Reflecting Feedback

• Observing 2020 Budget Process
  o Strengths
  o Opportunities for Improvement
Strengths

- Strong financial position
- Process includes multiple layers of scrutiny
- Board Strategic Plan and 5 Year Financial Plan
  - Provides foundation
Opportunities for Improvement

- Overall picture of the budget at the Committee level
- Earlier direction from the Board
- Greater input and transparency around decision making
- Increased understanding of evolving municipal challenges
Short-term Relief for Households
   Leverage supported tools to create a short-term action plan (1-3 years)

Maintain current goals and objectives
   Continue work on strategic and long-range plans

Realize New Opportunities
   Partner on projects to increase affordable housing
   Reduce GHGs
   Help drive economic recovery
Realizing New Opportunities

• Expanding affordable rental housing through strategic redevelopment and partnerships
  o 7-8 projects over 5 years (750-900 units)

• Waste-to-Energy District Energy
  o Up to 70,000 tonnes of GHG reductions per year

• Project delivery – maximizing local benefits
Toolbox

Continuous Improvement

Capital Plan Deferrals

Demand Side Management

Reduce Pay-as-you-go

Increase Debt Amortization Term

Asset Management Plans
- Minimize asset failure risks and impact to customers
- Optimize lifecycle value
- Meet asset performance targets

Financial Management Policy
- 15 Year Amortization Period
- Pay-as-you-go to ensure <40% debt servicing cost
Continuous Improvement

• Opportunities for continuous improvement
  o Find efficiencies
  o Improve service

• Annacis Cogen Expansion: $1.5M savings in 2020

• Identified 2021 opportunities:
  o Fraser Valley Gravel Pit Reclamation - $1.7M savings
  o Lulu Island Green Biomethane Sales Revenue - $860k in revenue
  o In-house Engineering and Design - $500k savings
  o COVID Claims Management on over 50 projects
Project Review

- Review of over 300 capital projects
  - Numerous adjustments to workplans and schedules
- Leveraging conservation efforts to defer growth-related infrastructure projects (demand side management)
Project Review

Capital Plan Deferrals

- Capital plan includes deferring key phases of the Coquitlam Water Supply project
- Unique opportunity to significantly increase water conservation efforts to achieve long-term per capita reductions
Capital Plan Requirements

*Infrastructure Resilience*

- Aging Infrastructure
- Climate Change Adaptation

Clayton Langley Main Valve Chamber Refurbishment

Before

Coquitlam Interceptor: corroded section of pipe

Iona Wastewater Treatment Plant: Flood Protection

After
Financial Tools

• Financial tools used to provide short-term relief:
  o Changing amortization period to 30 years for the next 2 years
  o Eased pay-as-you-go funding for next 3 years
## Budget Adjustments

<table>
<thead>
<tr>
<th>Prior Projection for 2021 Budget</th>
<th>Proposed 2021 Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>$967.5 M</strong></td>
<td><strong>$939.5 M</strong></td>
</tr>
<tr>
<td>$42 Increase for the average household in 2021 (Water: $7, Liquid Waste: $26, Solid Waste: $3, MVRD: $6)</td>
<td>$17 Increase for the average household in 2021 (Water: $2, Liquid Waste: $8, Solid Waste: $0, MVRD: $7)</td>
</tr>
<tr>
<td><strong>$602</strong> Average annual costs for all Metro Vancouver services</td>
<td><strong>$577</strong> Average annual costs for all Metro Vancouver services</td>
</tr>
</tbody>
</table>
## Overall Household Impact 2021-2025

