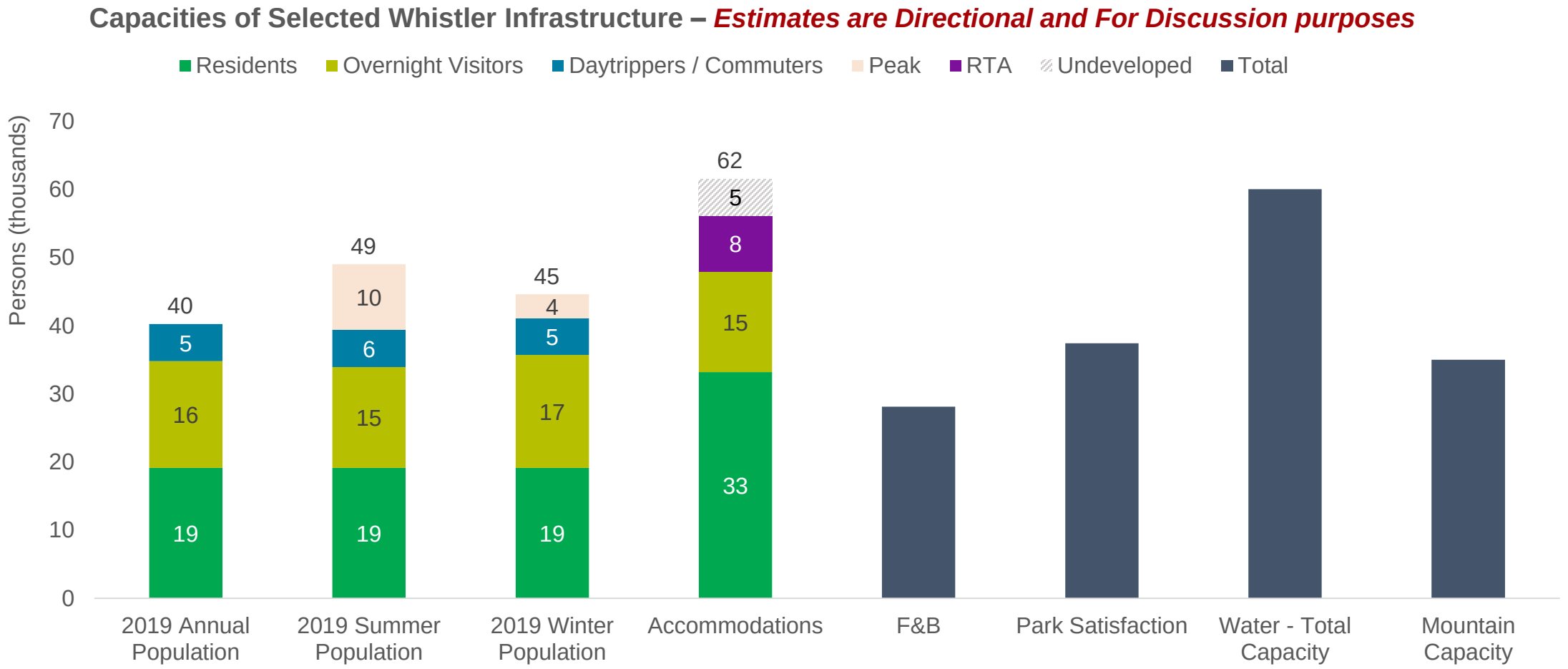


Refer to whistler.ca/ocp for the full Official Community Plan

Current Capacities - examples

DRAFT

Different population groups have different impacts on built infrastructure. Evaluating through future scenarios the implications of different population mixes will help define comfortable carrying capacity for different needs.



Conclusions

- **How much, where, and when growth and activity happens all matters.** E.g. seasonality of visitation, mix of population.
- **Some existing capacity constraints can be "engineered out of"** but only to an extent or temporarily. Limitations of environmental and social trade-offs become more evident
- **Collaboration is key to success** - the community is impacted by decisions of a number of major stakeholders
- **Trade-offs will be required.** Community engagement and input to prioritizing competing interests will also be key to delivering on the community vision.

To summarize, the current state assessment:

- Provides an evidence-based approach to understanding how we got to where we are
- Quantifies the relationships between population changes and pressure on various infrastructure and services
- Enables modelling of future population projections to understand potential implications of changing total population as well as segments within …

… ***and their impacts on social, environmental and economic performance indicators***

Agenda

- Recap on approach and timelines
- Historical and Current State Performance
- **Approach to future scenario modelling** and analysis
- Community Engagement

FUTURE STRATEGIC PLANNING

Project Outcomes

Overall the Balance Model seeks to understand the *quantifiable* relationships and tradeoffs between population growth and achievement of the community vision.

Completed Fall 2021

Current State Assessment

↘ *Where are we today? How did we get here? What have been the historical trends leading here?*

Winter 2021/22

Potential Future Scenario Modelling

↘ *What can we expect given different scenarios of future growth?*

Spring 2022

Strategies and Actions for Vision

↘ *What actions can we take to ensure balance across the four pillars and enable achievement of Whistler's vision?*

