



Options to Salvage Reusable Materials from Building Deconstruction

Committee of the Whole

March 13th, 2021



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Purpose & Overview

To provide Council with options to motivate the salvage of reusable and recyclable materials from building demolitions to enhance the well-being of the community.



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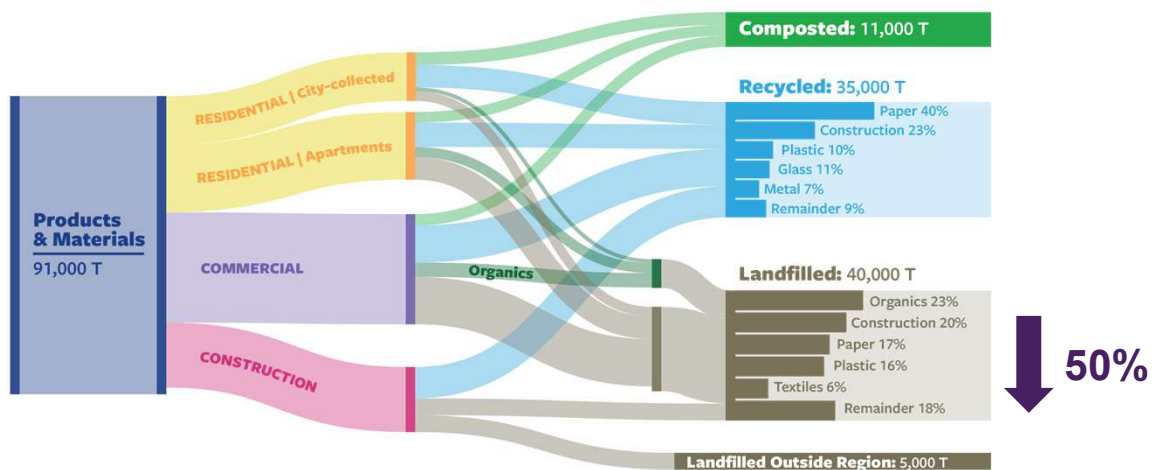
Status of Deconstruction

- Deconstruction services
- Builder awareness
- Media
- Community interest
- Policy alignment
- Industry forums

