Southborough

Analysis of Solid Waste Disposal

August, 2020 by John Butler Southborough Solid Waste Disposal Analysis

- É Goal: A Comprehensive Review
 - ó This is the first full report
 - ó A variety of follow-ups are possible

É Topics

- ó Context ó US Situation and Mass DEP
- ó Current Southborough Operations
- ó Analysis of Comparable Towns
- ó Analysis of Management Choices
- ó Conclusions and Follow-ups

Decision Context 6 US and Mass DEP

É US Situation for Solid Waste Policy

- ó Landfills
 - \acute{E} US \acute{o} 53% of solid waste, but in New England 24% and dropping
 - É Cheapest where land is abundant ó much of USA
 - ó \$24/ton in Mississippi, \$100/ton in Mass
 - \acute{E} Some MA solid waste ships to landfills to the west
- ó Waste to Energy (Incineration)
 - \acute{E} Takes 13% of US waste, but in New England 41%
 - \acute{E} Cleaner than ever \acute{o} nothing is perfect
 - ó High capital investment and NIMB problem for new plants
 - É All European countries are building WTE plants
 - \acute{E} Mass DEP willing to license WTE again
- ó Recycling ó takes 34% of solid waste nationwide
 - É Politicized ó not comprehensively scientific
 - \acute{E} For non-plastics the markets are functioning, somewhat
 - ó Market price is key to success, by material type
 - δ Subject to disruption, but markets usually recover
 - \acute{E} Recycling for plastics is deeply broken and unstable $\acute{o}12\%$ of total
 - ó The China Syndrome, but in reverse. (China stopped taking plastics.)
 - ó Piling up worldwide, and in MA.
 - ó Problems: Too many to list. Has potential to work, but doesnøt.
 - \acute{E} Subject to environmental science changes \acute{o} CO2 vs. Contaminants

Decision Context ó Global and Mass DEP

É Source Reduction

- $\acute{\mathrm{o}}$ The holy grail of MSW
 - É Big talk, only modest success
- ó Per capita MSW in US is flat since 1990
 - É Thatøs good
 - É But population is up, so total is up
 - É (Southborough seems to be doing better than USA)
- ó Worldwide MSW is growing rapidly
- ó 30% of waste is packaging
 - É Best candidate for reduction
 - É Getting rid of plastic packaging would be the big win
 - ó Still headed the wrong way
 - É Cardboard recycles well $\acute{\mathrm{o}}$ least of the problems

Mass DEP and Statute

É Mass DEP makes rules for Towns

- ó We just take their rules
 - $\acute{E}\,$ But we have to assume that facts will affect them, eventually
- ó Pushing recycling ó by regulation and advocacy

 $\acute{E}\,$ Have no good answer for plastics or comingled

- \acute{E} Some material-specific successes, however
 - ó Eg. Food waste from restaurants
- $\acute{E}~$ It as a hard job. Easy to criticize
- ó MSW destinations for Mass communities
 - \acute{E} Waste to Energy \acute{o} now the least-bad, again
 - \acute{E} Most former MA landfills are closed.
 - \acute{E} Shipment to out-of-state landfills taking up the gap
- É By Statute, the local Board of Health has regulatory authority over MSW collection and disposal ó regarding quality assurance
 - ó Reflects original reason for government involvement: public health
 - ó An active participant in some Towns
 - ó Licensing authority for haulers ó among many other powers
 - ó Not active in Southborough for last 30 years
 - ó I notified our BOH of this study

Context Summary

- É Waste to Energy
 - ó Stable and Preferred for Massachusetts
 - ó Our solution with Wheelabrator
- É Recycling
 - ó Not a stable system as a whole
 - ó Market fluctuations drive uncertainty
 - ó Environmental priorities could also change
 - \acute{E} Prioritize contaminants you get one answer
 - \acute{E} Prioritize CO2 $\acute{\mathrm{o}}$ you get some different answers
 - \acute{E} Priorities were set pre-Global Warming and haven ${\it d}t$ adjusted
 - ó We must be prepared for volatility and change
 - We should assume costs are equal to MSW ósafest plan
 É At \$57 now vs. \$69, but best to assume it might equalize

Current Southborough Situation

É Southborough Model

- Ó Transfer Station a Town-run option for Residents
 É Mostly funded by stickeró 80% of cost
 É Not Pay as You Throw (PAYT)
- 6 Curbside: Offered Privately by Contractors