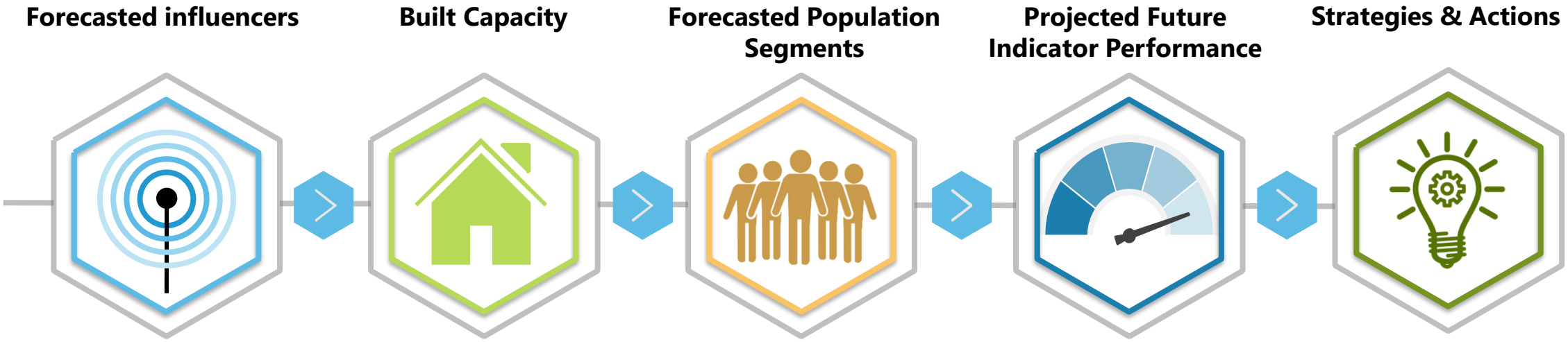
Explanatory note:

This section outlines the methodology for developing a model to predict future indicator performance based on various scenarios of future population changes – which will enable comparison of scenarios against each other and the Official Community Plan goals and objectives, thus focusing strategies and actions on a preferred or desired direction.

1. **Scenarios of future population** segments will be developed by reviewing 'influencers' of growth and possible built capacities in Whistler
2. **Indicator Performance** will be projected forward based on each indicators unique historical relationship to population changes, or with adjustments to future dependent on anticipated trends to consider sensitivities.

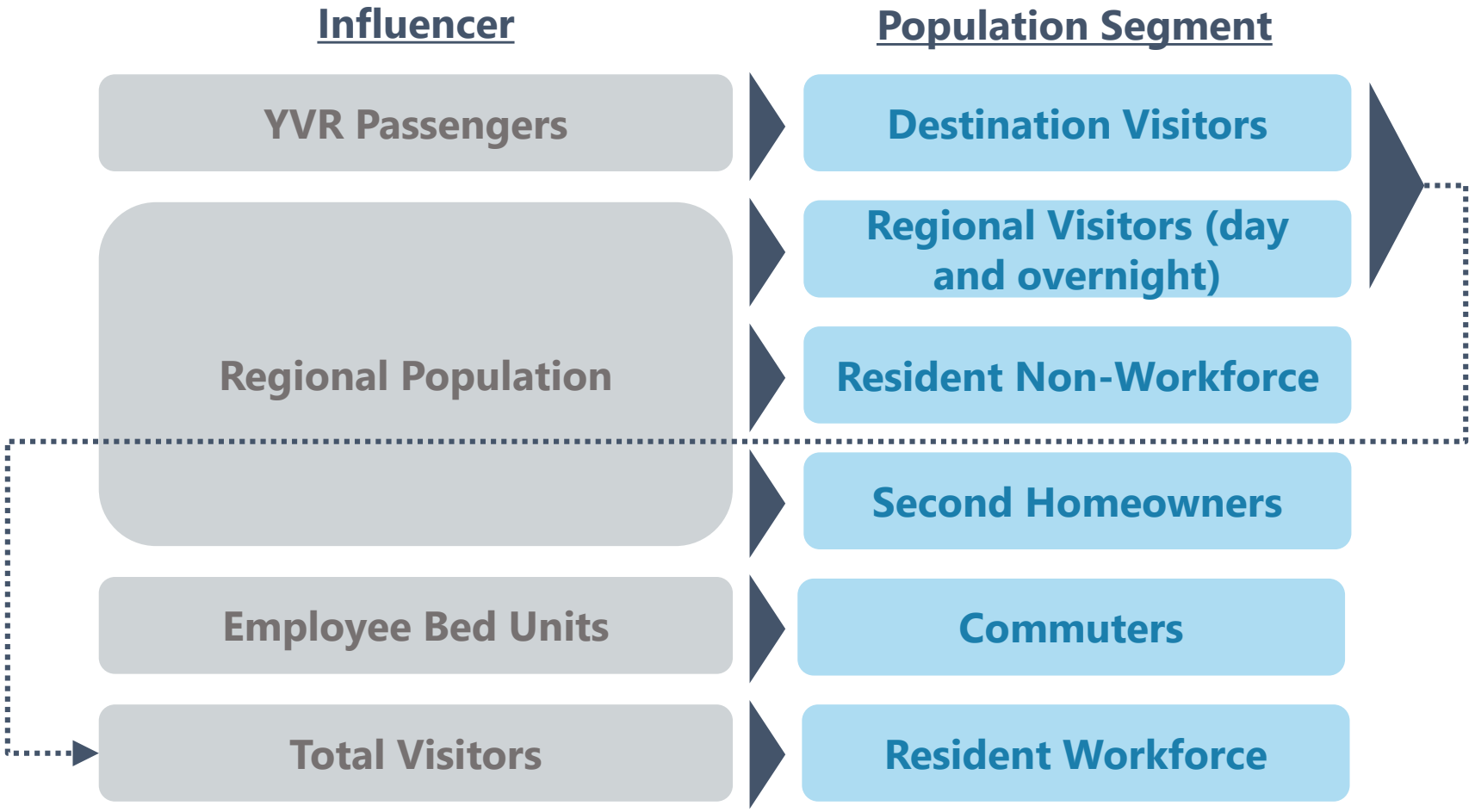
The purpose of this section is to explain the mechanics and scope of projecting population and indicator performance, and how this can be used to inform strategies and actions in the future.

The model will forecast implications for Whistler's balance across its Environment, Economy, and Community in various population scenarios.