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water District</strong></td>
<td>$172</td>
<td>$174</td>
<td>$178</td>
<td>$182</td>
<td>$197</td>
<td>$217</td>
</tr>
<tr>
<td><strong>Liquid Waste</strong></td>
<td>$264</td>
<td>$272</td>
<td>$289</td>
<td>$310</td>
<td>$344</td>
<td>$385</td>
</tr>
<tr>
<td><strong>Solid Waste</strong></td>
<td>$61</td>
<td>$61</td>
<td>$63</td>
<td>$65</td>
<td>$67</td>
<td>$70</td>
</tr>
<tr>
<td><strong>Regional District</strong></td>
<td>$63</td>
<td>$70</td>
<td>$73</td>
<td>$77</td>
<td>$81</td>
<td>$82</td>
</tr>
<tr>
<td><strong>Total Household Impact</strong></td>
<td><strong>$560</strong></td>
<td><strong>$577</strong></td>
<td><strong>$603</strong></td>
<td><strong>$634</strong></td>
<td><strong>$689</strong></td>
<td><strong>$754</strong></td>
</tr>
<tr>
<td><strong>% Change</strong></td>
<td>3.2%</td>
<td>4.2%</td>
<td>5.2%</td>
<td>8.8%</td>
<td>9.4%</td>
<td></td>
</tr>
<tr>
<td><strong>Prior Year Forecast</strong></td>
<td><strong>$602</strong></td>
<td><strong>$655</strong></td>
<td><strong>$708</strong></td>
<td><strong>$755</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Prior Year % Change</strong></td>
<td>7.4%</td>
<td>9.0%</td>
<td>8.0%</td>
<td>6.7%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Long-term Impact

Long-term Household Impacts of Financial Levers

2021 2030 2040 2050

- No Financial Levers
- With Financial Levers
• 2022 Budget Cycle will continue to prioritize:
  o Continuous improvement to realize cost savings and efficiency gains, including delivery mechanisms for capital projects
  o Exploring alternatives to building new infrastructure i.e. demand side management strategies
  o Sound fiscal management
  o Understanding of municipal challenges
  o Early direction from Boards and Committees
Financial Plan Overview
Overview:
• 2020 Operating Budget: $894.3M
• 2021 Operating Budget: $939.5M (5.1%)
• $28M less than previously projected for 2021

Drivers:
• Increase in Operations averages 2.2% over 5 years
• Debt servicing reflective of the capital program, but favorable rates and 30 year amortization in 2021/22
• Easing Contribution to Capital in 2021/22/23 - Refocusing in 2024/25
Overview:
• Primary funding sources - water sales, sewer levy, tipping fees, rents, MVRD requisition
• Expecting relative stability for primary sources
• Continued focus on alternate sources

Drivers:
• Assumed Water DCC revenue received and applied starting in 2023
• Assumed partner funding for upcoming major capital projects, reduces pressure on levies/rates
• Assume return to the Financial Management Policy in 2024/25
Overview:
- 2020 Capital Budget: $1.41B
- 2021 Capital Budget: $1.52B
- Increase: $110.0M (7.8%)

Drivers:
- Capital project in progress carried forward
- Reviewed for deferrals and savings
- Project risks and scope provisions
Questions
2021 – 2025 FINANCIAL PLAN
SOLID WASTE SERVICES

Paul Henderson
GENERAL MANAGER, SOLID WASTE SERVICES

Zero Waste Committee – October 16, 2020
Solid Waste Services 2021 Budget Highlights

- 2021 Tipping Fees increase $4 per tonne (previous cycle projection $7 per tonne)
- Per household cost unchanged from 2020 at $61 per household
- Budget projected to increase at 4.9% per year over five years – driven by debt for capital projects
- Priorities: zero waste and circular economy; greenhouse gas reduction and customer service
# PERFORMANCE METRICS

<table>
<thead>
<tr>
<th>Key Performance</th>
<th>Past Performance (Average)</th>
<th>Expected Performance 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recycling Rate (percent of solid waste diverted from final disposal)</td>
<td>64%</td>
<td>66%</td>
</tr>
<tr>
<td>Waste Disposed (tonnes) per Capita</td>
<td>0.48</td>
<td>0.45</td>
</tr>
<tr>
<td>Annual solid waste flows in Metro Vancouver system (tonnes)</td>
<td>920,000</td>
<td>860,000</td>
</tr>
</tbody>
</table>
## CONTINUOUS IMPROVEMENT

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste-to-Energy Facility District Energy</td>
<td>Up to 70,000 tonnes/year GHG reduction</td>
</tr>
<tr>
<td>Bottom ash beneficial use</td>
<td>Reduced landfill disposal of 40,000 tonnes per year, or 5% of regional solid waste quantities.</td>
</tr>
<tr>
<td>Reduced program expenditures: professional services, administrative efficiencies, Extended Producer Responsibility agreements</td>
<td>Operating budget savings of $700,000 per year</td>
</tr>
</tbody>
</table>
BUDGET OVERVIEW

