

Offsite Housing Construction & Strategic Land Use

Affordability, Climate & Economic Development

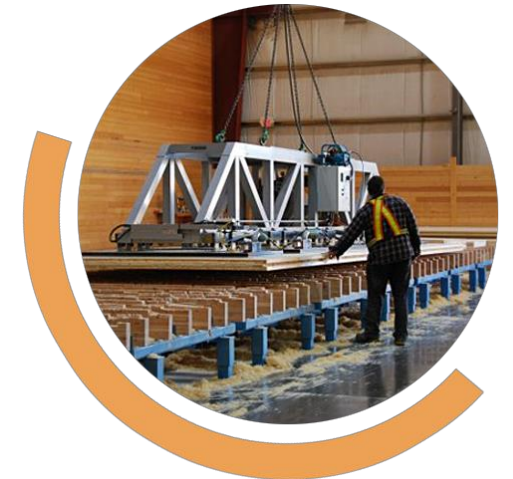


Prepared for
Metro Vancouver Regional Planning Committee

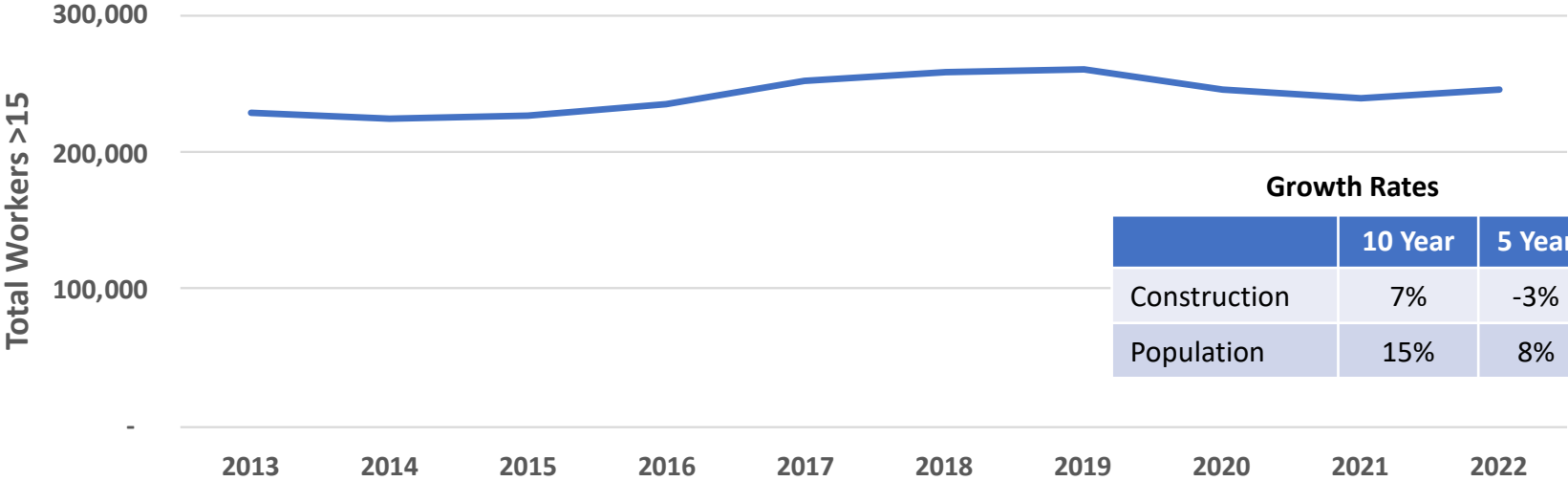
Prepared by
Alex Boston – Boston Consulting
ACE Housing Project Director

September 7 2023

1 of 41



BC Construction Labour Force 2013-2022

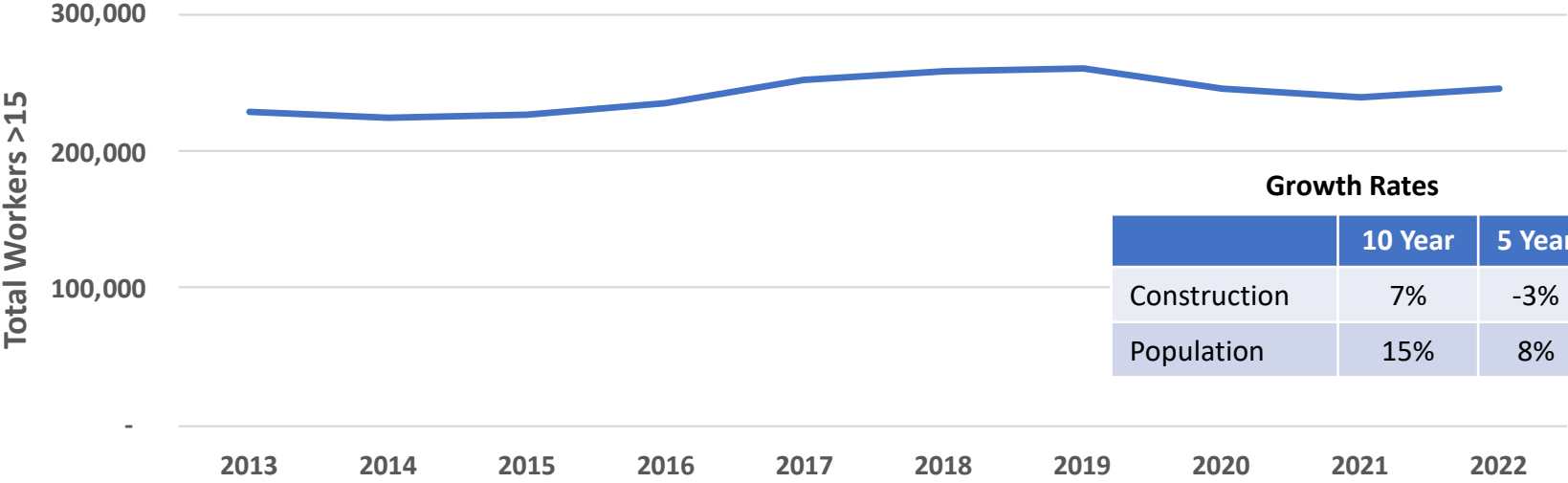


**Biggest Driver of
Housing Supply
Shortfalls:**

*Construction
Labour Force*

*municipal permitting
is important but
secondary*

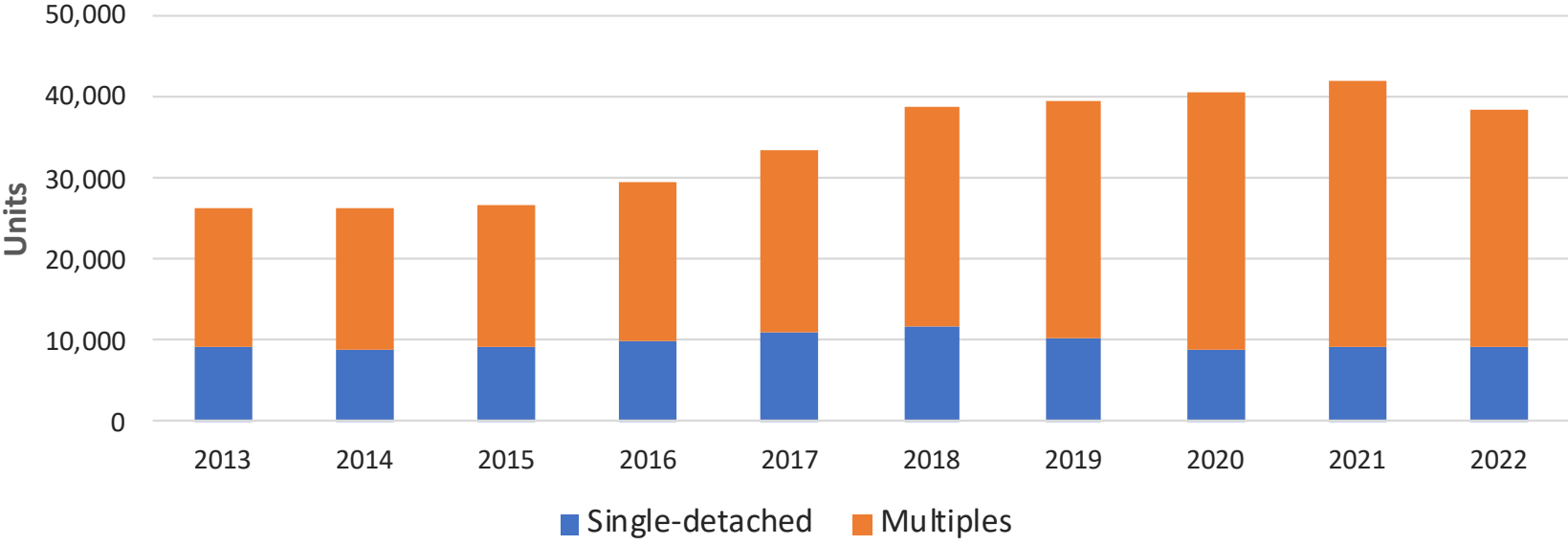
BC Construction Labour Force 2013-2022



Growth Rates

	10 Year	5 Year
Construction	7%	-3%
Population	15%	8%

BC Housing Completions 2013–2022



*Biggest Driver of
Housing Supply
Shortfalls:
Construction
Labour Force*

*10 Year Retiree
Projection:
38,000*

Solution: Offsite Construction!



