Statewide Solid Waste Plan Update-Element 171 State of Waste Review

Advisory Committee Review May 21, 2013

Michael OConnell, Executive Director
Rhode Island Resource Recovery Corporation

Recycling.
e it second nature.

Presentation Purpose:

- Overview of Regional Solid Waste Market and RIRRC Solid Waste and Recycling Trends
- Review strategies that optimize RI’s solid waste facilities and financial resources in the best long term interest of Rhode Islanders.
- Examine the environmental opportunities available to Rhode Island as we transition to the next stage of solid waste management

Plan Vision-2035:

To be truly sustainable, Rhode Island must invest in full-scale residential composting facilities. We must make organics management a top statewide priority. This will remove 30% of the waste from the waste stream, and will generate much needed energy. We must continue to invest in manufacturing processes that use recyclables as feedstock and provide long-term high-quality jobs. We must implement the best state of the art technologies and public policy practices to maximize the remaining years of the central landfill, increase the remaining usefulness of the Materials Recycling Facility, and begin the transition to the solid waste management practices that will take Rhode Island into the 22nd century.

Plan Goals:

- Goal 1: Significantly reduce the amount of RI generated solid waste requiring disposal through increased source reduction, reuse, recycling, and composting.
- Goal 2: Manage the solid waste that ultimately must be disposed in an efficient, equitable, and environmentally protective manner, consistent with the established solid waste hierarchy.
- Goal 3: Adopt stable, long-term funding mechanisms that provide sufficient revenue for state, regional, and local programs while providing incentives for increased waste reduction and diversion.

Regional Solid Waste Market

New England Solid Waste Disposal Capacity (Annual Tons)
(ME, NH, MA, CT, and RI)

	Landfill	WTE	Supply Total	Demand	Excess Capacity
2008	5.9M	6.7M	12.6M	~ 12.6M	None
2015E	5.0M	6.7M	11.5M	~ 10.0M	+1.5M

Observations:

- Current regional waste generation in the 10 million ton range.
- Market overcapacity will keep pricing unstable.
- Key Drivers affecting overall supply/demand:
  - » Economy and waste generation
  - » Transportation costs
  - » New legislation
  - » New technology
  - » Recycling markets

Rhode Island Market Dominated By Regional Incinerators

	Number of Incinerators	Percent Incinerated	National Rank
Connecticut	6	65%	1
Massachusetts	7	34%	2
United States	87	7%	N/A

Waste To Energy Economics/RIRRC Position

- Capital costs of $200,000/ton of installed capacity = **$400 million** for a 2,000 ton facility.
- Tipping fee ~$99-$111/ton (per study by GBB)
- RIRRC is open to utilizing WTE technology under the following conditions:
  - Meets regulatory requirements.
  - Uses proven, not experimental, processes.
  - Must be economically attractive to municipalities.

Regional Solid Waste Market in Conclusion

- Waste Disposal currently a buyer’s market.
- No opportunity for RIRRC to raise prices and increase cash flow.
- No new greenfield WTE plant built in 18 years.
- Incinerators are price leaders, landfills are price followers.
- Potential now exists to lock up relatively low disposal prices for major long term commitments of solid waste volumes.

Rhode Island Resource Recovery Corporation

Quasi-public state agency, established in 1974, charged with managing the state’s solid waste and recycling program by meeting high industry standards for recycling and waste disposal, and using the best mix of public and private processing, recycling and disposal systems, programs, and facilities for both commercial and municipal waste in order to meet Rhode Island's needs. *RIGL 23-19*

Current Mission/objectives

<u>Mission</u>: Provide safe, environmentally compliant, clean, and cost effective solid waste and recycling services for all Rhode Islanders.

<u>Key Objectives</u>:

1. Work collaboratively with stakeholders to increase recycling and diversion to make RI a greener and healthier place to live.
2. Continue to increase the life of the landfill in order to provide long term significantly reduced waste disposal costs versus the market for all municipalities.
3. Remain financially self-sufficient funding all operational and capital requirements from fees.