É 30% of total households, approximately

- $\acute{\mathrm{o}}$ But only 435 households accounted for by survey
- 6 640 households unaccounted for, presumed curbside

É Curbside % probably rising slowly ótonnage unknown

- ó Commercial users must contract privately
 - É Typical for communities our size
 - \acute{E} EDC, contacted, has not seen this as an issue

É The Transfer Station
Ó Wheelabrator for MSW
Ó Recycling via E L Harvey
É Volumes and Costs by Type
É Operational Costs and Funding
É Price/Volume Economics

É The Transfer Station

- ó 44 years old.
 - É Built before recycling
 - $\acute{\mathrm{E}}$ Recycling added later, around 2001
 - É Recycling located in visually separate area
- ó MSW hopper maintainable indefinitely
 - É With good planning ó which we have
 - É \$5000/yr in a good year, \$10,000+ if trouble
 - É Key repair parts maintained on site
 - É Occasional major repairs
 - É Unlikely to suffer prolonged downtime
- ó Two physical areas imply two staff attendants
 É Save staff if rebuilt for better sight-lines
 É A possible goal of rebuilding

Wheelabrator for MSW

- \acute{E} Wheelabrator is a Waste to Energy (WTE) Incinerator in Millbury
 - ó Takes all our non-recylables (called õMSWö)
- É Southborough contract is through 2027
 - $\acute{\mathrm{o}}$ Probably stable through 12/31/2027, and beyond
 - É Price per ton has CPIx*0.7 escalator δa good deal for Town so far
 - \acute{E} Our current price is \$69/ton.
 - É Expect a big change after 2027 (Will require preparation by Town)
 - É Contract is for õSouthborough Residential and Small Businessö disposal
- É Wheelabrator is privately held \acute{o} (LLP \acute{o} Private Equity)
 - ó So, we donøt have detailed financials
 - É Not ideal for analysis ó a bit of a blind spot
 - É Contract requires a \$50M net worth ó the type of clause that never works
 - ó Owner has large portfolio of such investments
 - ó No current reason to believe it is unstable
- É Mass is dependent on WTE plants
 - ó Mass DEP would like more WTE plants.
 - É 40 yrs from DEP: õTheyøre good. No, theyøre bad. No, theyøre good.ö
 - ó Still controversial, but WTE is best in-State option
 - ó All things considered, itøs great we have Wheelabrator

E L Harvey for Recyclables

É E L Harvey supports our recycling area

- ó Owns most of the equipment
- ó Handles the major recyclables
 - $\acute{\mathrm{E}}$ Paper, newspaper, comingled and cardboard
 - \acute{E} We have had large recent cost increases
 - ó Tipping costs vary by type of material
- $\acute{\mathrm{E}}$ Other handling for some items
 - ó Yard waste
 - ó Miscellaneous ó steel, batteries, sharps, clothing
- É Costs subject to market fluctuations
 - ó Lately has been going up, up, up
 - ó Probably the õfreeö era will never return
 - ó Costs may become similar to MSW, but only on average
 É Currently \$57/ton for our mix, \$100/ton for comingled
 - É Just to be clear ó would be cheaper to send comingled to Wheelabrator, but would be illegal per DEP ó crazy situation

É Tipping Volumes and Costs by Type

- ó MSW ó going to Wheelabrator
 - É 2553 tons FY19 = tipping cost 174,000
 - É Tonnage has slowly declined over 15 years
 - ó Per capita, and absolute totals have declined
 - ó it appears that tons per capita has declined from .70 to .54
 - » Even allowing for some shift from public to private disposal, although our data is imperfect
 - ó This excludes commercial, which is completely unknown
 - \acute{E} Tipping cost <u>down</u> from 7 years ago due to contract revision but now slowly rising again
 - ó 2012 = \$226,000,
 - ó 2018 = \$169,000
 - ó 2019 = \$174,000
 - \acute{E} Overall MSW tipping costs are well controlled and fairly stable
 - $\acute{\rm E}$ Our tipping fee of \$69/ton compares to Statewide reported of \$100/ton
 - \acute{E} Expect slow upward movement
- ó Recyclables
 - \acute{E} Unstable prices and situation
 - \acute{E} 22% of total tipping costs
- É Comingled formerly was free, now \$100/ton
 - \acute{E} Newsprint \$40/ton, cardboard \$20
 - \acute{E} Single stream: formerly fashionable, now is most expensive
 - \acute{E} FY19 total fees: \$50,000 up from FY16 \$15,000
- É Total Municipal Disposal (Tipping) Expense \$231,740 (FY19)

