


# City of Taunton Strategy Review Solid Waste Management

## Briefing for Taunton City Council


Presented by:  
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December 18, 2018




**GBB**  
SOLID WASTE  
MANAGEMENT  
CONSULTANTS


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## GBB Overview



- Headquartered in McLean, VA
- Established in 1980 as an objective adviser to governments, institutions, and businesses
- 38 years implementing innovative solutions for waste and recycling industry
- Dedicated exclusively to solid waste management
- “Change Agents” to produce better services and facilities



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## Project Team/Schedule

- Project Team:
  - City of Taunton DPW and Council members: Mayor Thomas C. Hoye, Jason Buffington, Daniel DeAbreu, Fred Cornaglia, Anthony Abreau, Katherine Nunes
  - West Law Group, LLC, Tip Torres
  - TMLP, Ken Goulart
  - GBB: Harvey Gershman, Jennifer Porter, Tim Giardina, and Steve Simmons
- Schedule:
  - October 28, 2018 - City contracts with GBB
  - End of October—Kick-off phone meeting/data request
  - November 28/29 –On-site tours and meetings
  - December 18 – City Council briefing



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## On-site Tours and Meetings

- State meetings with DEP at Lakeville
- City Council Members
- Local/regional sites
  - Taunton Landfill
  - Raynham WM Transfer Station
  - Lopes/NED & NER
  - ABC Hauling/New Bedford Waste/Zero Waste Solutions
  - Attleboro Junction
  - Aggregate site
  - Miles Standish Industrial Park
  - Wind River Plant
  - C Carney in Raynham
  - Republic Fall River
- Residential collection set outs



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## Waste in Taunton

- City responsible for residential waste and recycling collection, processing and disposal
- Residents set out waste in orange bags costing \$2 each; recyclables in a rolling cart at no charge
- City owns a Sanitary Landfill with unlined and lined areas
- Waste Management has Landfill concession paying royalties (18.5% of gate revenues) until closed
  - WM obligated to be open at least through June 30, 2019
  - Landfill projected to be full in December 2019
- City gets free residential MSW disposal
- No tipping fee for waste water treatment facility (WWTF) residuals delivered by Veolia
- Current Landfill benefits approx. \$3.3 million per year since 1996
  - Overall benefit will approach \$80 million once Landfill closes in 2019

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## Waste in Taunton (cont'd)

- City tried unsuccessfully to implement regional conversion technology project
- Nearby transfer stations available to take City residential waste
- Veolia will need to find alternative disposal location and begin paying once Landfill closed
- Conversion technology developers interested in Massachusetts market



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## Waste in Taunton (cont'd)

### End Dates on Other Relevant Contracts

- Lopes, June 30, 2019, \$152 per ton
- Republic, October 1, 2017-June 30, 2022 with optional two (2) one-year extensions
- Landfill gas with Mass Gravel, 1997, 20 years with two (2) five (5) -year extensions



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## Key Points – Taunton Solid Waste

- Only a year to secure alternative disposal given Landfill estimated to be full December 2019 (subject to adjustment)
- Residents can expect higher costs once free disposal and WM Landfill royalties are gone
- Post-closure costs at Landfill needs to be covered as well
  - WM responsible for Year 1 of unlined portion
  - City responsible for rest of unlined and all of lined areas through 30<sup>th</sup> year after closure
- Cart collection of residential waste should be considered to lower cost impact and increase convenience for residents




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## Key Numbers – Taunton Solid Waste

- Landfill current permitted for 860 tons per day (TPD)
  - Annual fly over report for remaining air space due this week
  - Contract limits WM to receive up to 685 TPD
- Taunton residential waste (80 TPD in FY2018) is less than 20% of volume
  - Orange bags = 47 TPD
  - WWTF residuals = 33 TPD
- In FY2018, Landfill received 423 TPD
  - 343 TPD 3<sup>rd</sup> party waste
  - 80 TPD City of Taunton
- Residential recycling rate @ 30% by weight
  - 20 TPD with Every Other Week pick-up (5,200 Tons)
- 18,625 households in Taunton, or 558.4 lbs. per household = GREAT JOB!
- Residents pay \$2.00 per orange bag; bag holds 35 lbs.



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## Revenue FY2019 – Taunton Solid Waste

- \$1.2 Million from WM for Landfill royalties
- \$1.62 Million in orange trash bag sales
- \$4,600 in 2<sup>nd</sup> recycling cart fees
- \$700 in carboard sales revenue (Q1 FY2018)




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## Expenses FY2019 – Taunton Solid Waste

- \$91,000 Part-time employees
- \$128,000 Professional Services
- \$1.2 Million Recycling contract (Republic/NER)
  - Republic - \$800,000 collection
  - NER - \$400,000 processing
- \$889,000 Trash pick up (Republic)
- \$253,000 Trash bag purchase



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## Recommended Concurrent Tracks Forward


**Track 1** → Negotiate with WM to Extend Landfill Life

**Track 2** → Procure new services for:

- Residential waste, recycling, yard, and bulk collection and disposal
- Regional conversion technology developer\*