2021 MV Budget, $939.5M
Solid Waste Services, $118.5M

2021 Operating Budget Breakdown - Solid Waste Services

- Solid Waste Operations
- Environmental Regulation and Enforcement
- Allocation of Centralized Support
- Planning & Public Involvement
- Contribution to Capital
- Administration and Department Support
- Debt Servicing
- Allocation of Project Delivery
Overview:

2020 Operating Budget: $114.1M
2021 Operating Budget: $118.5M
3.9% increase

Drivers for Change:

- Landfill disposal costs (+$0.84 M)
- Transition and operating costs for the new Coquitlam Transfer Station (+$1.6M)
- Debt Service (+$2.1M)
Overview:
2020 Operating Budget: $114.1M
2021 Operating Budget: $118.5M
3.9% increase

Drivers for Change:
Tipping fee increases by $4/tonne in 2021 and 2022
(previous cycle projection $7/tonne in each year)
## OPERATING HIGHLIGHTS

<table>
<thead>
<tr>
<th>Budget Year</th>
<th>Initiative</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021</td>
<td>Solid waste management plan update</td>
<td>Review and update of the region’s solid waste management plan</td>
</tr>
<tr>
<td>2022</td>
<td>New transfer stations</td>
<td>New Coquitlam and Surrey Transfer Stations fully operational</td>
</tr>
<tr>
<td>2023</td>
<td>Bottom ash beneficial use</td>
<td>Bottom ash beneficial use fully underway</td>
</tr>
<tr>
<td>2024</td>
<td>Transfer Station expanded recycling</td>
<td>New recycling depots at the Langley and Surrey Transfer Stations</td>
</tr>
<tr>
<td>2025</td>
<td>Waste-to-Energy Facility Operating Contract</td>
<td>Procurement for the Waste-to-Energy Facility operating and maintenance contract</td>
</tr>
</tbody>
</table>
## Projected Tipping Fees

<table>
<thead>
<tr>
<th>Projected Tipping Fees for Municipal Solid Waste ($/tonne)</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Municipal Tipping Fee</td>
<td>$113</td>
<td>$117</td>
<td>$121</td>
<td>$128</td>
<td>$135</td>
<td>$142</td>
</tr>
<tr>
<td>Small Vehicles (0-1t)</td>
<td>$147</td>
<td>$151</td>
<td>$155</td>
<td>$162</td>
<td>$169</td>
<td>$176</td>
</tr>
<tr>
<td>Medium Vehicles (1-8t)</td>
<td>$125</td>
<td>$129</td>
<td>$133</td>
<td>$140</td>
<td>$147</td>
<td>$154</td>
</tr>
<tr>
<td>Large Vehicles (&gt;9t)</td>
<td>$99</td>
<td>$103</td>
<td>$107</td>
<td>$114</td>
<td>$121</td>
<td>$128</td>
</tr>
</tbody>
</table>
Overview:

- 2020 Capital Budget: $88.5M
- 2021 Capital Budget: $96.3M

8.7% increase

Drivers for Change:

- District heating capital
- Recycling depot expansion projects

2021 – 2025 Solid Waste Services Capital Plan

- Mills
- Landfills
- Opportunity
- Transfer Stations
- Waste to Energy Facility
Overview:
2020 Capital Budget: $88.5M
2021 Capital Budget: $96.3M
8.7% increase

Drivers for Change:
$30 million of 2021 expenditures carried forward from 2020.
## CAPITAL PROGRAM HIGHLIGHTS

<table>
<thead>
<tr>
<th>Budget Year</th>
<th>Capital Project</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021</td>
<td>Coquitlam Transfer Station and Surrey Recycling and Waste Drop-Off</td>
<td>Completion of two new transfer stations and updated recycling depot funding model</td>
</tr>
<tr>
<td>2022</td>
<td>Biosolids Management at Waste-to-Energy Facility</td>
<td>Processing of 25,000 tonnes per year of biosolids at the Waste-to-Energy Facility</td>
</tr>
<tr>
<td>2023</td>
<td>Surrey and Langley Transfer Station Recycling Depot Expansion</td>
<td>New full service recycling depots ahead of the scales</td>
</tr>
<tr>
<td>2024</td>
<td>Waste-to-Energy Facility Capital Replacements</td>
<td>Ongoing replacement of end-of-life capital works</td>
</tr>
<tr>
<td>2025</td>
<td>Alternative Fuel and Recyclables Recovery Centre</td>
<td>Construction of a new facility to recover materials for higher use</td>
</tr>
</tbody>
</table>
## SOLID WASTE SERVICES FINANCIAL PLAN SUMMARY