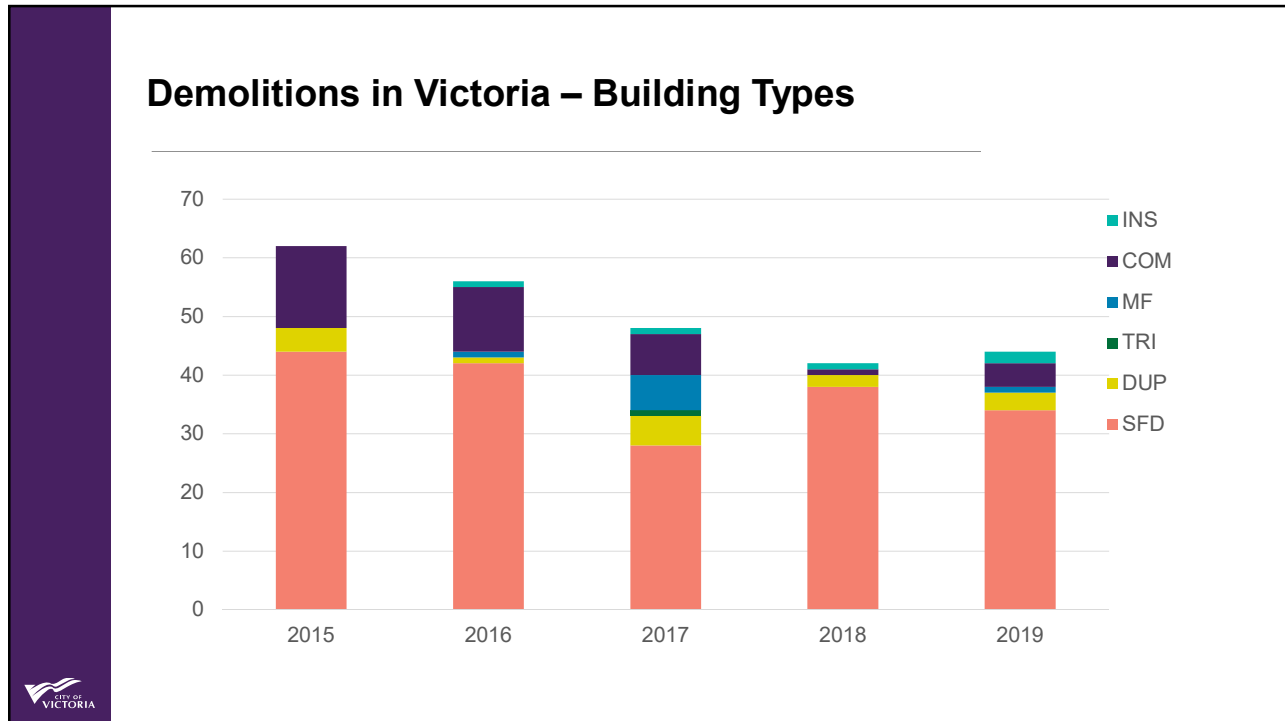


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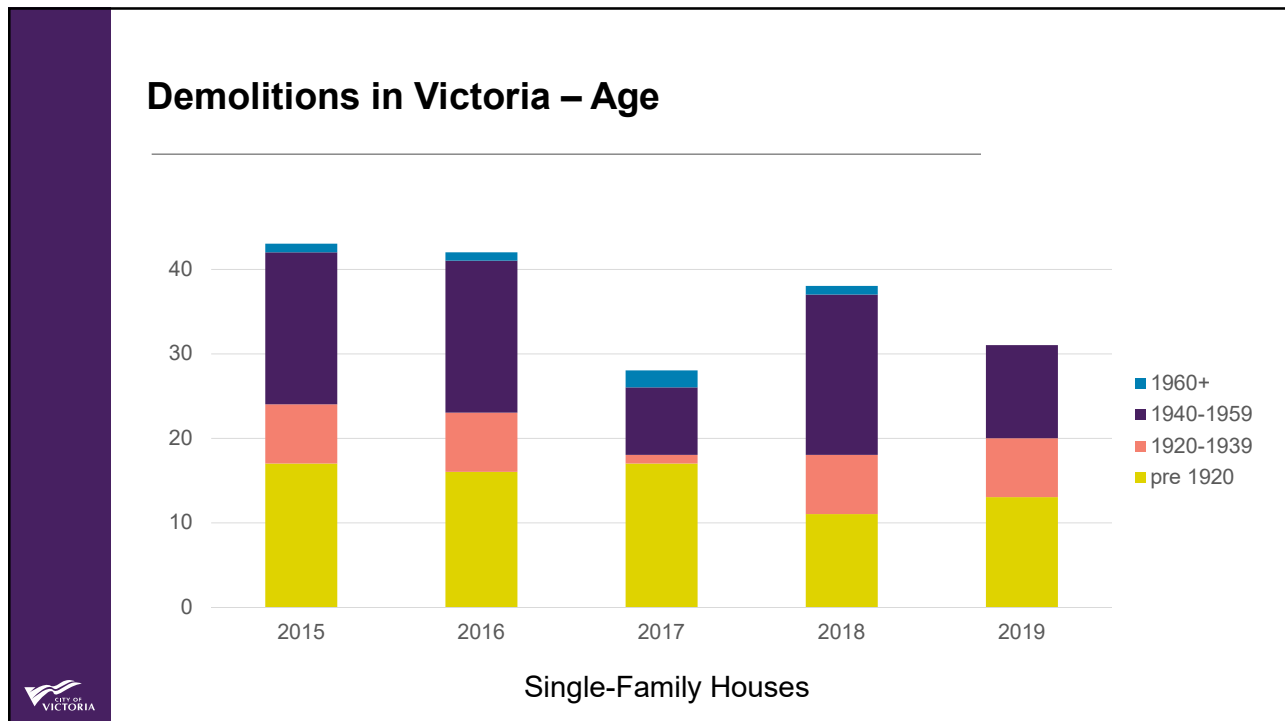
Zero Waste Victoria



