Tiverton Solid Waste Planning Workshop
Tiverton Town Hall
July 29, 2019
7:00 PM
What is the future Tiverton’s Solid Waste Program

• Tiverton’s town landfill, which has operated continuously since 1952, is closing next year.
• It is anticipated that the landfill will reach capacity by late summer 2020.
• Official closing date is November 30, 2020.
• Without the landfill, what does the future of solid waste and recycling look like in Tiverton?
Tonight we will...

• Discuss what the Town’s current program looks like.
• Review the 2011 Solid Waste Planning Study.
• Discuss what decisions need to be made regarding the future of the Town’s solid waste and recycling program.
The Current Program

• The Town provides curbside pick-up (run by MEGA Disposal).

• MEGA runs two trucks, five days a week.
  • One truck is for recycling and delivers recyclables directly to RIRRC’s Central Landfill.
  • One truck picks up trash and delivers trash to the Tiverton Landfill.
  • 6,900 residences served by MEGA.

• The Town receives certain materials at the Landfill, including;
  • Tires, White Goods, Unadulterated Wood (no paint, no stain), Bulky Waste, Mattresses, Yard waste, and E-waste
The Current Program (cont...)

• The Town does not accept the following at the landfill;
  • Construction and demolition debris (except from minor homeowner repair projects),
  • Commercial waste, or
  • Household hazardous waste.

• Other special wastes are handled as follows:
  • Waste oil is accepted at the Public Works Garage;
  • Household Hazardous Waste is collected on certain designated collection days by RIRRC (one per year at the Tiverton Public Works Garage).
TOTAL SOLID WASTE PROGRAM ANNUAL COST
CURRENT SOLID WASTE PROGRAM = $1.46 M

CURRENT CURBSIDE PICKUP PROGRAM
$738,400

LANDFILL CLOSURE ACCOUNT CONTRIBUTIONS
$425,000

LANDFILL OPERATION (COST TO HANDLE YARD WASTE, BULKY WASTE, WHITE GOODS, OPERATING COSTS, ENGINEERING, AND TESTING).
$300,000
What decision need to be made now that the landfill is closing?
1. What will the future program be?

- Direct Haul Program
  - Town-Operated: Curbside pickup of Trash and Household Recycling, no other material collected.
  - Contracted Waste Management Company: Expanded curbside pickup program, trash, recycling, plus select other services.

- Municipal Transfer Station
  - Town-Operated
  - Contracted Waste Management Company

2. Who will operate the future program?

- Town-Operated
- Contracted Waste Management Company

3. What level of service will the program provide?

- Curbside pickup of Trash and Household Recycling, no other material collected.
- Expanded curbside pickup program, trash, recycling, plus select other services.
- Curbside pickup with Recycling Center for comprehensive recycling services.

4. Where will the recycling center or transfer station be located?

- Site Selection

5. What materials will be accepted as part of the future program?

- Compost
- White Goods
- Yard Waste
- Electronic Waste
- Mattresses
- Household Hazardous Waste
- Tires
First Tier Decision

• What will the future solid waste and recycling program be?

• Direct Haul or Transfer Station?
  • In 2012, Pare completed a study on the relative difference between a direct haul and transfer station program.
  • The findings were presented to the Town Council and the consensus then was that a direct haul program is preferable;
    • No significant upfront capital costs
    • Can switch to a transfer station model in the future if direct haul does not serve the Town’s needs (but going from a transfer station to direct haul is much more difficult).
Second Tier Decision

• Who will operate the future program?
• The Town or a contracted waste management company?
  • The Town already uses a contracted waste management firm for the curbside pick-up program. It would be sensible to continue contracting that service.
  • A contracted waste management firm for a recycling center or a transfer station would offer experience and efficiency.
  • A Town-operated program would provide flexibility, particularly during the first couple of years – the “learning curve” period.
Third Tier Decision

• What level of service will the future program provide?
• This decision mostly pertains to the direct haul option.
• A transfer station would likely provide a similar level of service as the current program, in terms of which wastes are accepted.
  • One exception might be yard waste, which requires a significant amount of area to manage.
Third Tier Decision (cont...)