É Operational Costs (mixed years)

Transfer Station Operations		
Labor and Benefits, including retirement, fy21 rates	\$ 234,432	
Other Expense (departmental FY21)	\$ 30,900	
Capital Expense	\$ 46,500	
Total Annual Operating Expense (not incl. disposal)	\$ 311,832	-
Disposal Expenses FY 19 Actual	\$ 231,740	—
Total Annual Transfer Station Operating Costs	\$ 543,572	

É Note that fixed costs are large portion ó More than 50% of relatively fixed expense ó Variable cost probably <= \$80/ton for MSW É Not usually accounted this way, however É \$140 per Disposed Ton (all types, full cost) ó Operations and tipping combined

É Costs and Funding of Operations

Total Annual Transfer Station Operating Costs	\$ 543,572	100%		
Revenues from Sticker Fees FY 19	\$ 424,970	78%		
Covered by Tax Levy	\$ 118,602	22%		

Southborough Total Solid Waste Costs

- É <u>Total</u> Costs Are Important For
 - ó Consideration of Alternative Municipal Models
 - É Municipal Curbside ó for example

É <u>Total</u> Costs are sum of:

- 1. T-Station Operations
- 2. Residential Private Curbside
- 3. Commercial Disposal
 - $\acute{\mathrm{E}}$ But, Commercial Disposal not considered in this study, so these costs excluded
 - $\acute{\rm E}$ $\,$ We have no data on Commercial at this time $\,$

Residential Estimated Total Southborough Solid Waste Costs

Residential Total Estimate of Solid Waste Disposal Costs	\$ 983.492
Missing 642 households (condos and unknown) est. \$360 avg annual fee	\$ 231,120
Known 435 subscribers at \$480 avg annual fee	\$ 208,800
Residential Curbside and Private Hauling	
Transfer Station Costs	\$ 543,572

T-Station Price/Volume Economics

É Fundamentals Review

- ó T-station has large fixed expense component
- ó Variable costs \$80/ton (estimated, for MSW only)
 - \acute{E} We are mainly in the MSW business.
 - É Currently about \$68 variable cost estimate for all tonnage combined
- 6 We have lots of excess MSW capacity
- 6 Market price for MSW is \$100 -\$200/ton
- É Our current customer economics
 - ó 1.6 tons per year per customer household (incl. recyclables)
 - 6 \$173/yr avg price per customer household, after all discounts
 É \$250/yr avg price per non-Senior customer
 - 6 \$109/yr estimated variable costs per customer (\$68x1.6)
 - ó Average customer yields about \$64 operating margin toward fixed expenses (estimate, including all types of recyclables)

É Implications:

- 1. Losing T-Station customers is bad, gaining customers is good
 - \acute{E} Must run a service residents want, when compared to curbside
 - 6 This the important lesson from Wayland, Sudbury, as will be seen
- 2. More MSW volume at close to market\$/ton would be beneficial 16

É How Comparable Towns were Selected ó Query DOR data (Muni Database) Criteria: É Pop 8-15K, Inc/Cap \$80-160K, PropVal/Cap \$190-300 ó Results (only): Southborough, Boxford, Medfield, Norwell ó But must apply judgment É Drop Boxford ó Pop Density too low (spread out) É Re-query with Pop Density and Inc/Cap criteria added ó Results: Southborough, Sudbury, Wayland, Weston É Look at Our Neighbors also: Webo, Nbro, Hopk, Ashland ó Rejected due to population or Inc/Cap criteria É Final list: Medfield, Norwell, Wayland, Sudbury ó Did not consider MSW in this selection ó Also looked at Medway É Could do more analysis of other municipalities

É Mass DOR Data for Comparables

		F	Y 2017 DOR						
	2018		Income Per	FY 2018 EQV		Population	2018 Total	CIP % of Total	
	Population		Capita		Per Capita	Density	Road Miles	Value	
Southborough	10,169	\$	117,088	\$	253,902	725	85.77	19.49	
Medfield	12,904	\$	97,217	\$	217,102	896	80.32	5.63	
Norwell	11,115	\$	93,513	\$	252,595	531	91.06	14.57	
Sudbury	19,627	\$	113,334	\$	244,359	809	145.77	6.73	
Wayland	13,882	\$	147,191	\$	277,157	922	96.53	4.58	