Key Business Trends

Category	Actual Fiscal 2007	Actual Fiscal 2008	Actual Fiscal 2009	Actual Fiscal 2010	Actual Fiscal 2011	Actual Fiscal 2012
Statistical						
Solid Waste Tonnage (millions)	1.1	1.0	0.6	0.7	0.7	0.6
Remaining Landfill Life (years)	15.5	16.0	24.0	20.2	19.3	21.1
Number of Employees	129	121	99	97	95	93
Recycled Tons (000)	91	97	99	97	99	97
Leaf & Yard Waste Tons (000)	44	40	38	40	37	39

Key Financial Trends

(All In Millions)

	Actual 2007	Actual 2008	Actual 2009	Actual 2010	Actual 2011	Actual 2012	Projected 2013
Revenues	$69.8	$66.9	$45.5	$48.8	$51.9	$45.9	43.8
Operating Expenses	-66.5	-61.7	-49.5	-43.4	-42.8	-35.6	50.3
Operating Income	3.3	5.2	-4.0	5.4	9.1	10.3	-6.5
Transfer to State of Rhode Island	-3.3	-5.0	-7.5	0.0	0.0	-3.5	0

Major Capital Outlays

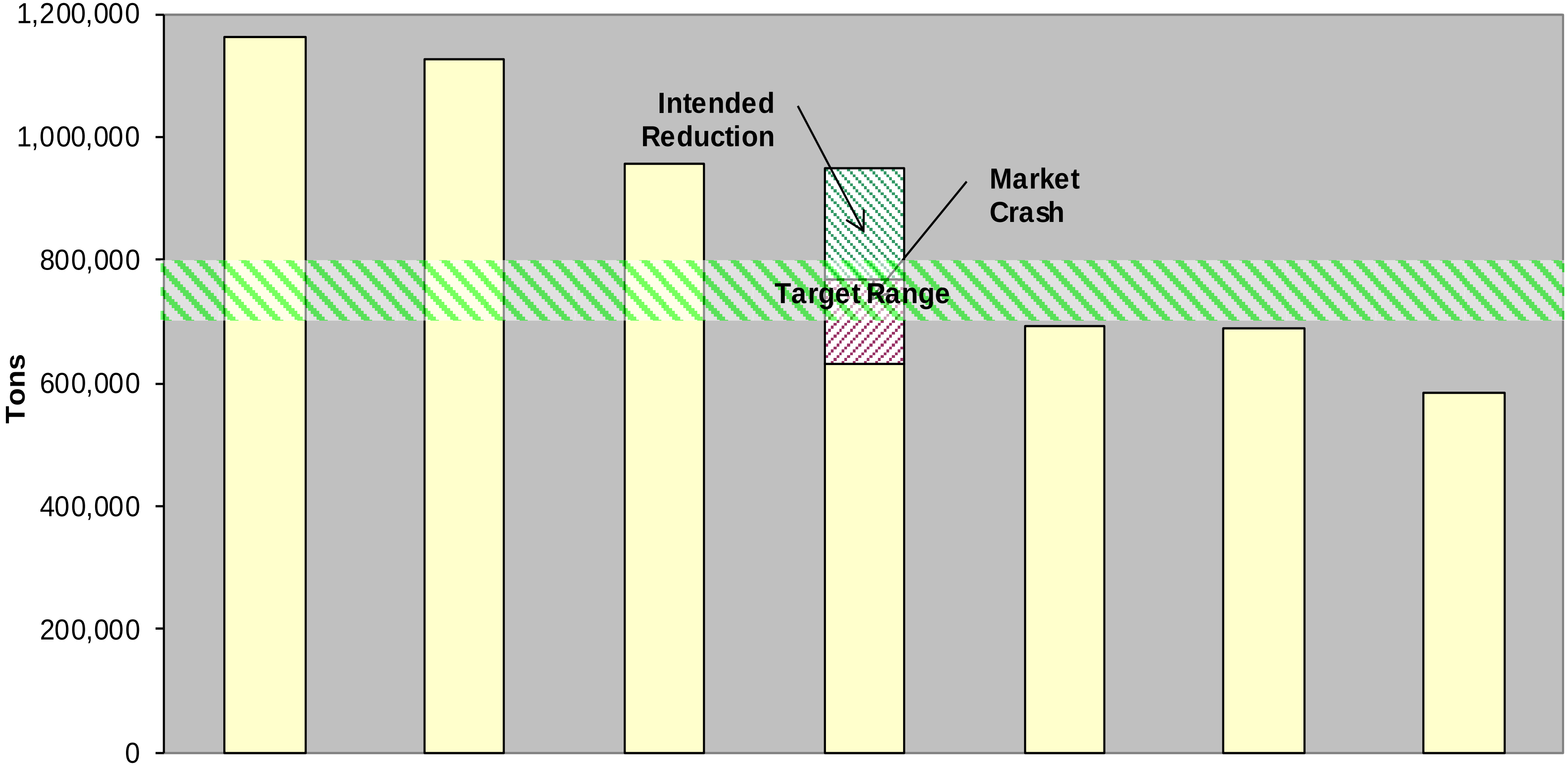
Sewer Infrastructure, Leachate Pre-Treatment	$35-$40M	- New state-wide limits for nitrogen - Currently no limits for RIRRC - Requires an on-site treatment plant - Expenditures in FY14 and FY15
Landfill Expansion Phase VI	$95-$100M	- Approximately $5M/year over 20 years -Covers demolitions, site prep, construction, roadways, double base liner, leachate system, scale house relocation etc.
Ongoing	$7-10M/Year	- Capping, Landfill Construction and Replacement Capital