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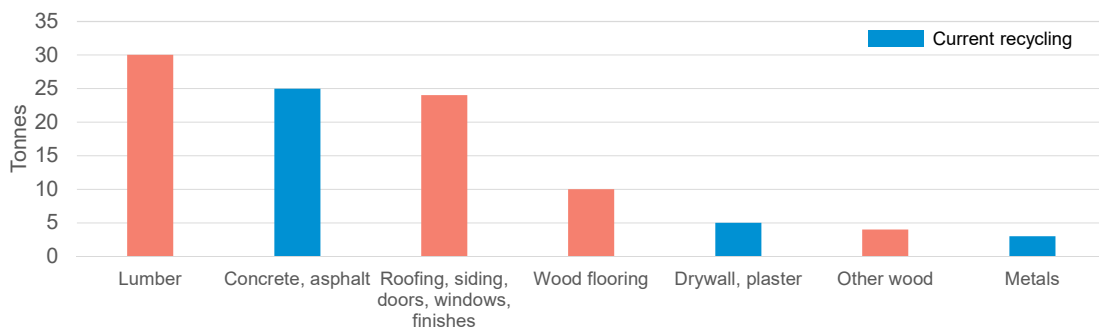


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Reusable and Recyclable Material



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Conventional Demolition



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Deconstruction



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Demolition vs. Deconstruction



Conventional Demolition	Deconstruction and Salvage
Heavy machinery (e.g., excavator)	Disassembly primarily by hand
Mixed waste	Separation of materials
Landfill	Reuse and recycling
Dust, noise, debris	Less nuisance, neighbourhood engagement
~ \$12,000	~ \$12,000 to \$30,000 (after material sale)
~ 7 days	~ 3 - 4 weeks
Jobs: 1 to 2 people	Jobs: 6 to 8 people



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Zero Waste Impact

Demolished **single-family homes** in Victoria provide an opportunity to divert **3,000 tonnes per year** from the landfill

- **15%** of the Zero Waste Victoria 2040 target
- **~25%** of all construction waste



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Economic Recovery Opportunity

- Value of **Metro Vancouver's** salvaged wood estimated at **\$340 million per year**
- **6 to 8 jobs for every one job** in conventional demolition
- **Circular Economy**
- **Innovation**



Photo: National Zero Waste Council



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Considerations for Successful Regulation