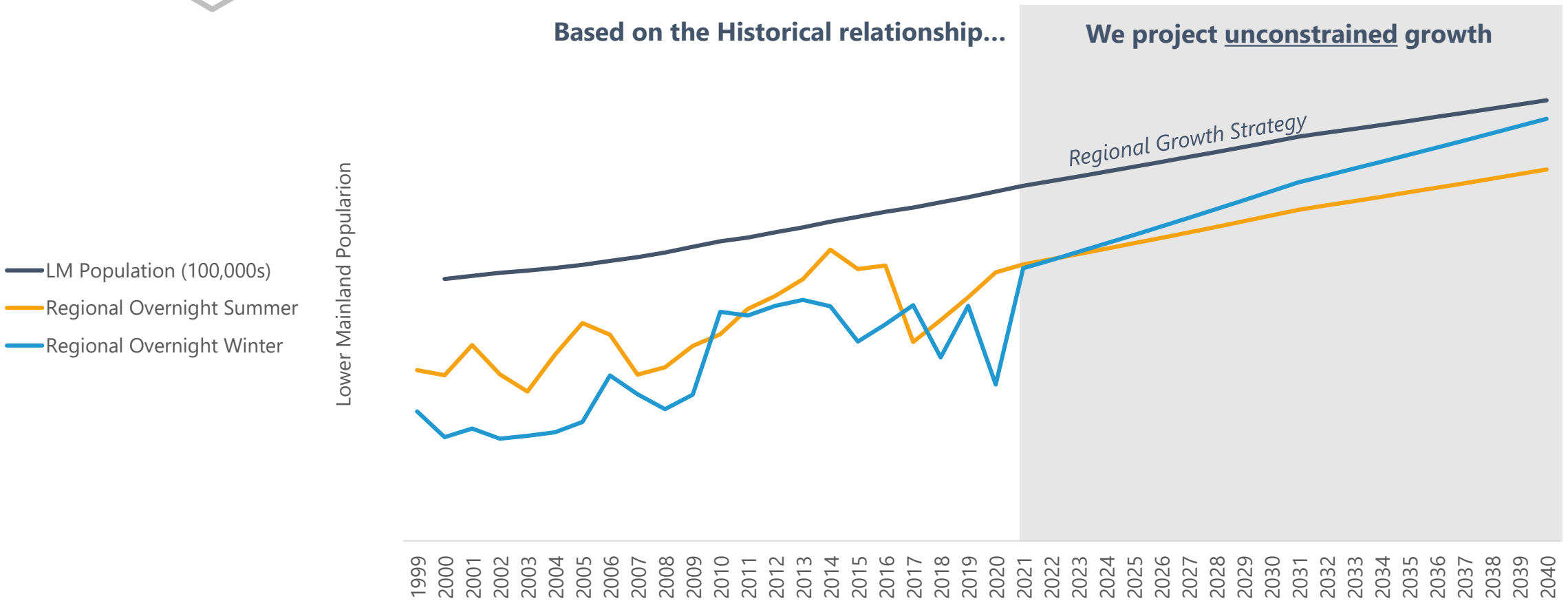
Influencers

Influencers are both external and internal forces that historically have impacted Whistler's population, and are thus useful in predicting future population.



Influencers

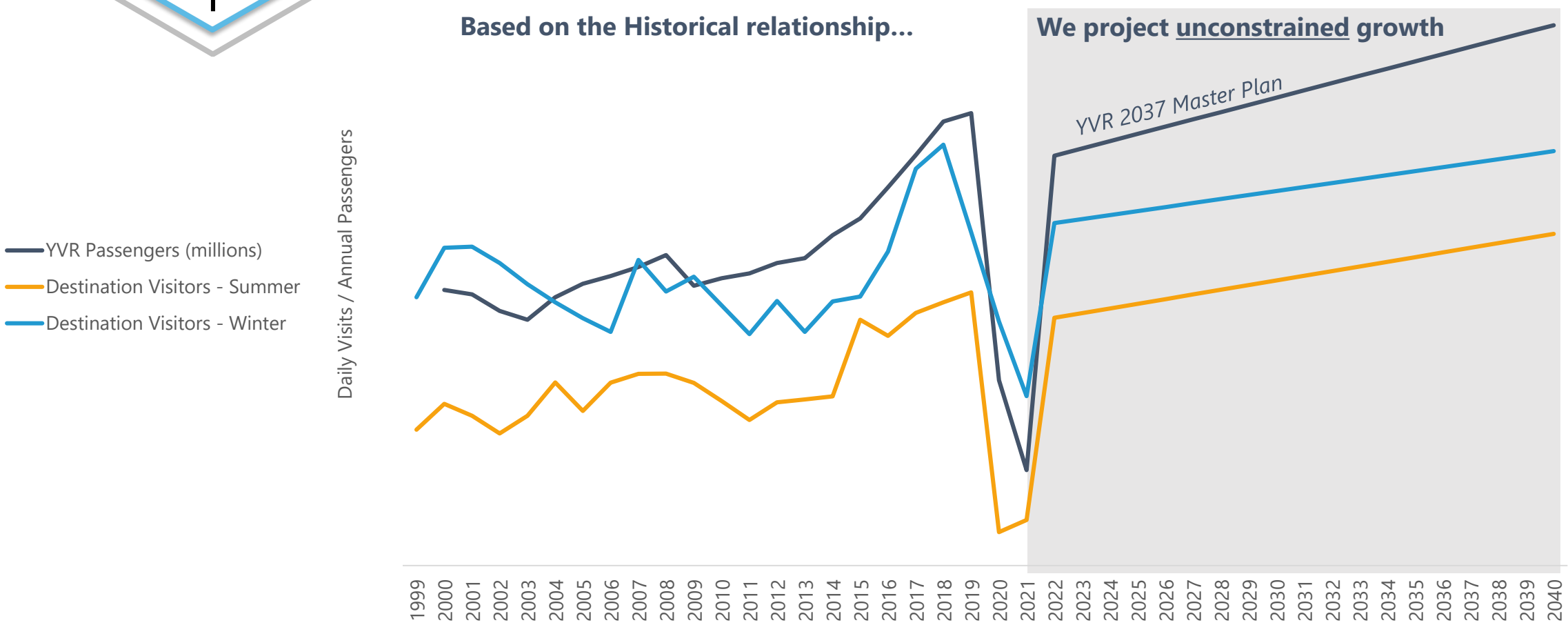
The Lower Mainland population has been a reliable predictor of Whistler's regional visitation rates. We use the Metro Van and Fraser Valley Regional Growth Strategies.



