



North Shore Recycling and Waste Centre

# C&D Waste Reduction and Recycling Toolkit

ALTERNATIVES TO DEMOLITION AND CASE STUDIES

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**metrovancouver**

**23** Member Jurisdictions

**2.8 Million** Residents

**53%** of BC population

**61%** of BC GDP

**\$7 billion** critical infrastructure investments over the next 5 years



# DEMOLITION

3,000 residential demolitions each year in Metro Vancouver



# COLLABORATIVE INITIATIVES

- Working with member jurisdictions to identify priority initiatives, pilot projects and studies.
- Participating in cross-sector collaboration initiatives to identify priority actions
  - National Zero Waste Council and Circular Economy Leadership Coalition C&D working groups
  - Environment and Climate Change Canada CRD Circularity Working Group



# DATA, RESEARCH AND PILOTS

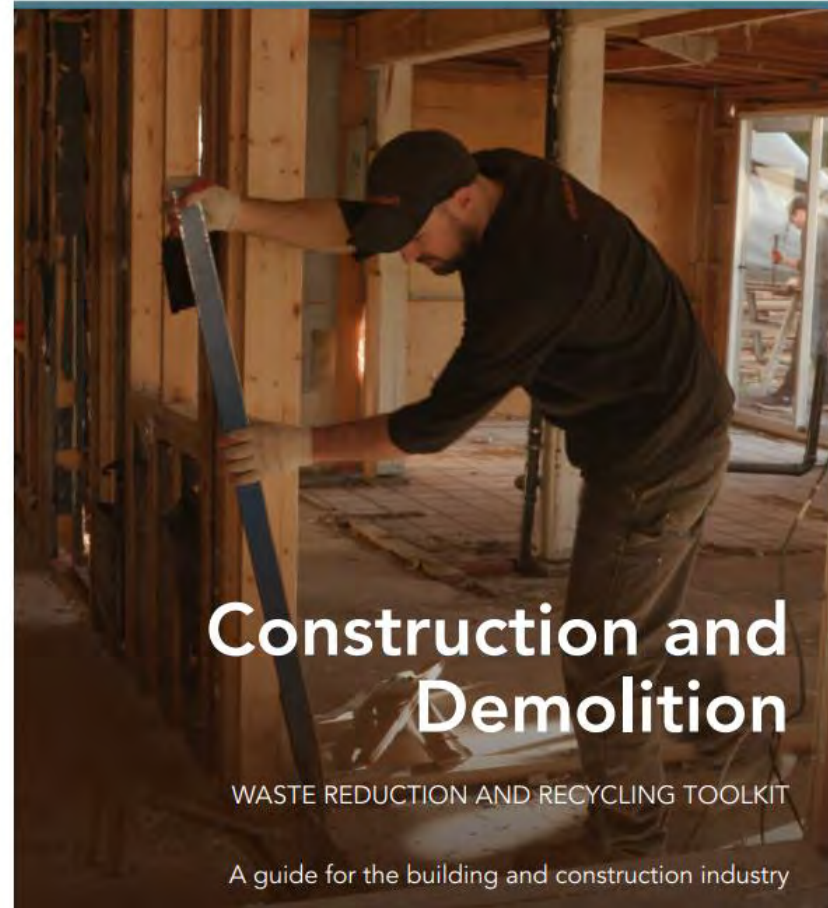
- Waste composition study data
- UBC scholars research on construction waste
- Storage to facilitate house moves



Temporary storage location for relocated houses at Lot 3 in Coquitlam Landfill

# C&D WASTE REDUCTION AND RECYCLING TOOLKIT

- Directory of service providers and facilities
- Municipal C&D reuse and recycling requirements
- How to set up onsite recycling stations
- Hazardous materials management
- Alternatives to demolition and case studies



# ADAPTIVE REUSE

Adaptive reuse involves restoring a building for a different purpose than it was designed.



Craft Beer Market False Creek Vancouver

# HOUSE MOVING

- If a building is no longer needed at the original location, it could be moved intact to a new site
- It may be used for the same or a different purpose than it was designed for



House Moving



# CASE STUDIES

House Moving - Kerrisdale

**Building type:**

**Single-Family House**

**Location:**

**City of Vancouver**

**Square footage:**

**2,400**

**Built in:**

**1931**



Character Home - City of Vancouver

CREDIT: NICKEL BROTHERS HOUSE MOVING



**REUSED**

**54  
TONNES**  
(House)

- Wood: 25 tonnes
- Mixed C&D: 29 tonnes



**RECYCLED**

**57  
TONNES**  
(Foundation)

- Concrete



## DECONSTRUCTION

- If a building cannot be restored or relocated, the structure could be deconstructed.
- Keeping building materials intact and separated makes them easier to reuse and recycle.

# CASE STUDIES

## Deconstruction – Riley Park

**Building type:**  
**Single-Family House**  
**Square footage**

**1,760**

**Built in**

**1910**

**Location**

**City of Vancouver**



**10%**  
**REUSED**

- Appliances, doors, casings, trimms, baseboards
- Flooring: 0.7 tonnes
- Lumber: 6.8 tonnes

**82%**  
**RECYCLED**

- Plaster: 5.1 tonnes
- Lumber, metal, asphalt: 17.9 tonnes
- Concrete: 43.3 tonnes



Character Home located on James Street  
CREDIT: UNBUILDERS



CREDIT: WELCOME PARLOUR

# CASE STUDIES

## Deconstruction – Dunbar

### Building type

Single-Family House

### Square footage

1,288

### Built in

1930

### Location

City of Vancouver



**8%**  
REUSED

- Appliances, doors, casings, trimms, baseboards
- Flooring: 0.2 tonnes
- Lumber: 5.3 tonnes

**91%**  
RECYCLED

- Plaster: 3.1 tonnes
- Lumber, metal, asphalt: 14.2 tonnes
- Concrete: 39.5 tonnes



# SALVAGE AND REUSE OF BUILDING MATERIALS

## Examples of Reusable Materials

- Appliances
- Architectural details
- Barn wood boards and fences
- Bricks, stone, and cinderblock
- Cabinets
- Doors and windows
- Hardwood flooring
- Lighting and electrical equipment
- Lumber
- Mirrors (framed)
- Plumbing fixtures and fittings
- Railings and gates



Reclaimed wood wall cladding. Credit: Vancouver Reclaimed

# MUNICIPAL CONSTRUCTION AND DEMOLITION REUSE AND RECYCLING REQUIREMENTS

Burnaby

Port Moody

Coquitlam

Richmond

City of North Vancouver

Surrey

District of North Vancouver

Vancouver

New Westminster

West Vancouver

# LOOKING AHEAD

- Construction and Demolition Waste Reduction Forum
- Regional solid waste management plan update
  - Visit [metrovancover.org](http://metrovancover.org) and search “SWMP” to learn more or sign up for updates





Vancouver skyline

Thank you!

**metro**vancouver