Offsite Construction Rewards

Affordability & Supply

- 20-50% faster construction time
- up to 20% cost savings

Climate

- *only* approach to scale net zero new construction BC wide
- corner “stud” to low embodied carbon

Economic development

- 50% labour productivity increase
- big domestic and international value-added forestry market opportunity
- secure jobs in small and big towns and Indigenous communities
- dramatic reductions in building construction injury and fatality rates

Sources: Blackbox Offsite Solutions, Building Intellect, McKinsey, WPI Economics

Offsite Construction: A Potential ACE Card

Affordability & Supply

- 20-50% faster construction time
- up to 20% cost savings

Climate

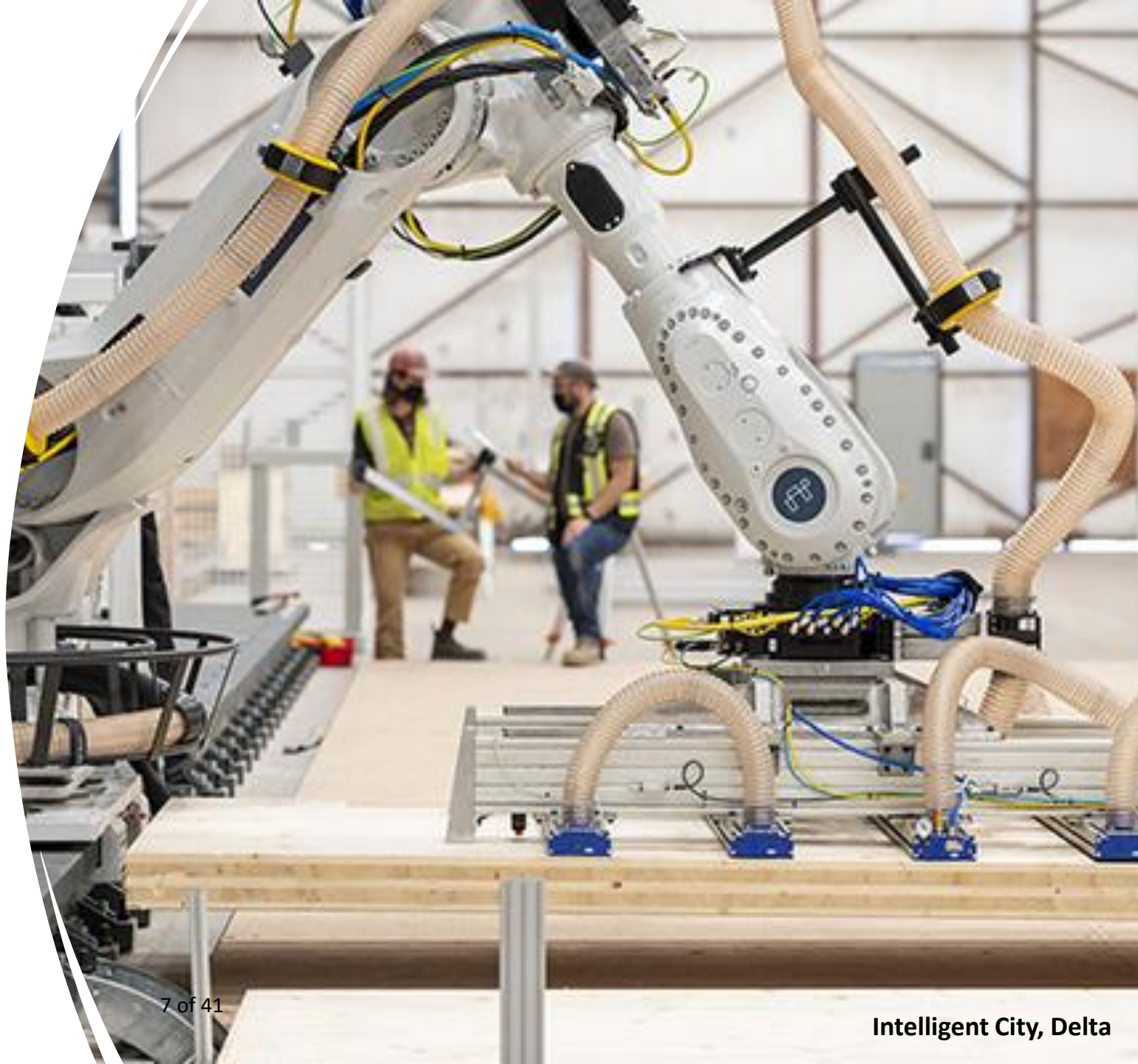
- *only* approach to scale net zero new construction BC wide
- corner “stud” to low embodied carbon

Economic development

- 50% labour productivity increase
- big domestic and international value-added forestry market opportunity
- secure jobs in small and big towns and Indigenous communities
- dramatic reductions in building construction injury and fatality rates