É My Methods for Gathering Info
 ó Analysis of public documents
 ó Outreach/interview
 É No Towns handle Commercial users
 ó Therefore, no further inclusion here

É Medfield ó Most like Southborough

- ó T-station and private curbside
- ó T-station open 3 days per week
 - \acute{E} Fee for sticker \$50/yr
 - É No PAYT
 - É Approx 4000 users (as reported)
 - É MSW to Wheelabrator Millbury, EL Harvey for Recyclables
 - É Same accounting practices as ours
 - É Tonnage 3900 (same as ours)
 - ó We do not have their budget numbers for labor at this time
- ó They have considered municipal curbside
 - É But citizens didnøt want it (as reported to us)
- É Summary ó Very similar to Southborough
 - ó Differences are small
 - É 3 days per week vs our 4
 - É Much lower sticker fee

É Norwell

ó Town provides full residential curbside É Weekly pickup: MSW and Recyclables É Not PAYT óexcept for excess quantities ó Basic service covers all normal usage, very little PAYT É 3674 households É Contracted out to Waste Management, Inc ó \$1,133,375, or \$308 per household per year ó Town also provides a recyclables center É No fee, except for large or unusual items É No MSW allowed É Curbside includes recyclables too, so low usage

É Sudbury

- ó T-Station ó885 users for MSW
- ó Private curbside: 4596 estimated
- ó T-station
 - É Fee \$170/yr plus PAYT 30gal bag @ \$2.40 ea
 - É Specific fees for bulk items list
 - É 3 days per week 8am to 3pm only
 - \acute{E} Enterprise accounting method
 - ó \$325,000/yr total budget
 - ó Chasing declining usage
 - É Disposed 1018 tons (CY19)
 - É Cost per disposed ton \$319
 - ó Compare to Southborough \$140/ton
- 6 Sudbury would save money by single contract municipal curbside, then shutting T-Station

É Wayland

- ó T-Station/PAYT and Private Curbside
- ó Most residents use curbside now
 - É Curbside growing, T-station declining slowly
- ó T-Station
 - \acute{E} 1875 subscribers out of 5000 households
 - \acute{E} Open three days per week, 7am to 4pm
 - É \$165/yr plus \$2.50 per 30 gal bag
 - $\acute{\mathrm{o}}$ $\,$ Wastezero runs their bag distribution/sales program
 - ó Also have specific fees for listed bulk items
 - $\acute{E}\,$ MSW goes to WTE (Semass), Casella recycling
 - \acute{E} Revolving fund accounting
 - ó ó OK in 2020
 - » FY 19 needed \$100,000 from Reserve Fund
 - ó Donøt like revolving fund system as too restrictive
 - $\acute{E}~$ Have had declining revenues \acute{o} chasing fixed rising costs
 - É \$425,000 Budget
 - \acute{E} Disposed 1707 Tons in CY19
 - É Cost \$249/ton
 - ó Compare to Southborough \$140/ton
- 6 Wayland would probably save money by single contract Curbside and shutting T-Station
 - É DPW chief brought this up with me
- ó (Note: I promised the DPW Chief Iød share my results with him.)

É Observations/Lessons

- ó From Wayland and Sudbury ó have very high cost per ton
 - É Lesson: donøt take customers for granted
 - ó Residents can drift toward private curbside
 - » Raising fees órisks more residents leaving system
 - » Make it annoying PAYT, short hours os they run away
 - É High fixed expense of T-Station is a key economic factor
 - É Donøt get stuck with declining revenue and high cost per ton
 - ó Wayland/Sudbury costs per ton are 177% and 227% of ours

É DPW Chief in Wayland:

õOlder residents all use T-station. New families all use curbside. Hard to make the economics stay balanced. We should probably go õall curbsideö but difficult to do. Just spent over \$1M on T-station upgrades.ö

ó Norwell and Medfield both have good working models

- É Different models can work
- É Norwell ó the municipal curbside can work at about 15% higher cost than we have now, counting total Town spending
 - ó But, disadvantage is õone size fits allö and higher cost for many