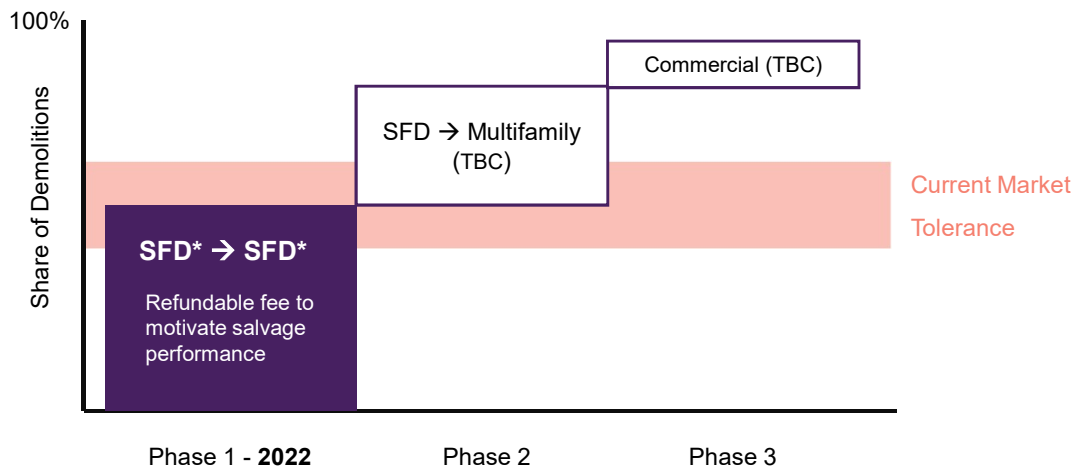


- Availability of deconstruction service providers
- Markets for salvaged material
- Steadiness & predictability
- Alignment with City objectives
- Readiness of community & industry



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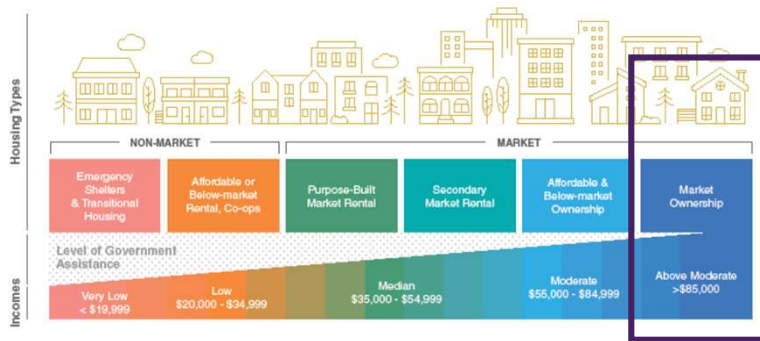
Recommended Option – Phased Regulation



*includes duplexes

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Recommended Option – Initial Subset



Replacement Single-Family & Duplex

- >50% of demolitions
- Steady & predictable
- Flexibility for time and costs
- Regulation design
- Expected to stimulate growth and competition

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Next Steps

- **May 2021**
 - Analysis to confirm market capacity
 - Drafting of bylaw
 - Bylaw for Council's consideration **Q4 2021**
 - Administrative system development
 - Industry communications & awareness
 - **Implementation Q2 2022**
- } Industry consultation

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Recommendations

That Council direct staff to:

1. Bring forward a draft bylaw to motivate the salvage of reusable and recyclable materials from an initial subset of building demolitions where the structure is being replaced with a new single-family dwelling or duplex.
2. Report back with outcomes, lessons, and future expansion of the material salvage regulation to additional building types after review of initial implementation and further industry consultation.
3. Bring forward one-time funding of \$90,000 for consideration as part of the 2022 financial planning process to design and configure the regulatory administrative system and develop industry supporting training and communication resources.



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Supplementary Slides



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Supplementary Slides – SFD Replacement

	SFD Demos	SFD*		DUP		TRI		MF		VAC**		INS		COM		MIX***	
2015	44	21	49%	3	7%	0	0%	11	26%	6	14%	1	2%	1	2%	0	0%
2016	42	28	68%	6	15%	0	0%	3	7%	3	7%	0	0%	0	0%	1	2%
2017	28	17	61%	5	18%	0	0%	3	11%	2	7%	0	0%	1	4%	0	0%
2018	38	25	68%	2	5%	1	10%	3	8%	7	19%	0	0%	0	0%	0	0%
2019	34	18	53%	3	9%	0	0%	9	26%	4	12%	0	0%	0	0%	0	0%
Average	37.2	22	59%	4	10%	0	1%	6	16%	4	12%	0.2	1%	0.4	1%	0.2	1%
Total	186	109	59%	19	10%	1	1%	29	16%	22	12%	1	1%	2	1%	1	1%

*SFD includes homes with suites

**VAC includes vacant properties, demos in progress, and status unknown

***MIX includes mixed use properties



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Supplementary Slides – Duplex Replacement