Sources: Blackbox Offsite Solutions, Building Intellect, McKinsey, WPI Economics

Region-Wide Wood Offsite Construction Innovation





Richard Wong: King Edward Villa
City of Vancouver
6 Storey Rental/Retail



UBC: Brock Commons
University of BC
18 Storey University Residence



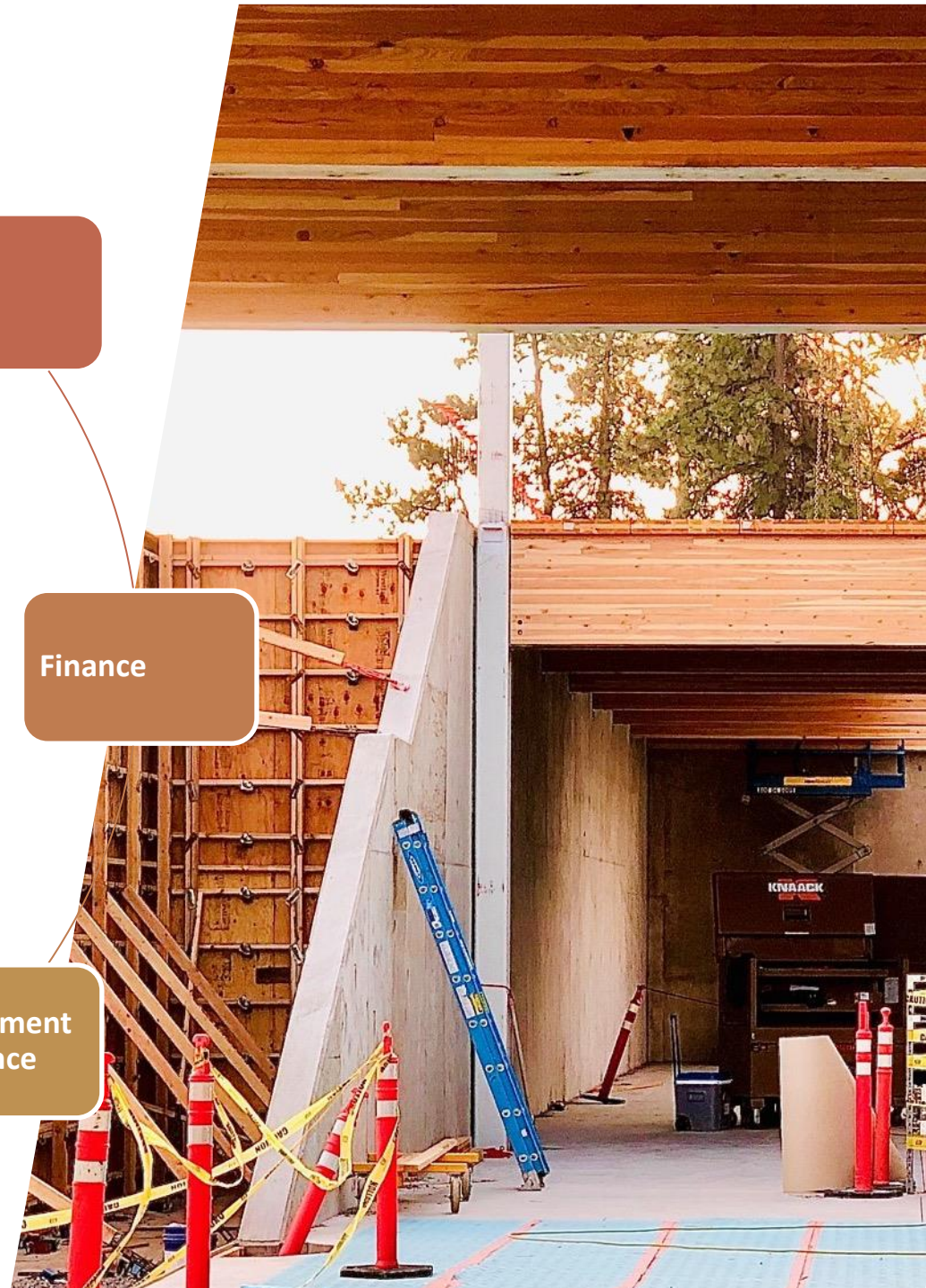
Trinity Western: Jacobson Hall
Langley Township
5 Storey University Residence



Atira: Little's Too
City of Surrey
4 Storey Supportive Housing



Adera: Crest
City of North Vancouver
7 Storey Condo/Townhome





Demand Generation Opportunities Municipal Early Adopters

- **Pre-zoned, “pre-approved” prefab designs**
 - Rental
 - Part 9 multiplex
 - Supportive housing
 - Non-market/co-op housing
- **Pre-zoned mid-rise in transit hubs and corridors** with supportive design guidelines
- **Underutilized, strategically-located public land** for non-market housing



UBCM Resolution: BC Affordable, Offsite Wood Construction Industrial Development

Courtenay

Quesnel

Vancouver

Robust Provincial Policy Framework

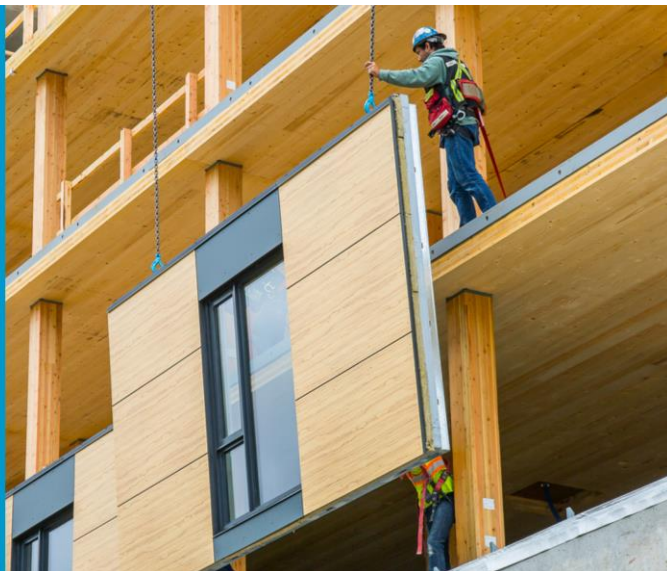
- Collaborative approach
- Market demand strategy
- Early adopter program
 - Pre-approved designs



Come to the table

BC'S HOUSING ACE CARD

Hitting the
Affordability,
Climate &
Economy
Jackpot
with Offsite Wood
Construction &
Strategic Land Use



UBCM Convention Side Event

following Premier Eby's Address

Friday September 22 12:30 – 2:00 PM

Fairmont Waterfront



Let's do lunch

BC'S HOUSING ACE CARD

Hitting the
Affordability,
Climate &
Economy
Jackpot
with Offsite Wood
Construction &
Strategic Land Use



UBCM Convention Side Event

following Premier Eby's Address

Friday September 22 12:30 – 2:00 PM

Fairmont Waterfront



Top Players Show Their Cards



LISA DOMINATO
City of Vancouver



TIFFANY DULZITA
Community Land Trust



LISA HELPS
Premier's Housing Advisor



KEN KALESNIKOFF
Mass Timber Manufacturer



BRENDA KNIGHTS
BC Indigenous Housing Society



ROCKY SETHI
Developer & Homebuilder

Help Write the Rules to this Game

[Register at EventBrite](#)

BC'S HOUSING ACE CARD

Hitting the Affordability, Climate & Economy Jackpot with Offsite Wood Construction & Strategic Land Use



Top Players Show Their Cards



LISA DOMINATO
City of Vancouver



TIFFANY DULZITA
Community Land Trust



LISA HELPS
Premier's Housing Advisor



KEN KALESNIKOFF
Mass Timber Manufacturer



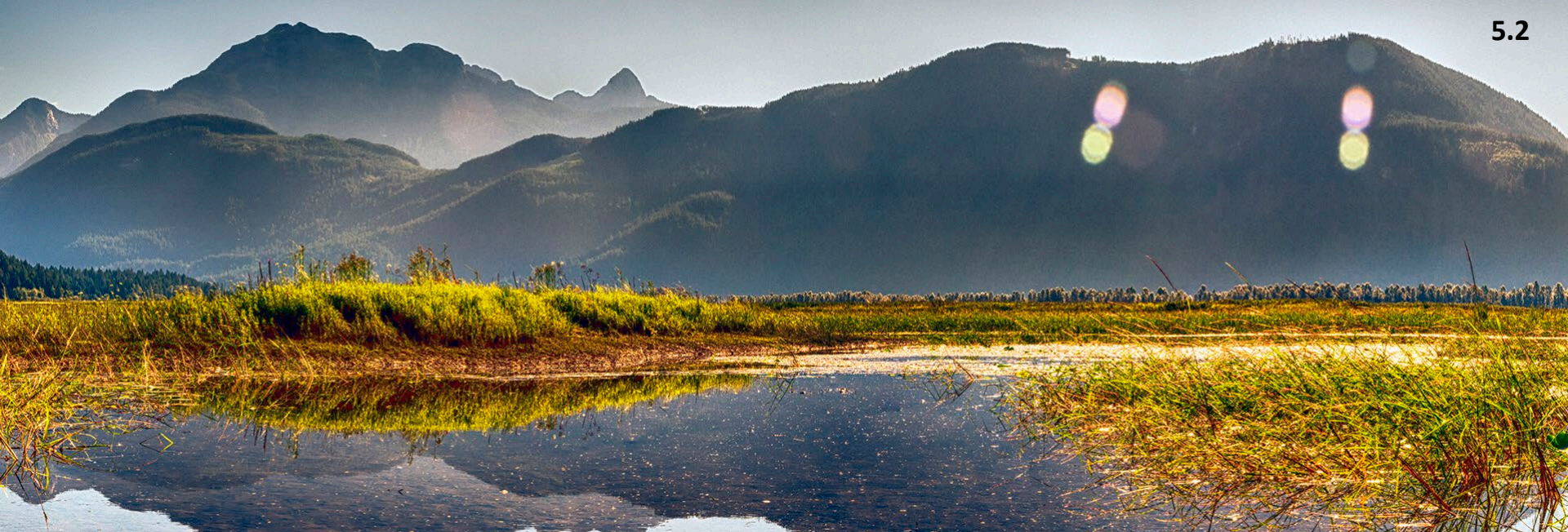
BRENDA KNIGHTS
BC Indigenous Housing Society