Illustrative & for discussion – does not represent final modelling results

Influencers

YVR Passenger volumes have historically tracked closely with destination visits.



Illustrative & for discussion – does not represent final modelling results

Built Capacity

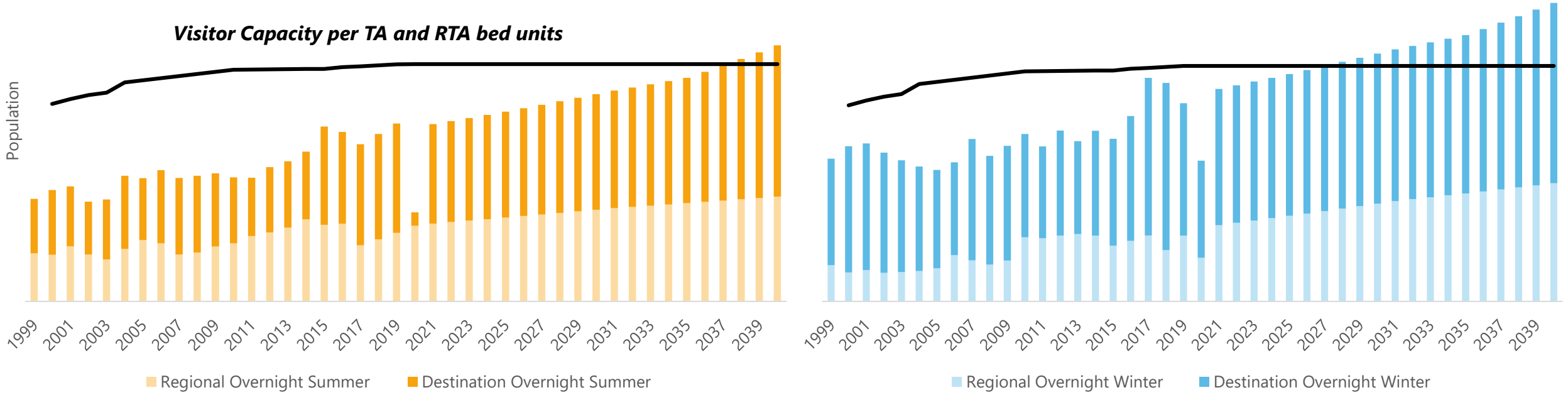
Whistler's visitation levels are subject to available accommodation and parking capacities. Ongoing work (e.g. Housing Survey) will help determine the anticipated number of bed units available to overnight visitors, while parking limits day visitation.

Summer Overnight Visitor Forecast - Unconstrained

Winter Overnight Visitor Forecast - Unconstrained

TBD – what portion of RTA zoned dwellings are used as tourist accommodation? Winter vs. Summer?

Visitor Capacity per TA and RTA bed units



Illustrative & for discussion – does not represent final modelling results

Forecasted Visitation

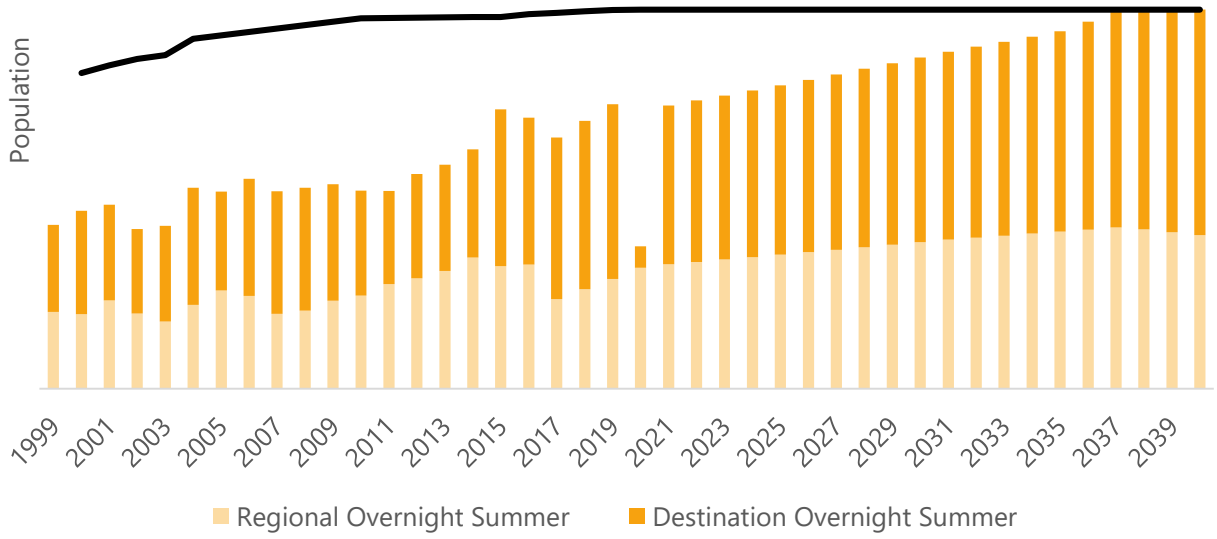
Therefore, forecasted visitation figures are 'capped' based on the available bed unit capacity in each scenario.