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Expenditures ($ Millions)</td>
<td>$114.1</td>
<td>$118.5</td>
<td>$124.7</td>
<td>$131.1</td>
<td>$137.5</td>
<td>$144.7</td>
</tr>
<tr>
<td>% Change</td>
<td>3.9%</td>
<td>5.2%</td>
<td>5.2%</td>
<td>4.8%</td>
<td>5.2%</td>
<td></td>
</tr>
<tr>
<td>Tipping Fees ($ Millions)</td>
<td>$105.8</td>
<td>$108.5</td>
<td>$113.0</td>
<td>$118.2</td>
<td>$124.3</td>
<td>$131.3</td>
</tr>
<tr>
<td>% Change</td>
<td>2.5%</td>
<td>4.1%</td>
<td>4.7%</td>
<td>5.2%</td>
<td>5.6%</td>
<td></td>
</tr>
<tr>
<td>Total Capital Expenditures ($ Millions)</td>
<td>$88.5</td>
<td>$96.3</td>
<td>$76.3</td>
<td>$65.6</td>
<td>$30.8</td>
<td>$29.9</td>
</tr>
<tr>
<td>Household Impact ($)</td>
<td>$61</td>
<td>$61</td>
<td>$63</td>
<td>$65</td>
<td>$67</td>
<td>$70</td>
</tr>
<tr>
<td>% Change</td>
<td>0.0%</td>
<td>2.8%</td>
<td>3.5%</td>
<td>4.0%</td>
<td>4.2%</td>
<td></td>
</tr>
<tr>
<td>Prior Cycle Household Impact Change (%)</td>
<td>5.0%</td>
<td>3.5%</td>
<td>3.2%</td>
<td>3.8%</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>
Questions?
North Shore Transfer Station Wood Recycling Area
Why do we do waste composition studies?

• Gauge progress of recycling campaigns and initiatives
• Identify materials to target for future programs
• Learn more about specific sectors
Full-scale study
Sector-Specific Studies

Multi-Family

Commercial/Institutional

Construction & Demolition
Who uses our waste composition studies?

• Each study downloaded up to 6500 times
• Most downloads local, but used in other jurisdictions including San Francisco, Atlanta and Toronto
• Used across Metro Vancouver departments and member municipalities
<table>
<thead>
<tr>
<th>Type of Study</th>
<th>Description</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-scale</td>
<td>Includes samples from all sectors received at Regional Facilities</td>
<td>Annually</td>
</tr>
<tr>
<td>Multi-family</td>
<td>Focuses on apartment and townhome waste sampled directly from participating buildings</td>
<td>Annually for three years, then every two years</td>
</tr>
<tr>
<td>Commercial/Institutional</td>
<td>Focuses on business waste sampled directly from participating businesses</td>
<td>Annually for three years, then every two years</td>
</tr>
<tr>
<td>Construction &amp; Demolition</td>
<td>Visually estimates composition of large construction and demolition loads received at regional landfills</td>
<td>Every three years</td>
</tr>
</tbody>
</table>
Thank you
2019 Transfer Station Customer Service Survey

Paul Henderson, P.Eng.
GENERAL MANAGER, SOLID WASTE SERVICES

Zero Waste Committee – October 16, 2020

https://orbit.gvrd.bc.ca/orbit/lisapi.dll/link/41768293
Customer Service at Transfer Stations

- Excellent customer service an overarching goal for the regional solid waste system

- Use a number of mechanisms to monitor customer service:
  - Customer feedback
  - Video monitoring
  - Announced and unannounced inspections
  - Scale operator staffing levels
  - Tracking daily onsite waste volumes
  - Annual customer survey

- 2019/2020 survey: 5,650 customer interviews conducted across the regional solid waste system

- Work Plan item: Investigate continuous feedback mechanisms
Overall Customer Experience at Metro Vancouver transfer stations

- Satisfied with the hours of operation: 94%
- Wait times are reasonable: 92%
- Satisfied with the level of service: 88%
- Satisfied with the range of materials: 93%
- Fees are reasonable: 70%
Feedback on Materials Accepted at Facilities

- Generally high level of satisfaction with the range of materials accepted
- Surrey and Langley Transfer Stations – top survey suggestion was to increase types of recyclables accepted
Thank you