ROCKY SETHI
Developer & Homebuilder

UBCM Convention Side Event
following Premier Eby's Address
Friday September 22 12:30 – 2:00 PM
Fairmont Waterfront





Widgeon Marsh, Coquitlam

Sensitive Ecosystem Inventory Update

2014-2020 CHANGE SUMMARY

Laurie Bates-Frymel

Senior Planner (Environment), Regional Planning and Housing Services

Regional Planning Committee | September 7, 2023

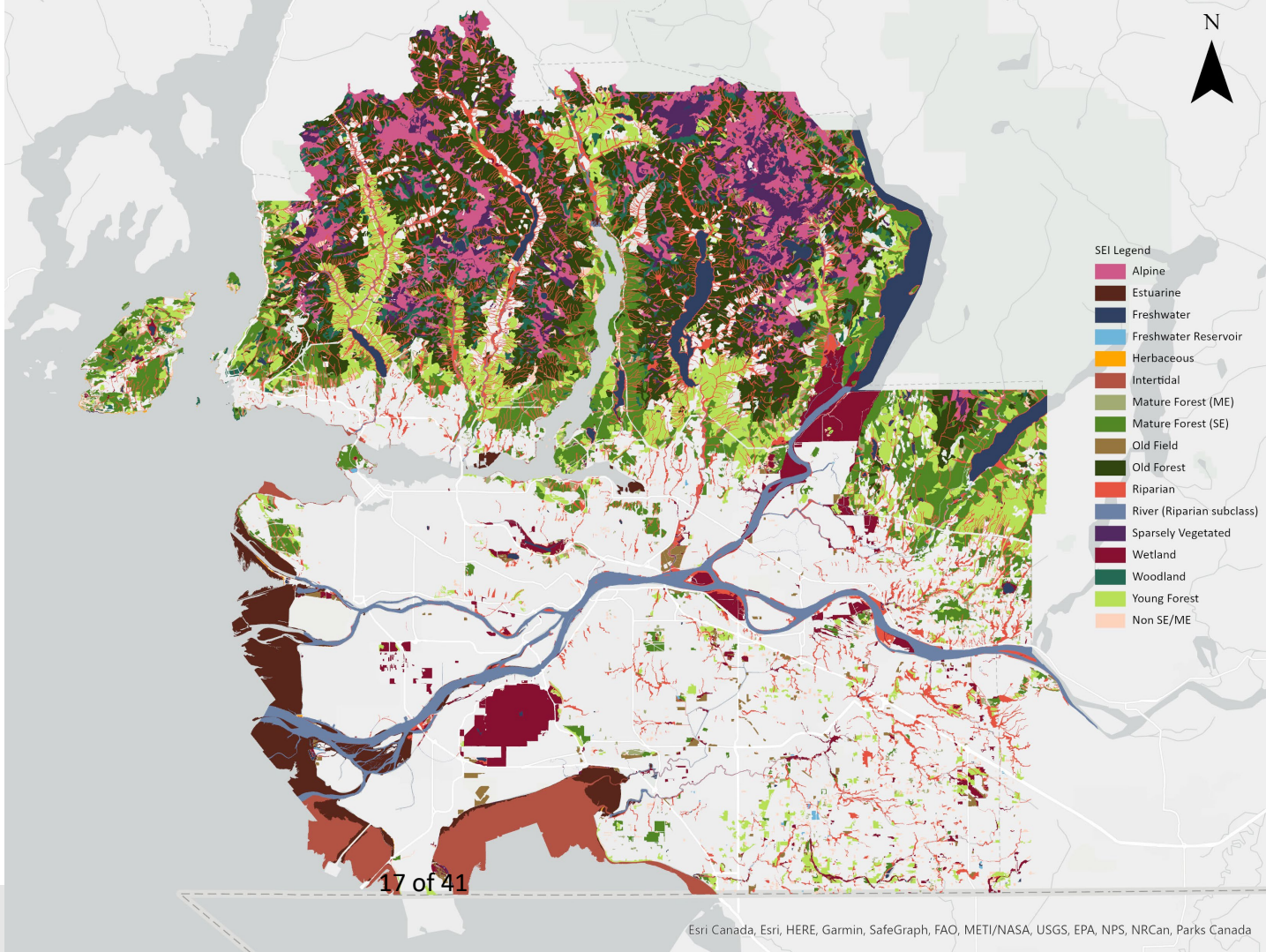
61364980

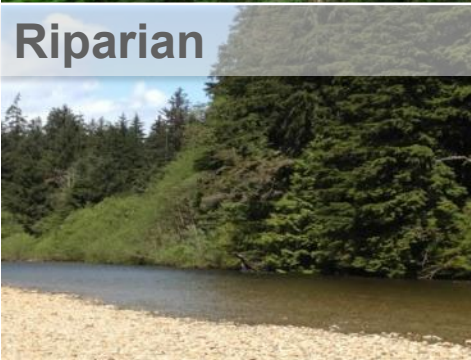
16 of 41

metrovancouver

SENSITIVE ECOSYSTEM INVENTORY (SEI)

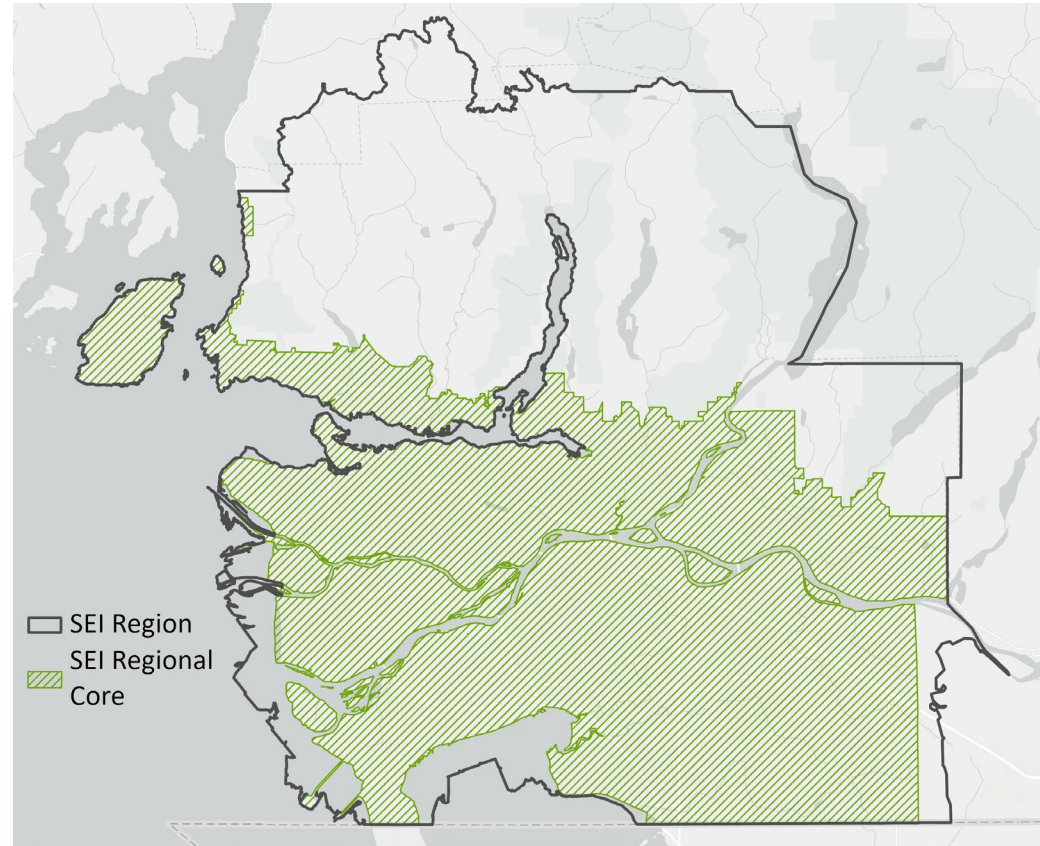
- GIS dataset
- Identifies and classifies ecologically-important areas
- Quality





REPORTING AREAS

- Region
 - **53%** is Sensitive or Modified Ecosystem
- Regional Core
 - **20%** is Sensitive or Modified Ecosystem