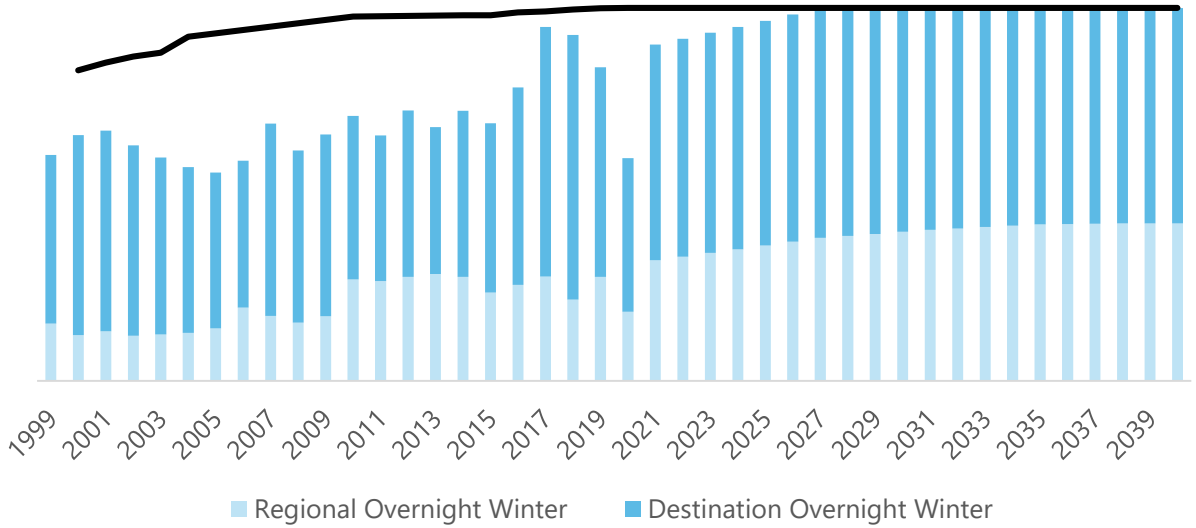
Summer Overnight Visitor Forecasts - Constrained

Winter Overnight Visitor Forecast - Constrained

TBD – what portion of RTA zoned dwellings are used as tourist accommodation? Winter vs. Summer?

Total bed units available to Visitors





Illustrative & for discussion – does not represent final modelling results

Forecasted Visitation

To Summarize…

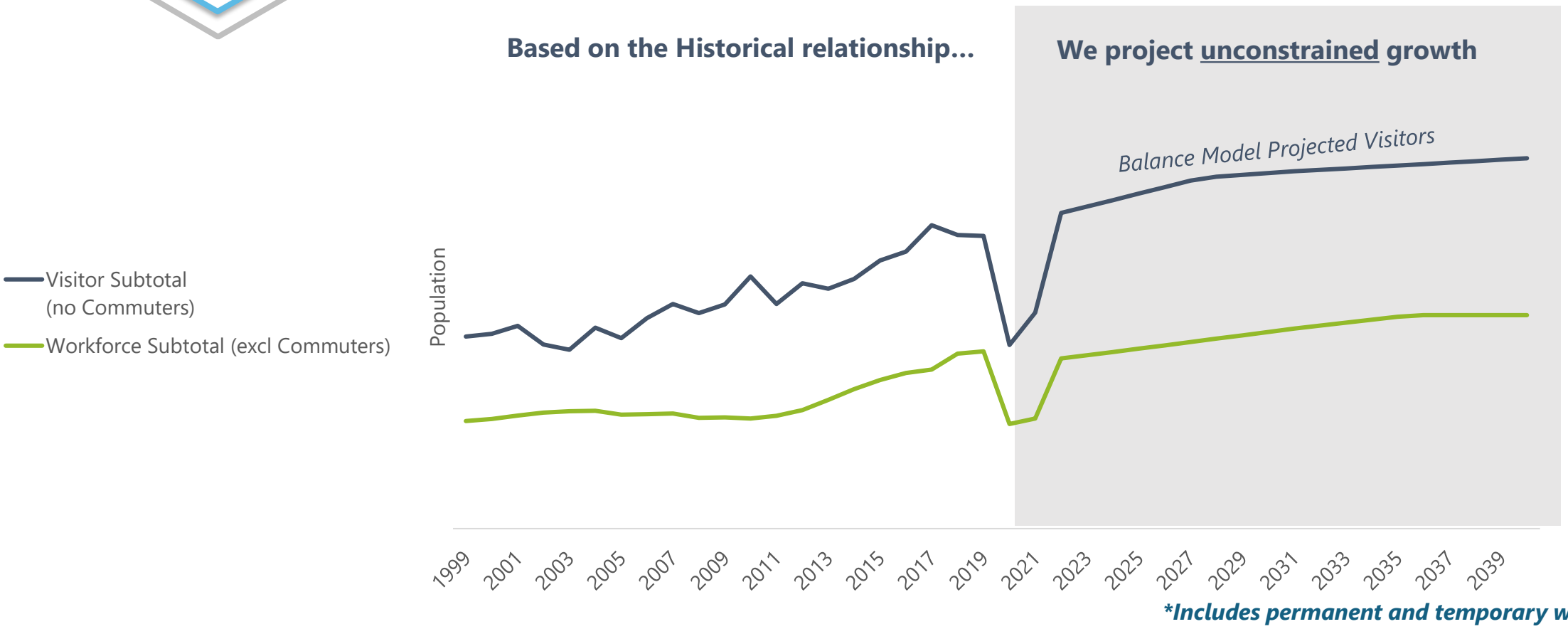
1. Forecasted visitation is driven by YVR passenger volumes and regional growth

2. Overnight visitation can only grow up to the available built capacity per tourist accommodation

3. Day visitation will also be considered in the context of built capacity, e.g. parking

Influencers

As a resort economy, visitation levels have been a key driver in the size of the local workforce.