• Direct Haul Level of Service options are as follows:
  • Option 1 – Curbside pick-up for trash and recyclables only. No other material would be collected, residents would have to make private arrangements for all other material.
  • Option 2 – Expanded Curbside pick-up program. In addition to trash and recyclables, arrangements could be made (through the Town of waste hauler) to pick-up e-waste, bulky waste, white goods, tires, etc.
  • Option 3 – Curbside pick-up for trash and recyclables, town-owned recycling drop-off center for other materials.
Fourth Tier Decision

• Where will the recycling/drop-off area or transfer station be located?

• Selection criteria for locations:
  • Parcel Size – 2+ acres for recycling, 2-3 acres for Transfer Station, and 4+ acres for compost site, which includes land for setbacks and buffers (every site has different constraints that could vary the total land area)
  • Accessibility to the public
  • Access to major transportation routes
  • Physical site constraints (zoning, wetlands, adjacent uses, traffic circulation, site topography, etc.).
Public Works Garage
Industrial Park
Bulgarmarsh Road
National Grid Site
If these four sites, or any other Town-owned properties, are not considered viable the Town may have to look to purchase a site. Purchase criteria would include (not necessarily in this order):

- Cost to purchase,
- Location relative to users,
- Access to transportation infrastructure,
- Zoning,
- Site setting and conditions (i.e., cost and time involved to prepare site), and
- Permitting requirements.
Fifth Tier Decision

- What materials will be accepted as part of the future program?
  - Trash and household recyclables;
  - White goods, mattresses, tires, e-waste, household recycling are all possible at a recycling center;
  - All the above plus bulky waste could be accepted at a transfer station – bulky waste and trash CANNOT be accepted at a recycling center;
  - Yard waste could be accepted at a recycling center or a transfer station;
  - Town could consider accepting food waste for composting (with a yard waste program).
Permitting Considerations

• Transfer Station will require multiple permits from the State and Town;
  • RI DEM Office of Waste Management (OWM) License – ($10,000 initial licensing fee);
  • RI DEM RIPDES App. for Stormwater Run-off and App. for Construction (likely)
  • Local Planning and Zoning Approvals

• Recycling Center
  • No RI DEM OWM license required.
  • RI DEM RIPDES App. for Stormwater Run-off and App. for Construction (possibly)
  • Local Planning and Zoning Approvals
TOTAL SOLID WASTE PROGRAM ANNUAL COST
TRANSFER STATION OPTION 1 = $1.58M

CURBSIDE PICKUP PROGRAM COST
$738,400

TRANSFER STATION O&M1
$357,000

RIRRC TIPPING FEE2
$197,000

DEBT SERVICING3
$160,000

MISC. MATERIAL HANDLING - $75,000

LEGACY LANDFILL COSTS - $50,000

1 Based on a unit price of $85/ton, inclusive of transportation costs
2 RIRRC Municipal Tipping Fee $47/ton (FY 2020)
3 Based on capital costs of $2,500,000 and 20-year borrowing term at 2.5%
TOTAL SOLID WASTE PROGRAM ANNUAL COST
DIRECT HAUL PROGRAM OPTION = $1.55 M

CURBSIDE PICKUP PROGRAM COST
$738,400

COST INCREASE TO HAUL TO RIRRC
$360,000

MISC. MATERIAL HANDLING AT CURB
$200,000

RIRRC TIPPING FEE1
$197,000

LEGACY LANDFILL COSTS - $50,000

1 RIRRC Municipal Tipping Fee $47/ton (FY 2020)
TOTAL SOLID WASTE PROGRAM ANNUAL COST
DIRECT HAUL WITH RECYCLING CENTER = $1.58 M

CURBSIDE PICKUP PROGRAM COST
$738,400

COST INCREASE TO HAUL TO RIRRC
$360,000

RIRRC TIPPING FEE¹
$197,000

RECYCLING CENTER O&M COSTS
$200,000

LEGACY LANDFILL COSTS - $50,000

DEBT SERVICING² - $32,000

¹ RIRRC Municipal Tipping Fee $47/ton (FY 2020)
² Based on capital costs of $500,000 and 20-year borrowing term at 2.5%
Additional Considerations

• Any new program will require a robust public education program.
  • Clearly explained policies;
  • Robust public outreach; and
  • Thoughtful, organized implementation.
Questions?
Thank you,

Timothy P. Thies, P.E.
Senior Vice President
Pare Corporation
8 Blackstone Valley Place
Lincoln, RI 02865
401-334-4100
tthies@parecorp.com