SENSITIVE ECOSYSTEM CHANGE

- Losses:

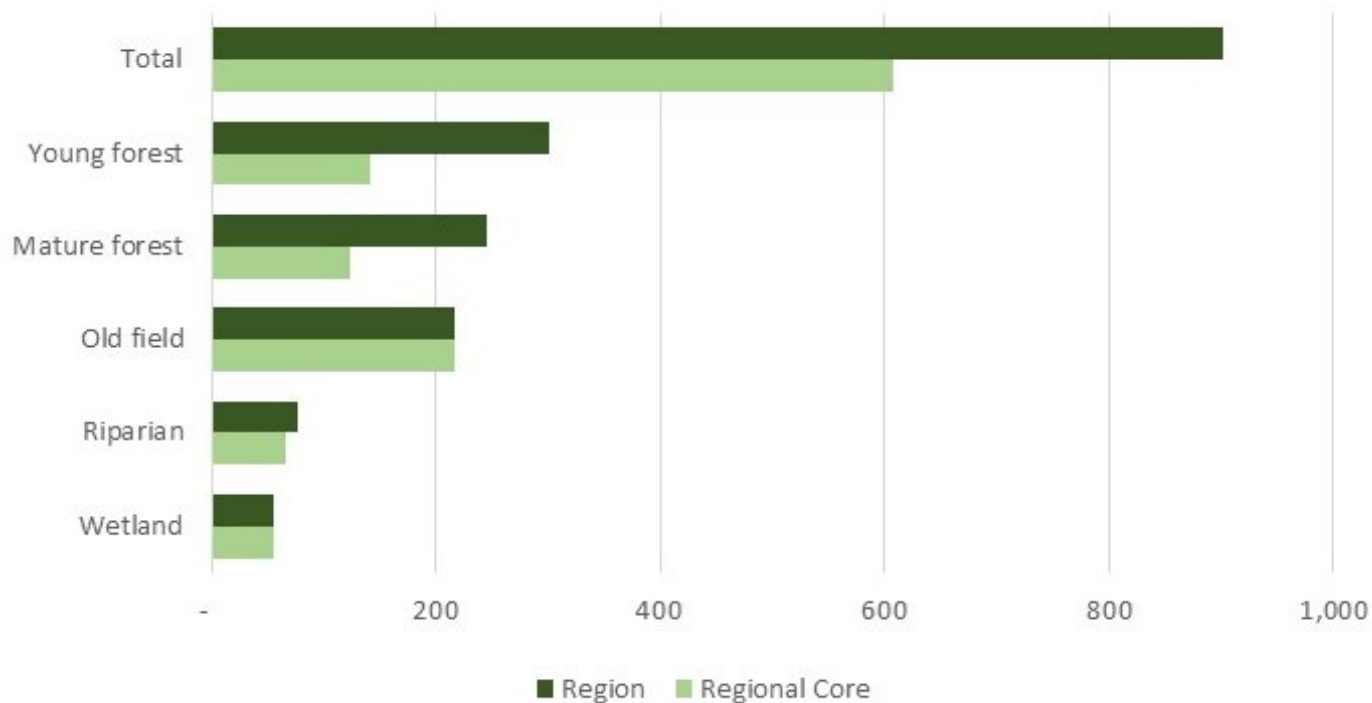
Area	2009-2014	2014-2020
Region	- 1,600 ha (-0.9%)	- 900 ha (-0.5%)
Regional Core	- 1,200 ha (-3.4%)	- 600 ha (-1.8%)

- Gains: 8 ha



Burnaby Lake, Burnaby

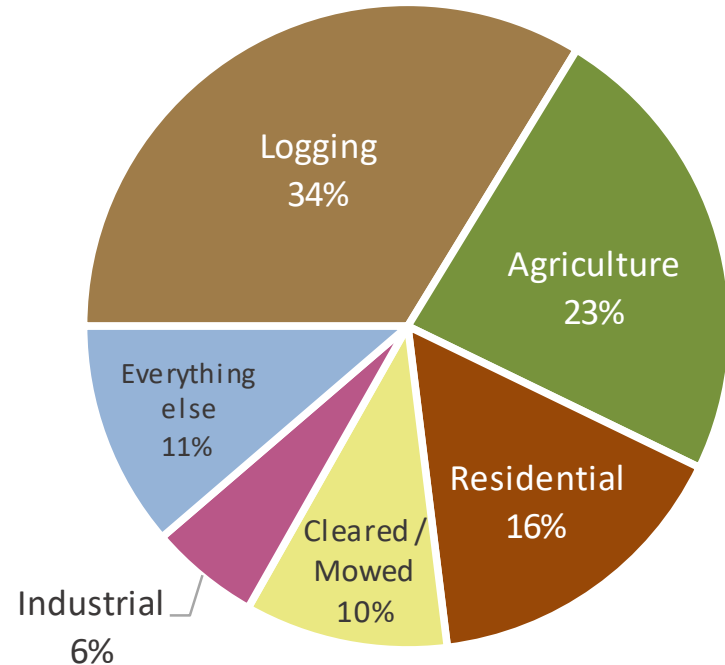
Sensitive and Modified Ecosystem Loss Between 2014 and 2020 - Total and Top 5 Classes*



21 of 41

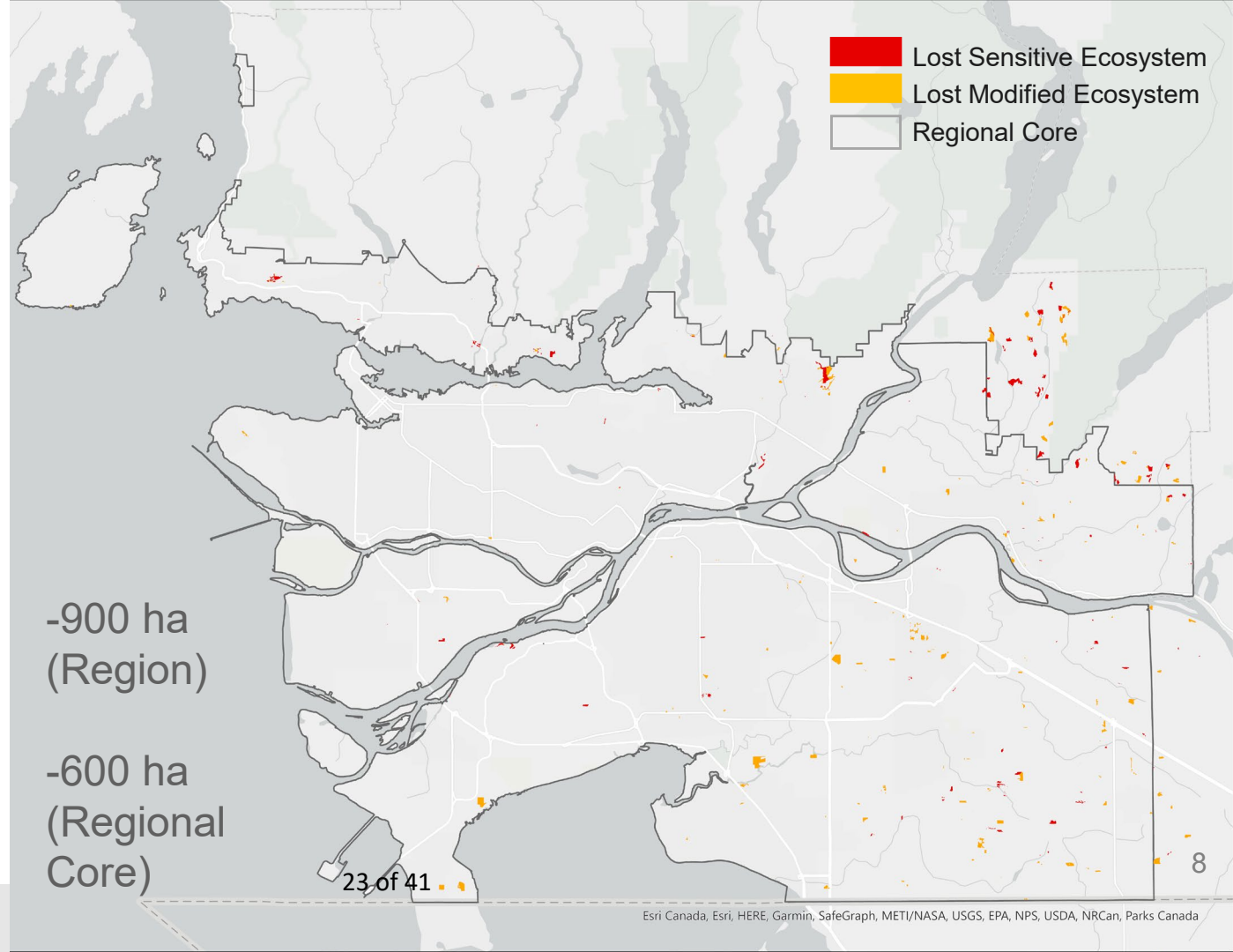
CAUSES OF SENSITIVE AND MODIFIED ECOSYSTEM LOSS IN THE REGION (2014-2020)