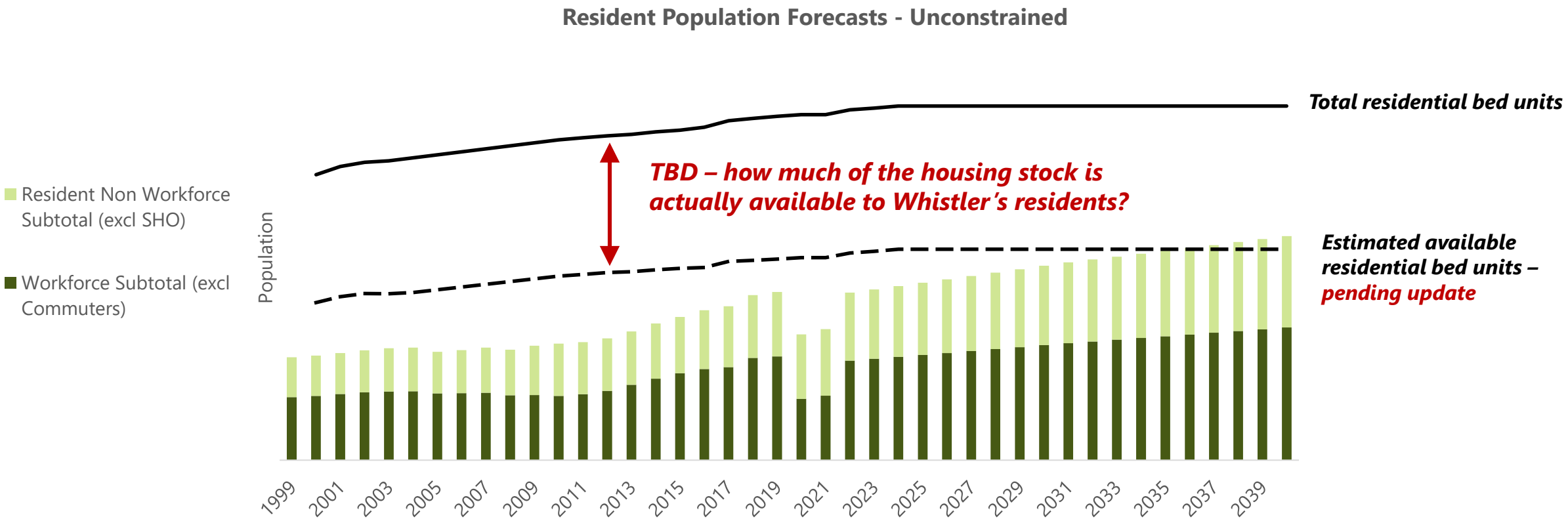


***Includes permanent and temporary workers**

Illustrative & for discussion – does not represent final modelling results

Built Capacity

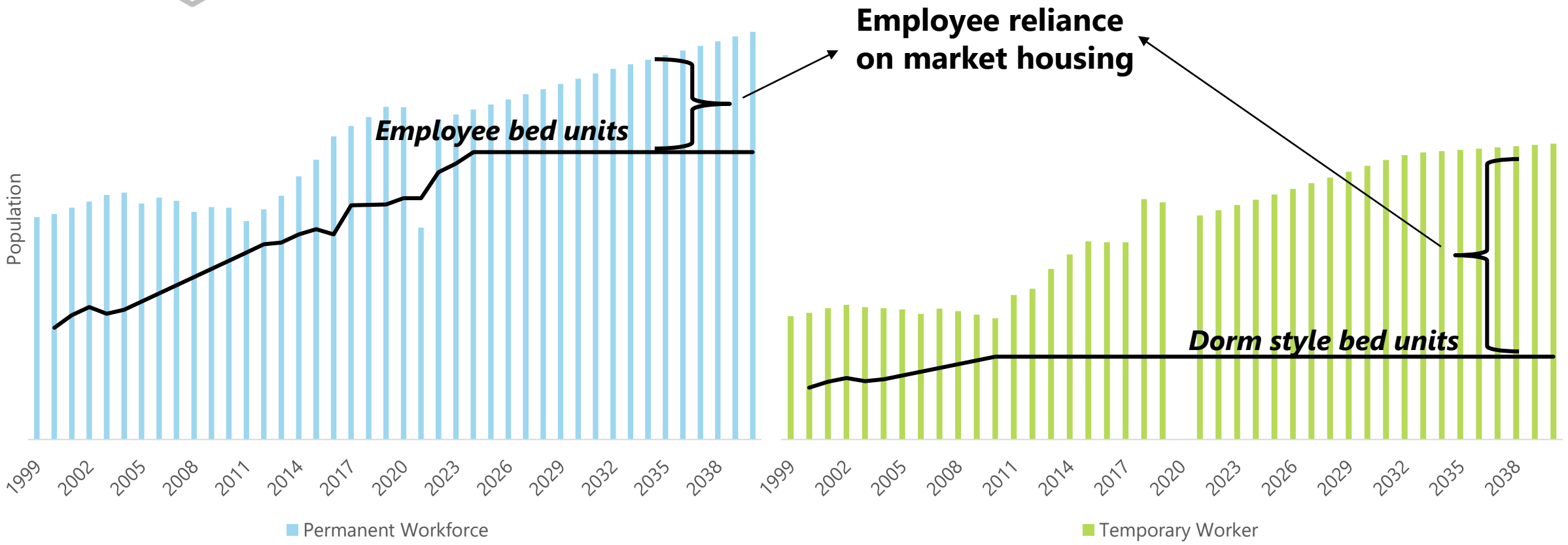
Whistler's resident populations are subject to available residential housing. Ongoing work (e.g. Housing Survey) will estimate actual availability of housing (via SHO use).



Illustrative & for discussion – does not represent final modelling results

Built Capacity

Scenarios of future employee-specific developments will determine expectations for employee reliance on market housing.



Illustrative & for discussion – does not represent final modelling results

Forecasted Workforce

To Summarize…

1. Forecasted demand for labour is determined by visitation

2. Increased demand for labour subsequently contributes to the growth of the overall resident population

3. Availability of residential dwellings determines the ‘constraint’, which may indicate potential labour shortages, drive technological solutions to manage labour demands and/or consider capacity increases.

Illustrative Scenario Example

WHISTLER

Projected Indicator Performance

A performance assessment would summarize the performance of all indicators for a given scenario.