RIRRC BUSINESS SEGMENTS (ex MRF)
With Controlled Pricing

Segment	F12 Tip Revenue	Price Set By
Municipal Solid Waste	11.0M	Statute
Commercial Solid Waste	13.1M	Market
Leaf and Yard Debris	0.3M	Statute
Eco-Depot	0	Practice
Construction Debris and Other	5.8M	Market/Statute
Total Charges for Services	$30.2M	
MRF Recyclables	0	Statute
Grand Total	$30.2M	

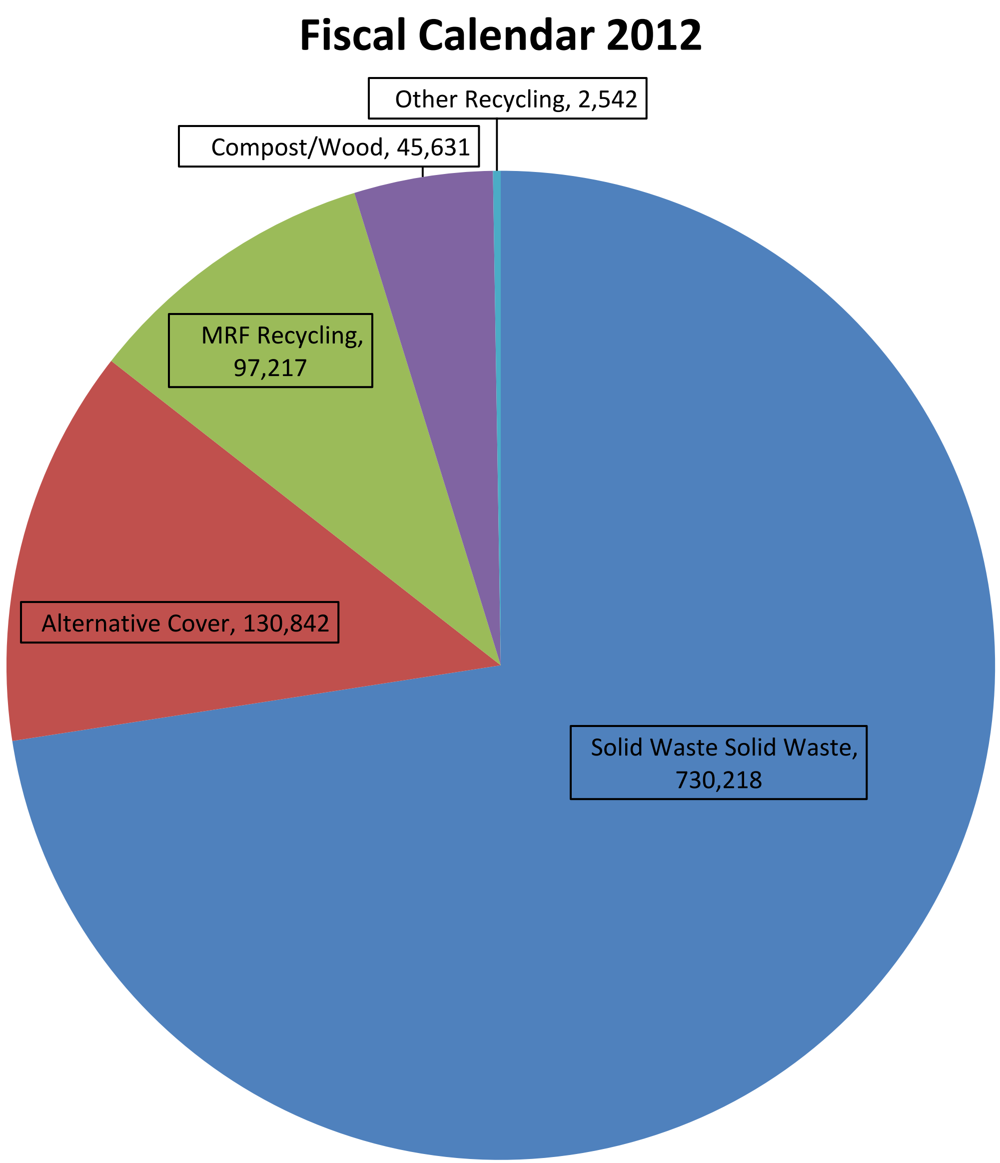
*Greater than 50% of services offered by RIRRC have fees or volumes controlled by statute.