1. Logging of young and mature forests
2. Old fields converted to active agriculture
3. Residential development



ECOSYSTEM LOSS

2014-2020



-900 ha
(Region)

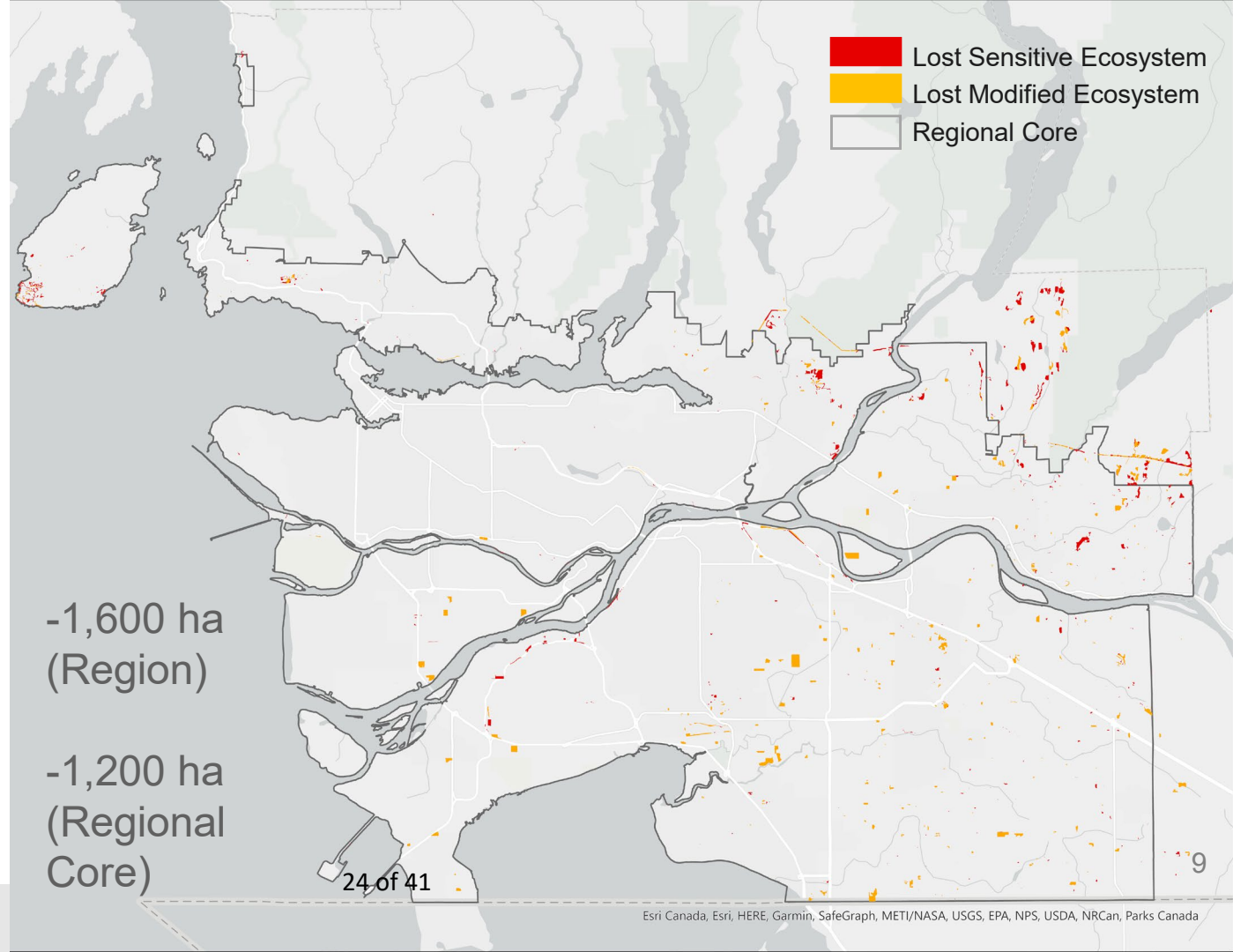
-600 ha
(Regional
Core)

23 of 41

8

ECOSYSTEM LOSS

2009-2014



ECOSYSTEM LOSS

2009-2020

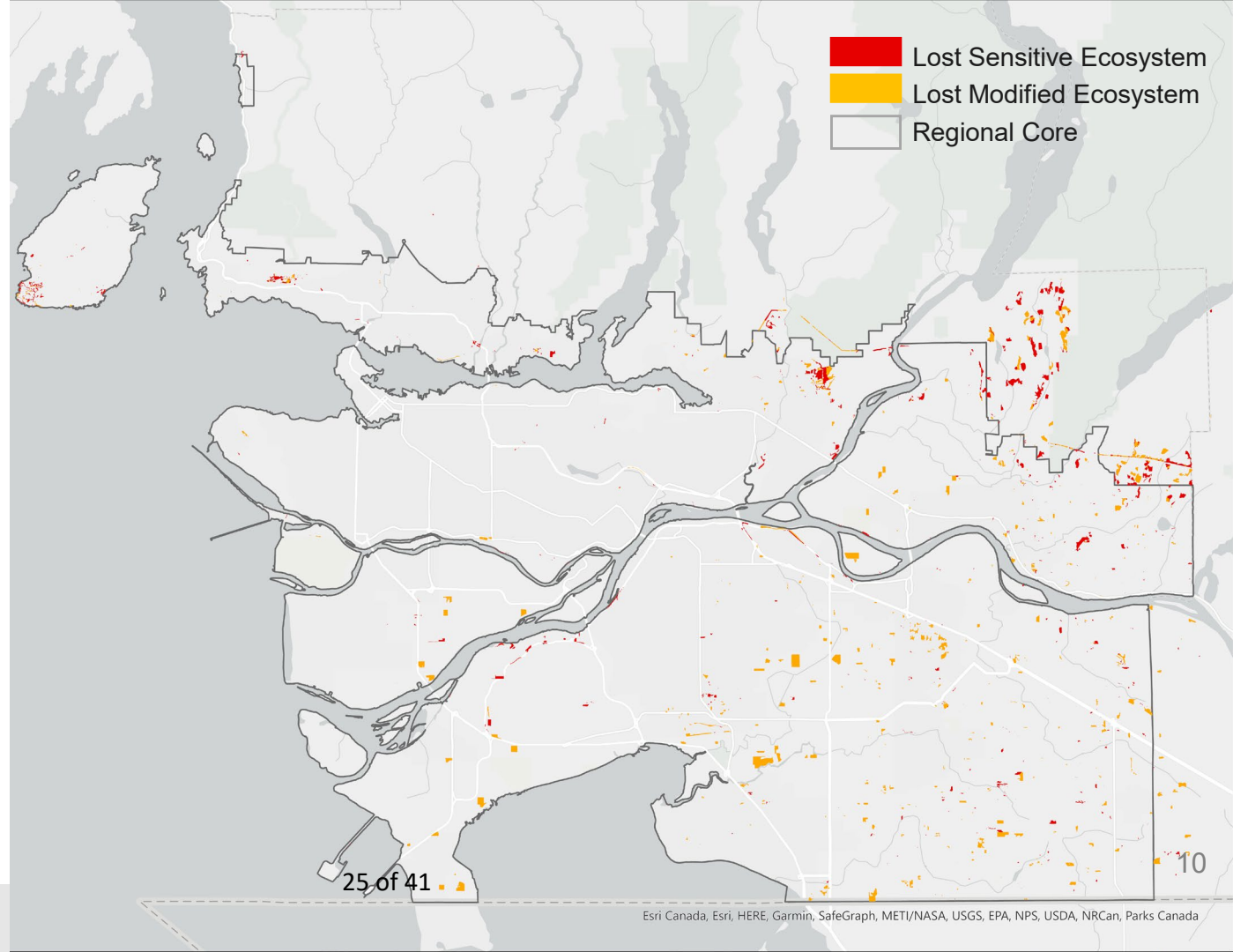
=

2,500 ha

(~1.5%) in the
Region

1,800 ha (~5%)