Environment

- GHG Emissions from Vehicles
- GHG Emissions form Natural Gas
- Waste Disposal
- Water Inflows
- Water Outflows (WWTP)

Economy

- Occupancy Rates
- F&B
- Commercial Space
- Tourism Cost Recovery

Community

- Resident Housing
- Employee Housing
- Park Space
- Child Care
- Health Care (GPs)
- Traffic
- Transit Ridership

Legend:

- Good Performance
- Satisfactory Performance
- Concerning Performance
- Not evaluated

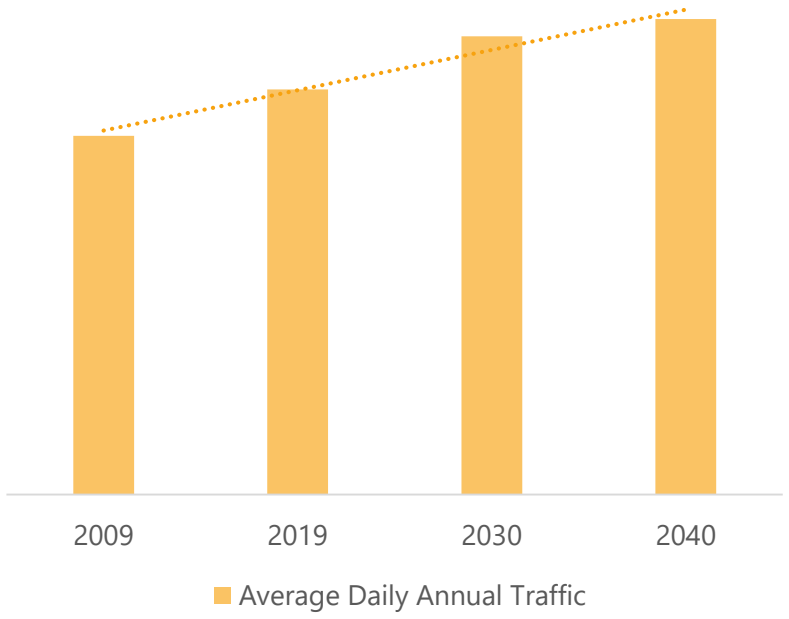
Illustrative & for discussion – does not represent final modelling results

Illustrative Scenario Example

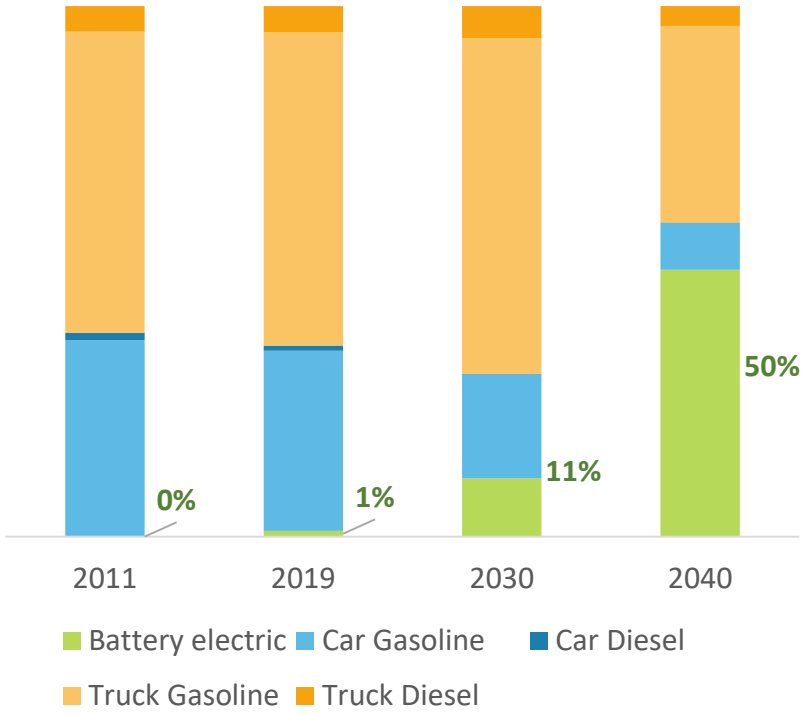
Projected Indicator Performance

In this illustrative scenario, emissions from passenger vehicles decline as EV use increases, though increasing traffic volumes still push us past our targets.

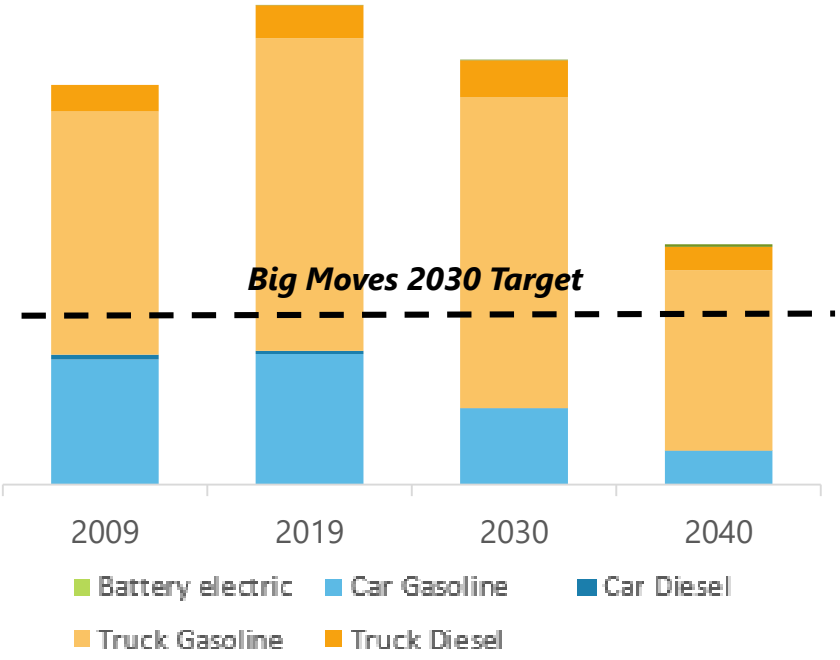
Traffic Within Whistler (vehicles per day)



Share of Electric Vehicles (ZEV Act)



GHG emissions by Vehicle Type



Illustrative & for discussion – does not represent final modelling results

Illustrative Scenario Example

Strategies & Actions

Indicator observations of passenger vehicle GHG emissions can lead to a number of potential avenues for discussion of green transit and infrastructure for electric vehicles.