	DUP Demos	SFD*		DUP		MF	
2015	4	2	50%	0	0%	2	50%
2016	1	1	100%	0	0%	0	0%
2017	5	2	40%	0	0%	3	60%
2018	2	1	50%	0	0%	1	50%
2019	3	0	0%	0	0%	3	100%
Average	3	1	40%	0	0%	2	60%
Total	15	6	40%	0	0%	9	60%

*SFD includes homes with suites



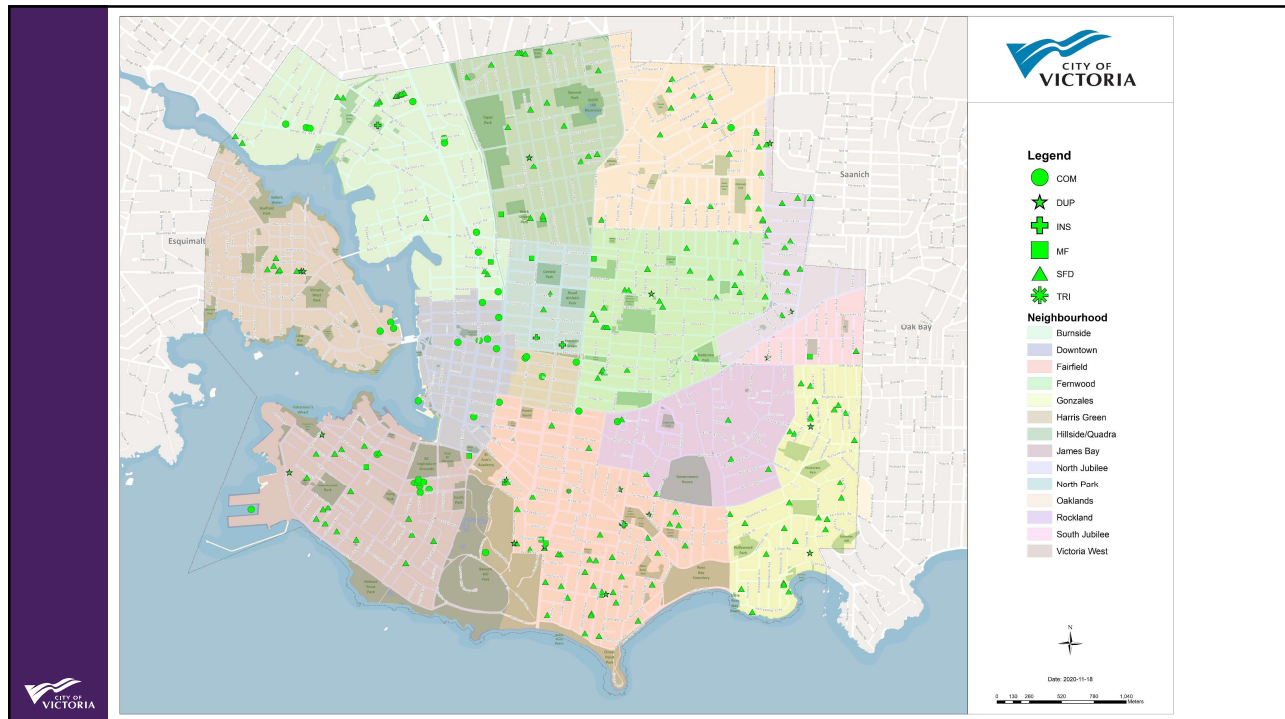
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Supplementary Slides – Permits for New Developments

	2017	2018	2019	Total	Avg per Year	% of Permits
Apartment	9	8	9	26	9	19%
Mixed-use	2	5	2	9	3	7%
SFD	28	29	29	86	29	63%
Duplex	4	0	6	10	3	7%
Triplex	0	0	1	1	0	1%
Fourplex	0	0	0	0	0	0%
Townhouse	2	0	3	5	2	4%
Total New Construction	45	42	50	137	46	100%



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