in the Regional Core
over 10 years





IMPLICATIONS OF LOSS

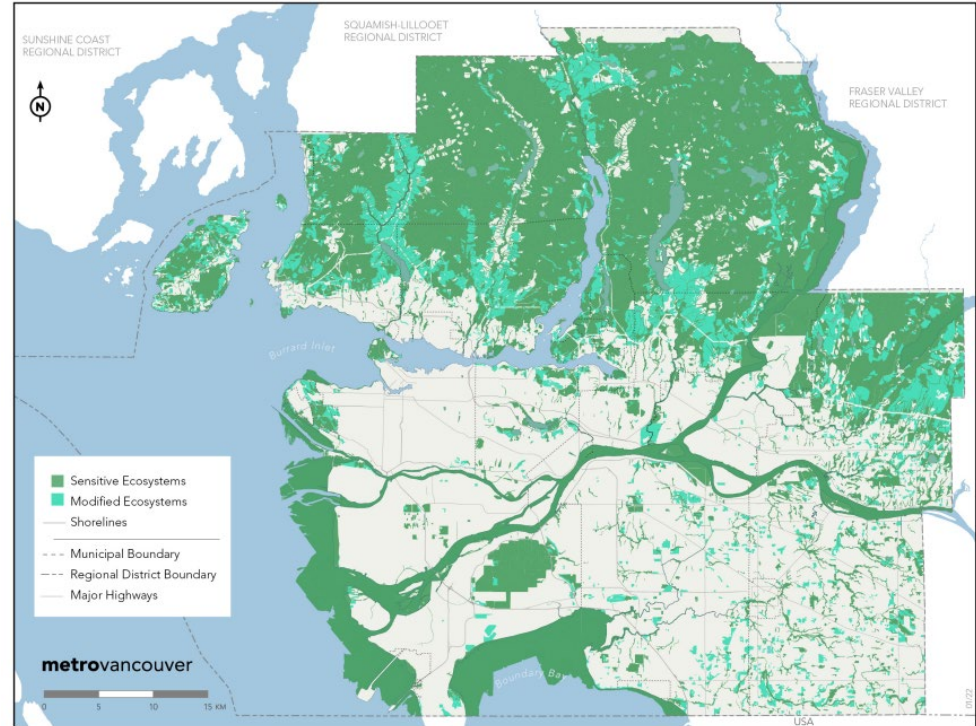
- Ecosystem service provision
 - Carbon storage
 - Mitigation of natural hazards
 - Human health
- Climate change resiliency
- Habitat and connectivity

Aldergrove Regional Park, Langley Township

NEXT STEPS

- Share data
- Additional data analyses
- *Metro 2050 Map 11*
- Policy implementation
 - *Metro 2050*
 - *Regional Parks Land Acquisition 2050 Strategy*
 - *Climate 2050*

MAP 11 Sensitive Ecosystem Inventory



Map for reference only and does not reflect Regional Land Use Designations. An online SEI Tool is available at gis.metrovancouver.org/mvmaps/SEI and downloadable from metrovancover.org/data. The SEI data set is from 2014. Local ecological datasets may be more current and detailed.



Burns Bog, Delta



Thank you



Social and Community Data Land Use Model

Residents and Recent Immigrants Survey Results

Sinisa Vukicevic, PhD

Program Manager, Planning Analytics, Regional Planning and Housing Services

Regional Planning Committee | September 7, 2023

61811194

29 of 41

metrovancouver

OBJECTIVES

The objectives of this research are to:



Identify the different household compositions within Metro Vancouver: Where do they live? Who lives there? What is the type of house?



Understand the current values of those living in Metro Vancouver: Why do they live in Metro Vancouver? Why did they choose their current home/neighbourhood? Does access to certain amenities impact their choice?



Establish preferences for housing and neighbourhood choice: Are there differences between current and preferred housing types? Do values change?



Identify differences between the two target groups: Are there are differences between residents and immigrants and if so, what are they? i.e. movement patterns, housing preferences, values?

REASONS FOR LIVING IN METRO VANCOUVER (MV)

Residents' top reason for living in the MV region is "My family and/or friends live here" (48%) while for immigrants it is "for employment opportunities" (34%). Immigrants are more likely than residents to have chosen to live in MV for many reasons, including safety, affordability, available housing, and education.

		Resident (n=3,000)	Immigrant (n=1,547)
My family and/or friends live here	44%	48% ▲	31%
Favourable climate	34%	35%	33%
For employment opportunities	33%	33%	34%
For the nature and landscape this region has to offer	29%	30%	28%
Safe region	28%	26%	33% ▲
Attractive neighbourhoods/architecture	24%	23%	25%
Access to the ocean/beaches	22%	22%	21%
Affordability	20%	18%	24% ▲
Good region for raising kids	18%	18%	18%
Available housing	18%	17%	23% ▲
For schools and playgrounds for children	14%	13%	18% ▲
For university or other education	14%	12%	21% ▲
Many people in my ethnic group/ from my country live here	10%	8%	19% ▲
Access to winter sports	7%	6%	11% ▲
Ease of access/fast to obtain permanent residence after student/work visa	7%	5%	14% ▲
Other	6%	8% ▲	1%

Base: All respondents (n=4,547)

31 of 41

Q7. Why did you decide to live in the Metro Vancouver Region? *Select all that apply*

▲ Statistically significantly **higher** than comparison group.

TOP 3 REASONS FOR CURRENT RESIDENCE/NEIGHBOURHOOD

Overall, for those who live in Metro Vancouver, a safe neighbourhood, affordability, and having family and friends nearby are the top three reasons for choosing their current residence. For immigrants, access to public transportation is the second most important factor, while having family and friends nearby is less important.

		Resident (n=3,000)	Immigrant (n=1,547)
Safe neighbourhood	32%	32%	31%
Affordability	31%	32% ▲	28%
Family and/or friends nearby	31%	34% ▲	19%
Nature nearby parks, walking trails/paths, forests	25%	26% ▲	22%
Proximity to workplace	24%	25% ▲	21%
Access to public transportation	24%	23%	29% ▲
Good investment	18%	20% ▲	13%
Residence design, property features, style	18%	19% ▲	15%
Attractive neighbourhood/architecture	18%	18%	17%
Proximity to schools and playgrounds for children	14%	14%	15%
Proximity to facilities/amenities that serves people from my culture	10%	8%	17% ▲
Sports and recreation nearby	8%	7%	11% ▲
Pubs, restaurants, or student clubs nearby	8%	7%	9%
Proximity to university or other education	7%	6%	12% ▲
Building amenities	6%	5%	10% ▲
Cinemas, theatres, cultural facilities nearby	6%	5%	11% ▲
Proximity to people in my ethnic group	5%	3%	10% ▲
Proximity to place of worship	4%	3%	8% ▲
Other	5%	5%	2%

