“State of Recycling”
November 1, 2021
Project Update

• Transfer Facility
  - building construction including the conveyor and compactor
  - Open bids on November 4
  - Estimated Cost - $3,550,000

• Landfill Entrance Improvements
  - Entrance road, site work for scales, watermain extension, and internal road construction
  - Open bids on November 2
  - Estimated Cost - $1,700,000

**Recommendation of award for both projects will be on November 15 city council agenda.**
Recycling Markets

2019 Cost Analysis

Processing - $76 per ton
Rebate (YTD Average) - $60 per ton

City pays a net of $16 per ton

2021 Cost Analysis

Processing - $76 per ton
Rebate (YTD Average) - $160 per ton

City receives a net of $84 per ton

- Rebates reflect the value of a ton of mixed recycling excluding glass
- The YTD average including glass is $128.00
- The average rebate for August 2021 was over $230 per ton
Market Changes

- Changes in China policy in 2017 (National Sword) set a low contamination threshold for recycling imports. China restricted import licenses - end result was a flood of cheap domestic supply with few end markets

Long-Term impacts:
- The cheap domestic supply prompted investment in developing domestic markets
- Domestic markets will provide a long-term benefit by creating and maintaining local demand
- Continued pressure from consumers for recycled content is creating more demand for recyclable materials

Short-Term impacts:
- COVID has disrupted supply chains causing increased commodity prices - would expect this to normalize

Appears 2017-2020 was the low point and markets are currently at a high point.
- Optimistically can expect $50 per ton in average revenue for the next couple years.
## Cost Analysis

<table>
<thead>
<tr>
<th>Cost Category</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
<th>2028</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recycling Accounts</td>
<td>7,142</td>
<td>7,249</td>
<td>7,358</td>
<td>7,468</td>
<td>7,580</td>
<td>7,694</td>
<td>7,809</td>
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</tr>
<tr>
<td>Tons Collected</td>
<td>1,428</td>
<td>1,450</td>
<td>1,472</td>
<td>1,494</td>
<td>1,516</td>
<td>1,539</td>
<td>1,562</td>
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</tr>
<tr>
<td>Labor</td>
<td>($67,500.00)</td>
<td>($69,187.50)</td>
<td>($70,917.19)</td>
<td>($72,690.12)</td>
<td>($74,507.37)</td>
<td>($76,370.05)</td>
<td>($78,279.31)</td>
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<tr>
<td>Transport</td>
<td>($144,263.35)</td>
<td>($147,891.57)</td>
<td>($151,611.05)</td>
<td>($155,424.06)</td>
<td>($159,332.98)</td>
<td>($163,340.20)</td>
<td>($167,448.21)</td>
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<tr>
<td>Processing Cost</td>
<td>($109,965.81)</td>
<td>($113,066.30)</td>
<td>($116,254.20)</td>
<td>($119,531.99)</td>
<td>($122,902.19)</td>
<td>($126,367.42)</td>
<td>($129,930.35)</td>
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<tr>
<td>Commodity Rebate</td>
<td>$185,685.50</td>
<td>$188,470.78</td>
<td>$191,297.84</td>
<td>$194,167.31</td>
<td>$197,079.82</td>
<td>$200,036.02</td>
<td>$203,036.56</td>
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<tr>
<td>Net Processing</td>
<td>$75,719.69</td>
<td>$75,404.49</td>
<td>$75,043.64</td>
<td>$74,635.32</td>
<td>$74,177.63</td>
<td>$73,668.60</td>
<td>$73,106.21</td>
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<tr>
<td>Net Recycling Costs</td>
<td>($136,043.66)</td>
<td>($141,674.59)</td>
<td>($147,484.59)</td>
<td>($153,478.86)</td>
<td>($159,662.72)</td>
<td>($166,041.66)</td>
<td>($172,621.30)</td>
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<tr>
<td>Sanitation Costs (0.5%/year)</td>
<td>($2,411,806.04)</td>
<td>($2,423,865.07)</td>
<td>($2,435,984.39)</td>
<td>($2,448,164.31)</td>
<td>($2,460,405.13)</td>
<td>($2,472,707.16)</td>
<td>($2,485,070.70)</td>
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<tr>
<td>Net Sanitation Costs</td>
<td>($2,547,849.69)</td>
<td>($2,565,539.65)</td>
<td>($2,583,468.98)</td>
<td>($2,601,643.17)</td>
<td>($2,620,067.85)</td>
<td>($2,638,748.82)</td>
<td>($2,657,692.00)</td>
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<tr>
<td>Recycling Cost per account per year</td>
<td>$ (19.05)</td>
<td>$ (19.54)</td>
<td>$ (20.05)</td>
<td>$ (20.55)</td>
<td>$ (21.06)</td>
<td>$ (21.58)</td>
<td>$ (22.11)</td>
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<tr>
<td>Recycling Cost per account per month</td>
<td>$ (1.59)</td>
<td>$ (1.63)</td>
<td>$ (1.67)</td>
<td>$ (1.71)</td>
<td>$ (1.76)</td>
<td>$ (1.80)</td>
<td>$ (1.84)</td>
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</tbody>
</table>
• Regional survey started in 2002 with communities in Minnesota, North and South Dakota and Montana.

• Has since grown to 9 states and the Minneapolis/St Paul metro area.

• Compares water, sewer, storm sewer and sanitation rates of participating communities.

• Approximately 100 communities participated in 2021
RECYCLING STATISTICS

- 88% of respondents reported a recycling program.
- 72% average reported participation rate for recycling program.
- 42% of systems with a recycling program charge a separate fee.
- $5.60 average reported monthly recycling fee for a residential user.

City of Minot
Questions?