Indicator Observations

Illustrative & for discussion – does not represent final modelling results

If EV ownership meets the ZEV Act goals by 2025, 2030, and 2040, we can expect significant increases of electric vehicles by 2030

With no additional action to alleviate traffic volumes, Whistler will not meet its Big Moves GHG target for passenger vehicles by 2030

Strategies & Actions Discussion

- *What level of infrastructure is needed with increased EV adoptions?*
- *How will increasing levels of EV ownership change travel behaviours?*
- *What level of traffic reduction is needed to reach community climate goals?*
- *Will a regional transit system have a material impact on traffic volumes?*

Purpose of the Balance Model

The Balance Model will support both strategic decisions and tactical analyses.

1. **Strategic** – the Balance Model takes a broad view of Whistler from a population perspective, and can help identify and prioritize areas for focus

2. **Tactical** – the Balance Model will illustrate relationships at the indicator level, and may direct our attention to specific challenges or solutions

The model is best used to identify areas for focus from a high level. It may initiate deeper investigation and further work on specific topics, which would take place outside of the balance model.

Strategic Purposes

Strategically, the Balance Model takes a broad view to identify areas for further study.

Within Balance Model

- What are the specific pain points Whistler may face when seeking balance across economy, community, and environment? Eg water constraints.
- What key areas may need investment / expansion in the next 5–10 or 10–20 yrs? (e.g. Employee housing, childcare)
- What can we expect in demand for regional and destination visitation and subsequent impacts on resort viability, such as occupancy, traffic congestion etc.?
- What workforce might be expected to support various visitation levels?

Strategic Discussions and/or additional studies

- What **specific conservation actions need to be taken** to preserve water, tree canopy etc?
- What is **the investment required to expand the capacity** of a specific amenity? Where should it be located? Business case etc. (e.g. commercial space in Cheakamus, additional employee housing, etc)
- **Evaluation of alternate transport models** such as regional transit, park and ride or rail services
- How can we address labour shortages? E.g. specific technological solutions to manage demands

Agenda

- Recap on approach and timelines
- Historical and Current State Performance
- Approach to future scenario modelling and analysis
- **Community Engagement**

Community Engagement

- **Dec 21 – Committee of the Whole meeting**
  - Highlights outlining historical performance and modelling & strategic planning approach

- **Ongoing**
  - www.whistler.ca/balancemodel
  - Detailed presentation available online for review
  - Survey access for feedback, comments, suggestions to be considered in the work

- **Spring 2022**
  - Scenario modelling and Strategic implications – Broad community input
  - *format pending*

APPENDIX POPULATION ESTIMATES – SOURCES AND METHODOLOGY

WHISTLER

Population Estimation Methodology (1/3)

The Balance Model combined multiple sources to arrive at annual population estimates for each segment. Refer to the table below for detail on estimation methods.

TERM	DEFINITION	DATA SOURCE
Residents	Residents include those that consider their home in Whistler on a permanent basis or temporarily *(see below Permanent Residents and Temporary Residents)*	*Census + Statistics Canada custom reports*
Permanent Residents	Permanent residents are those that identify their usual place of residence as Whistler and include both those working and not working in the community.	*Census*
Temporary Residents	For Census purposes, those who consider being in Whistler on a temporary basis, where their place of residence is elsewhere. Differentiating temporary residents from visitors, is the duration and also intent- visitors are here on vacation typically less than 30 days, while temporary residents may be in Whistler for an extended stay (greater than 30 days)	*Census + Statistics Canada custom report*
Workforce	Workforce refers to those employed in Whistler's resort economy, and does not include those working in Whistler for a company located outside of Whistler. Workforce is a subset of Residents (permanent and temporary) and includes Commuters in.	*Statistics Canada custom report*

Population Estimation Methodology (2/3)

The Balance Model combined multiple sources to arrive at annual population estimates for each segment. Refer to the table below for detail on estimation methods.

TERM	DEFINITION	DATA SOURCE
Commuters In	Commuters are those who do not live in Whistler, but travel from their place of residence to Whistler for work. They are employed in a resort business. Commuters In are a subset of the workforce.	*Census*
Commuters Out	Residents of Whistler who work outside the community – this may include both commuters and remote workers	*Census*
Homeowner	Assumes owner occupied dwelling located in Whistler.	*Census*
Renter	A person who leases a residential home from a landlord.	*Census*

Population Estimation Methodology (3/3)

The Balance Model combined multiple sources to arrive at annual population estimates for each segment. Refer to the table below for detail on estimation methods.

TERM	DEFINITION	DATA SOURCE
Second homeowner (SHO)	Owners of property in Whistler, who do not live here permanently, but use their home as a vacation or second home to visit Whistler. Visits to Whistler may be frequent, regular or not.	*BC Assessment*
Visitors	Visitors include those who may come to Whistler on vacation, on a day or overnight basis.	*Tourism Whistler*
Day visitor	Visitors who do not stay overnight.	*Tourism Whistler*
Overnight visitor	Visitors who stay in either paid accommodation or with friends and family.	*Tourism Whistler*
Regional visitor	Visitors originating from British Columbia and Washington state.	*Tourism Whistler*
Destination visitor	Visitors originating from anywhere other than British Columbia and Washington state, ie Eastern Canada and International locations.	*Tourism Whistler*