\*See handout on Conversion Technologies Update



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## Track 1: Negotiate with WM to Extend Landfill Life – Scenario A

- WM decreases to 200 TPD to extend City of Taunton use of Landfill
  - Challenges: timing of negotiations, quicker than Scenario B
  - Site life increase: approx. 2 years, depending on when starts
  - Cost to compensate WM to take diverted tonnages elsewhere



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## Track 1: Negotiate with WM to Extend Landfill Life – Scenario B

- Pursue mechanical wall with WM; purchase adjacent gun club and tombstone business for expansion
  - Challenges: timing of negotiations and permitting, need an interim plan or combo of Scenarios A and B
  - Site life increase: would need to calculate base on usable acres and tie into existing slope
  - Cost impact: land purchase, wetlands mitigation, permitting, cell construction, operations



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## Track 1: Negotiate with WM to Extend Landfill Life – Scenario C


- WM agrees to terminate ownership with agreeable closure/post-closure terms; City needs a new contractor to take over Taunton-only waste with goal of 150-200 TPD
  - Challenges: timing of negotiations, hiring contractor and implementation
  - Site life increase: @ 200 TPD approx. 2yrs, @100 TPD, approx. 4 years
  - Cost impact: cost of contractor for Landfill life and closure/post-closure costs for remaining airspace allocation



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## Track 2: Procure New Services

- Issue RFP with menu of options for proposers:
  - Collection of residential trash, recyclables, yard waste, and bulk
  - Processing of recyclables
  - Processing of yard waste
  - Transfer and disposal services for MSW
  - Mining of unlined portion of City of Taunton Landfill, permitting, design, and construction of new Lined cell(s)
  - Host community for regional conversion technology partner
- Challenges:
  - Short timeline needed for RFP responses
- Cost impacts:
  - Transfer and disposal: \$80-\$90/ton
  - Conversion Technology \$60-\$90/ton, and host community benefits




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## “To Do’s” Needed As Tracks Advance

- Keep Convenience Center at current site; explore possible improvements with DEP in current permit
- Before finalizing, conduct due diligence on viability and financial strength of companies solicited in RFP
- Pre-qualify potential sites for transfer station and/or regional conversion technology developer
- Seek 10-15 year disposal and processing contracts
- Address City responsibilities and costs for post-closure needs for 30 years after Landfill closes
- Consider other ways to collect residential waste to lessen cost impact



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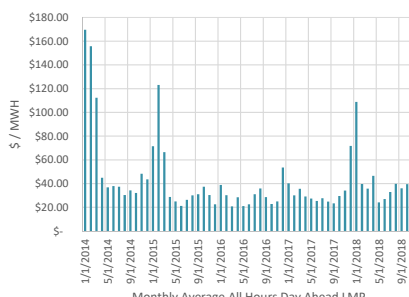


## TMLP Discussions


- Retrofit of TMLP boilers to utilize MSW-derived fuel not feasible
- Value of power per ISO New England historical data
  - 3-year average \$35 per MWhr
  - 5-year average \$43 per MWhr
- MSW energy potential:
  - 600 KWhrs per ton = \$24 per ton (assuming \$40 per MWhr)

**ISO New England Historical Pricing  
Day Ahead Electricity Value**


ISO New England SEMASS Zone



Monthly Average All Hours Day Ahead LMP




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## City of Taunton Solid Waste and Recycling Budget and Projections (2019\$)

FY2019 Waste and Recycling Budget	Transfer & Disposal FY2020	Regional Conversion Tech Developer FY2030**
<b>Revenue</b>		
Disposal royalties	\$1,200,000	0
Trash bags	\$1,620,000	?
2 <sup>nd</sup> Recycling carts	\$4,600	\$4,600
Host Community Fees	0	\$350,000
<b>Total Revenue</b>	<b>\$3,083,600</b>	<b>?</b>
<b>Operating Expenses*</b>		
Part-time staff	\$91,000	\$91,000
Professional services	\$128,000	?
Recycling contract	\$1,200,000	?
Trash pick-up contract	\$889,000	?
Trash bags	\$253,000	?
Landfill Post-Closure Costs	0	?
Tipping Fees	0	\$916,500
<b>Total Expenses</b>	<b>\$2,561,000</b>	<b>?</b>




\*DPW staff and interdepartmental costs not included  
\*\* Assumes 350,000 TPY @ \$1.00 per ton HCF

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## Conclusions

- Concurrent tracks forward to determine efficacy and costs of tracks
  - Extend Landfill life
  - Short term transfer and disposal
  - Long term regional conversion technology project with host community revenue
- Alternative residential waste collection service to lessen cost impact
- Resident costs will increase
- City should expect diverse results from the proposed RFP to make an economic decision
- Financial plan needed to anticipate changes in City's costs for solid waste management




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## Timeline

- Jan-Feb 2019
  - WM negotiations
  - RFP development
- Feb 2019
  - Decision on RFP to release
- March-May 2019
  - RFP out
- June 2019
  - 5-year financial plan
  - Select option going forward



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*Thank you!*

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