Solid Waste Loading*

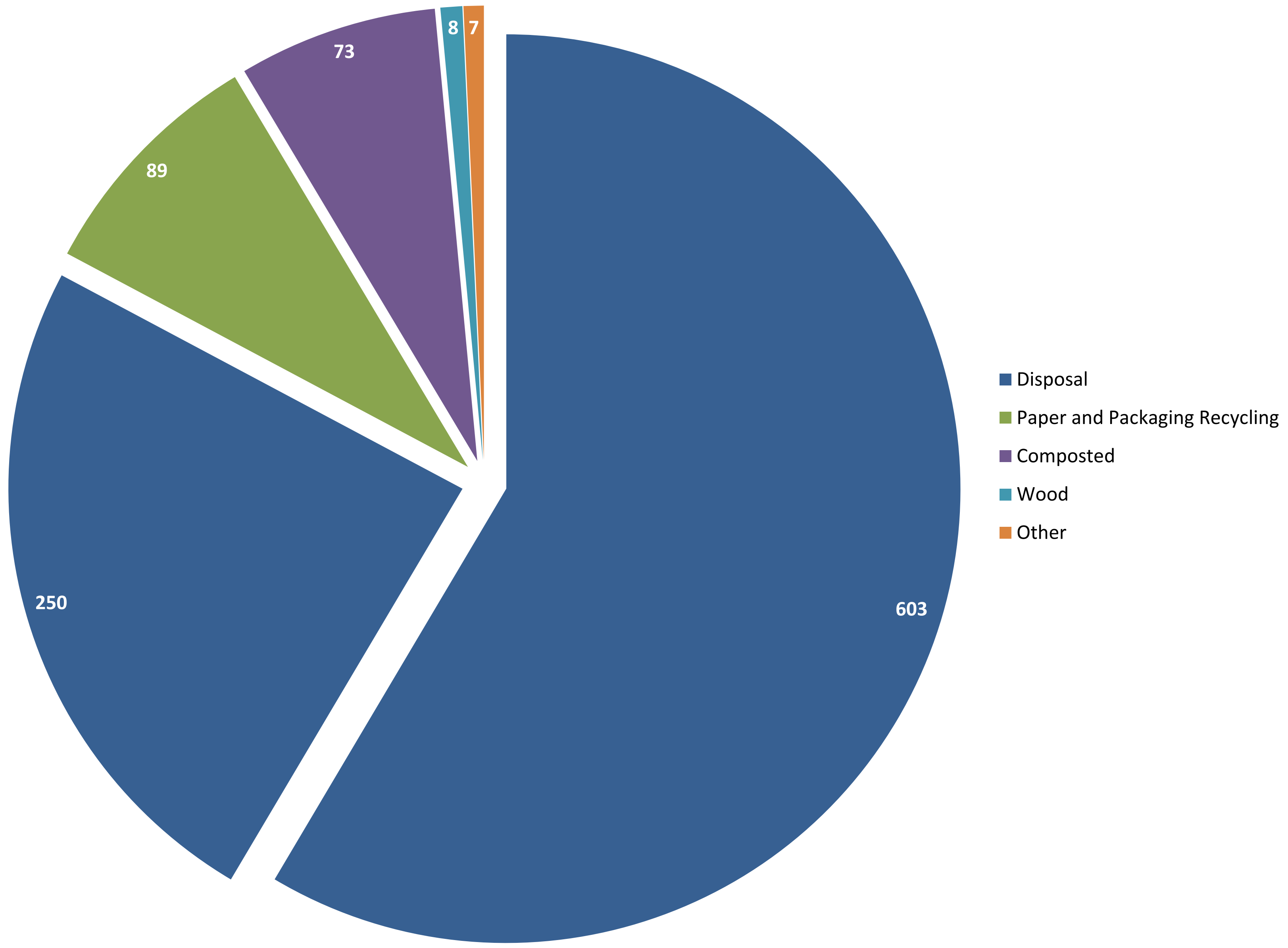


	Fiscal 2006	Fiscal 2007	Fiscal 2008	Fiscal 2009	Fiscal 2010	Fiscal 2011	Fiscal 2012
Total	1,161,711	1,124,221	955,284	629,800	690,879	687,393	583,413
% Change vs Prior Year	NA	-3%	-15%	-34%	10%	-1%	-15%
Avg. Cmrcl Price		$51.83	$54.92	$60.67	$52.92	$50.24	$49.83