Base: All respondents

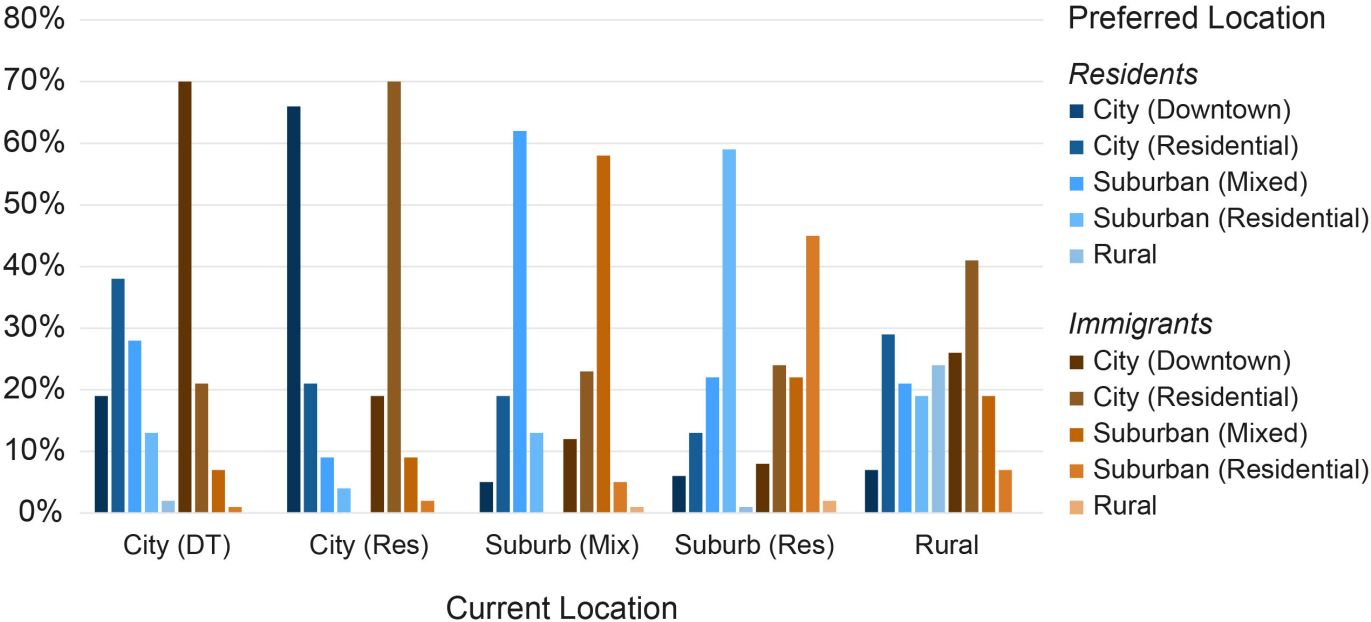
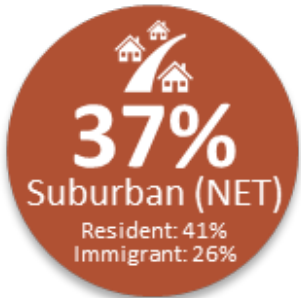
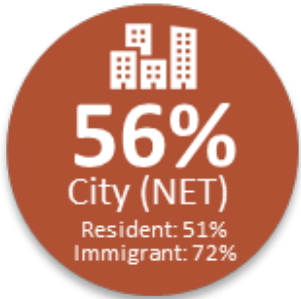
32 of 41

Q8. From the list below, please pick your top THREE reasons for choosing your current residence and neighbourhood.

▲ Statistically significantly **higher** than comparison group.

CURRENT VS. PREFERRED

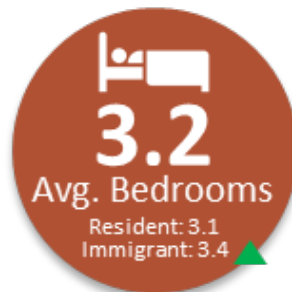
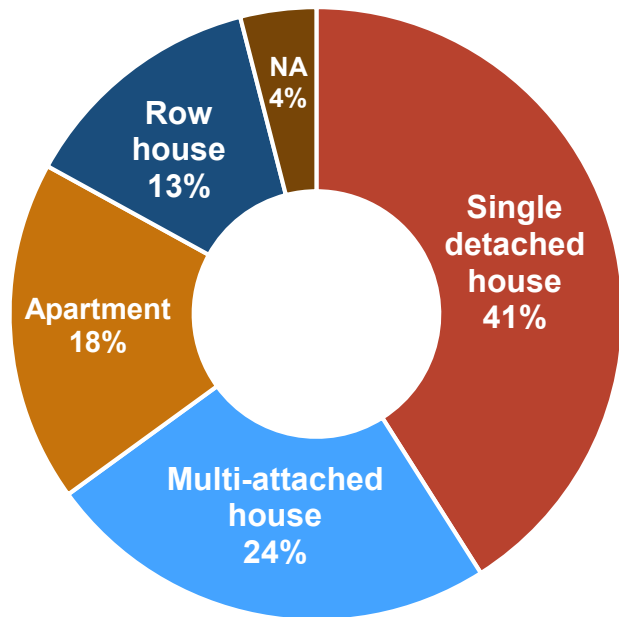
Living Location



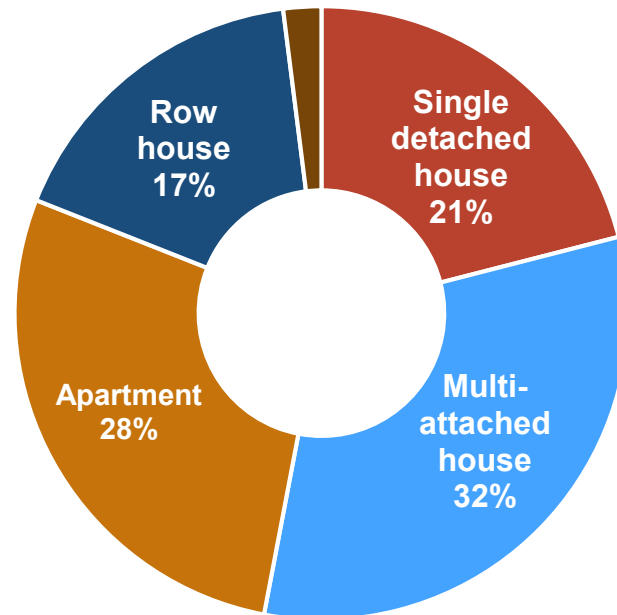
HOUSING PREFERENCES

Key Findings

Residents



Immigrants



THE BEHAVIOUR CHANGE - LOCATION

Cross- municipal analysis

RESIDENTS

Preference for
lower density

New Westminster
Burnaby
Vancouver
Coquitlam
North Vancouver – City

Preference for
higher density

Port Moody
West Vancouver
Lions Bay
Pitt Meadows
Bowen Island

IMMIGRANTS

Preference for
lower density

Port Moody
New Westminster
Richmond
Vancouver
Coquitlam

Preference for
higher density

Langley Township
Belcarra
Lions Bay
West Vancouver
Bowen Island

KEY FINDINGS

How the model will support regional policymaking?

- Residents expressed preference live in lower density areas
- Immigrants want to remain in city, but live in more residential areas (not downtown)
- Home type preferences:
 - Residents: Need to reconcile preference for single-detached homes with reality of future housing supply. Need to ensure higher density neighbourhoods are attractive and meeting the needs of residents.
 - Immigrants: higher demand for multi-attached lots in city residential area (outside of downtown)
- Immigrants expressed greater interest in future home ownership
- Immigrants favour public transport and walking

KEY FINDINGS

How the model will support regional policymaking?

- Both, residents and immigrants, expressed higher demand for 3 bedroom units
- Safety and affordability becomes two main criteria for choosing where to live (NBH)
- Families with children would downsize after their children move out; this is higher among residents than immigrants
- Future home accessibility or adaptability is about twice as great as current needs – with immigrants anticipating significantly greater needs

NEXT STEPS – FUTURE PROJECTS

Sample size and machine learning

- To make this survey a standardized survey in the region that will be repeated frequently (to follow Census years)
- The project intends to inform regional and local policymaking:
 - an indication if existing land use designations follow residents' preferences
 - a sign of the need for a specific housing structure type
 - a hint of potential pressure on the rental housing market
 - ...



Thank You

Accessibility features could include an accessible entrance (either a no-step entrance or a ramp), accessible bathroom (wide doorway, space for a wheelchair to turn around, space under the sink, grab bars around the toilet, wide walk-in shower, etc), accessible kitchen (lowered counters, space under the sink, cooktop controls on the front rather than the back, etc).

Adaptable features could include wider doorways, reinforced bathroom walls to accommodate the future installation of grab bars around the toilet and shower, reinforced stairway walls to accommodate the future installation of lift rails, kitchen cabinets that can be lowered or removed, door and sink handles of the lever type rather than knobs, etc.)