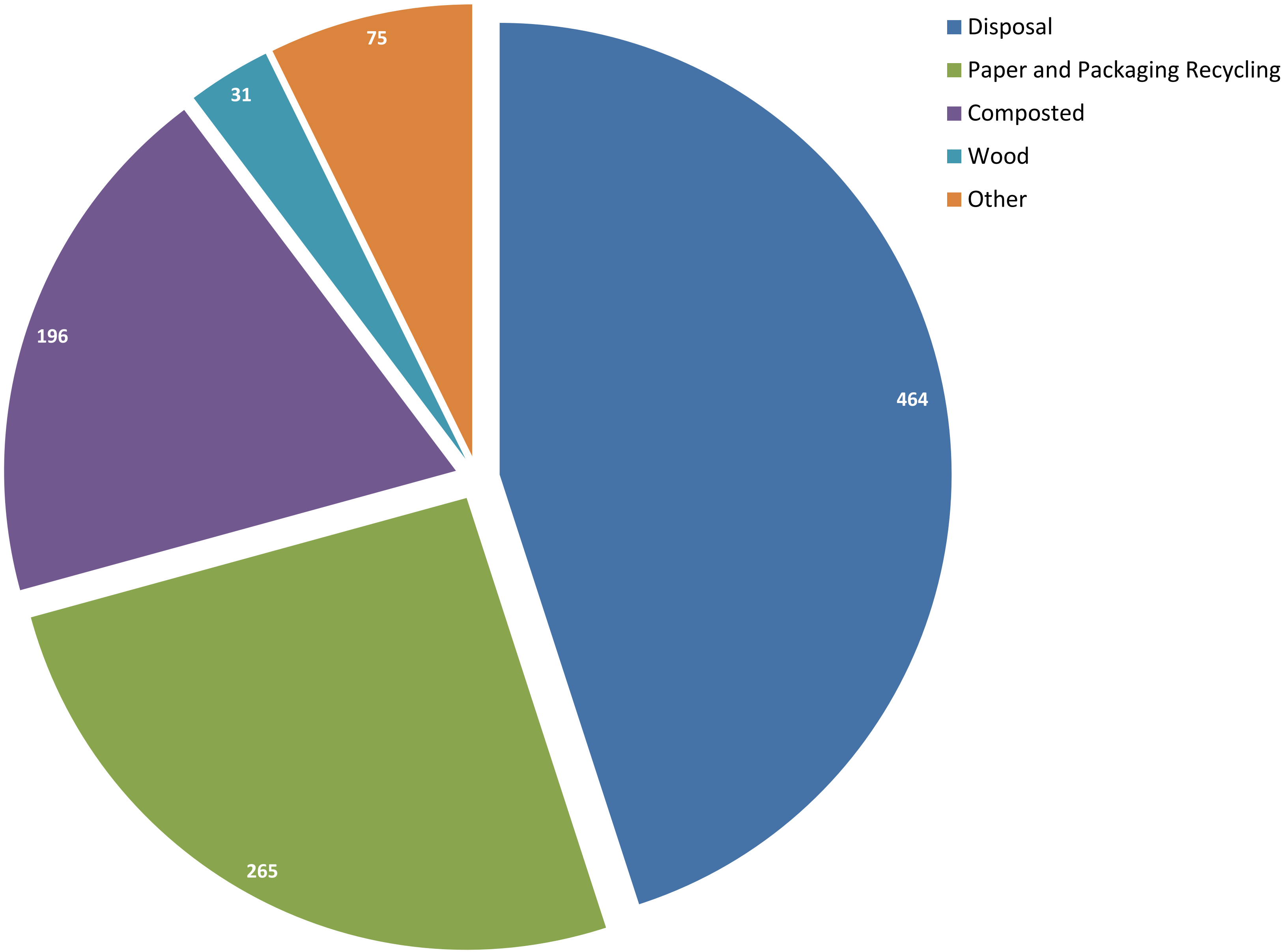
Delivered Tons To RIRRC



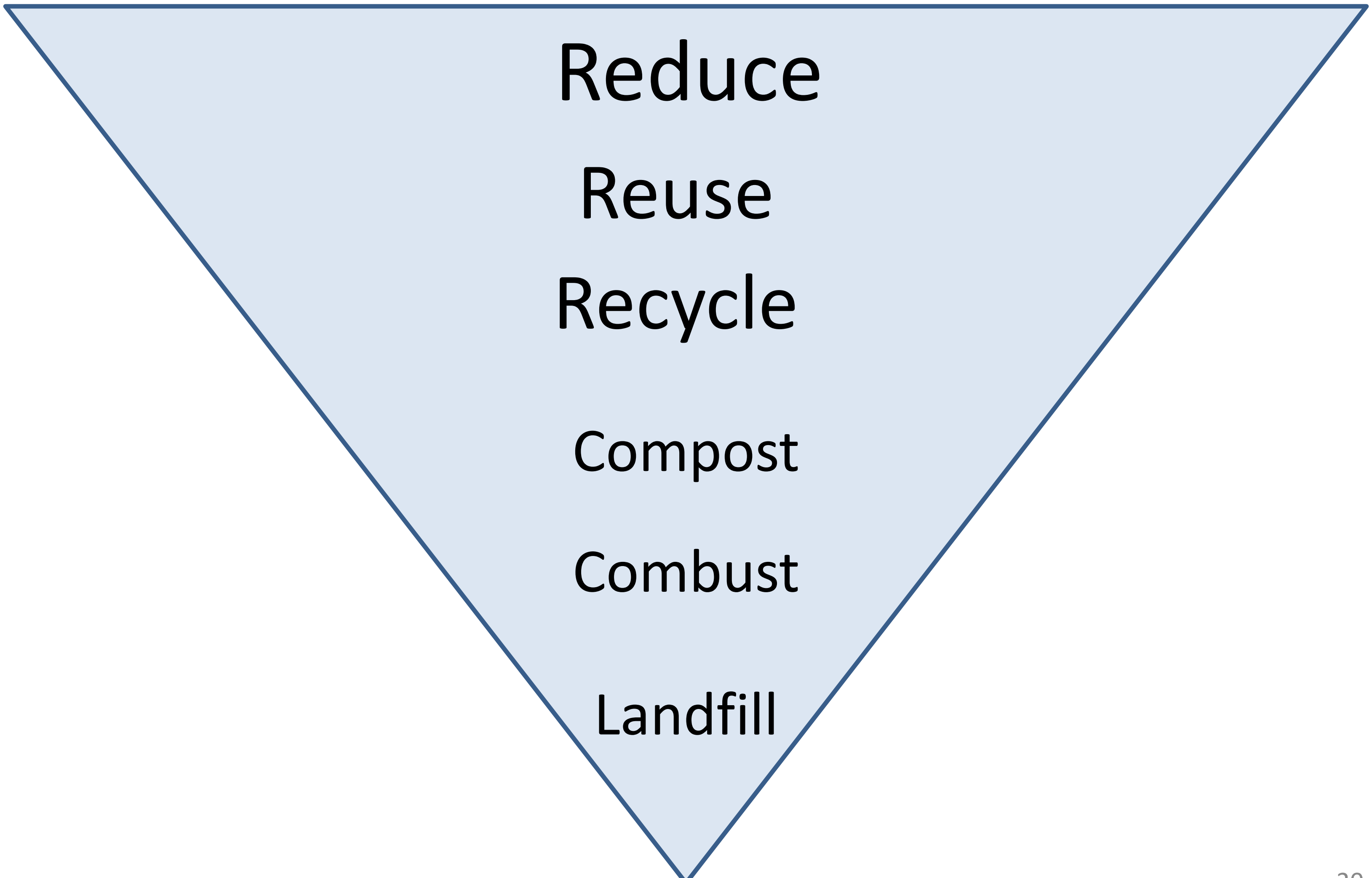
Estimated Current Disposition of RI Solid Waste (K tons)



Potential Disposition of RI Solid Waste (K tons)



EPA Waste Hierarchy



Municipal Costs & Opportunities

- Bulky Wastes
  - -Mattresses; Scrap Metal; Appliances; Tires
- Extended Producer Responsibility
  - -Mattresses; Paint; Unwanted Medications; Carpet
- Leaf & Yard
  - -Local composting areas; Backyard composting
- Automated collection
  - -Large wheeled carts for recycling, smaller carts for refuse
- Pay As You Throw
  - -Treat trash and recycling as a utility; Use (create) less, pay less.

Strategic Options to Extend Landfill Life

1. Become primarily a municipal disposal/recycling facility.
   - Municipalities = shareholders
2. Develop specific programs to further divert materials from disposal.
   - Extended Producer Responsibility
   - Maximize municipal transfer stations, recycling centers
3. Utilize technology that meets RIRRC stated objectives.
4. Before landfill closes, develop long term/cost effective contracts with regional incinerators/transfer station owners to ship RI municipal sector solid waste out of state.