T-Station Price/Volume Economics

É The Market in Southborough ó Curbside quote: \$442/yr per household ó T-station sticker: \$250/yr — ó Not much room for sticker price increase É Curbside pickup is regarded as better service by many, but not all, residents. ó PAYT at T-Station É Must buy and use special bags or tags É Curbside eliminates the PAYT annoyance factor-just fill the barrel

É Observations/Conclusions

ó Benefits of Southboroughøs Current Operation

 \acute{E} Choices for residents at varying price points

- ó Approx \$25 avg for over 65 (paid in tax bill)
- ó \$275 for under 65. (T-Station sticker + tax portion)
- ó \$525 for private curbside (average price)
 - » \$440 \$630 quoted
- É Low tax burden on non-users of T-station
 - ó Residential curbside pay only \$25/yr in taxes on avg.
 - ó For commercial taxpayers 96% of cost is on residents
 - » They get no benefits and have almost zero burden
- É Cost per ton is good
- \acute{E} Stable and predictable operations and finances
 - ó Uses less than 3/10ths of 1% of the Levy (0.0025)
- É MSW tonnage per capital going slowly down
 - ó (Best we can tell ónot much info on curbside tonnage)
 - » Can estimate from pre-2008 tipping data
 - $\acute{\mathrm{o}}$ The socially beneficial direction. Tells a good story.

Analysis of Possible Choices

É Two categories of management choices ó Operational and Op Management Options ÉCurbside ÉT-station reconstruction ÉPAYT and Bulk Items Schedule É Adding MSW at market prices **6** Funding and Accounting Choices É Fees vs Levy É Budget, Revolving Fund, Enterprise Fund

Analysis of Op Choices

- É Operational Choice: Eliminate the T-Station ó switch to Curbside Only
 - $\acute{\mathrm{o}}$ Sub-options
 - a) 100% Privateó individual contracts, no Town role
 - \acute{E} Boylston made this change \acute{o} It can work
 - \acute{E} $\,$ Has highest total cost for residents.
 - \acute{E} Estimate \$1.8 million/yr total vs. current estimated \$983,000
 - b) Private operator / Town-wide contract
 - É Like Norwell
 - $\acute{\rm E}$ Estimate costs of \$1.1 million/yr (range \$925 to \$1.5M)
 - \acute{E} Medwayøs best contract would place us at \$925
 - \acute{E} $\,$ Would cut costs for current private curbside users, increase for all others
 - \acute{E} Wheelabrator contract is flexible to allow this
 - c) Town curbside with Town trucks ó no cost estimate in this analysis
 - É Regain some land after demolition costs of T-Station area
 - É Any of these would require further study, but are possible
 - ó But, why switch? Current system works.
 - \acute{E} Citizen preference for curbside would be essential
- É Private operation of T-station
 - É Westborough has this.
 - \acute{E} Not analyzed \acute{o} could be, if asked to do so

Analysis of Op Choices

É Operational Choice: Keep current operational system ó Andí Option to *Rebuild T-station*

- ó Rebuild Concept
 - $\acute{E}~$ Tear down current MSW hopper and shed
 - \acute{E} Relocate new MSW hoppers near to recycling $\acute{\mathrm{o}}$ no shed
 - \acute{E} All compactors Town owned $\acute{o}MSW$ and recycling
 - É Benefits
 - ó Can be supervised by one employee
 - » Down from two with current layout
 - ó Could be some land repurposing, but maybe not
 - ó Modernization of equipment ó but hard to quantify value
- ó Analysis of Cost/Benefit of Rebuilding
 - É Save 81,000/yr (sal&ben) after 5 years transition
 - ó Assume 2.25%/yr salary savings escalator in analysis
 - É Cost \$2.5 million, assume bond at 1.5%/yr
 - $\acute{E}~$ Breakeven is 31 years on cash flow. Not a financial justification.
 - ó Duration is beyond mere financial analysis.
 - É So, would require
 - ó Some non-financial justification ó land repurposing?
 - \circ $\,$ Plus, belief in stability of recycling basics
 - » For example, no increased sort monitoring requirement, or (unlikely) fundamental explosion of the recycling concept.

Analysis of Op Choices

- É Operational Choices:
 - ó Pay as You Throw (PAYT)
 - $\acute{\rm E}$ 137 of 350 MA communities currently use PAYT
 - \acute{E} Primarily a volume reduction system, not a funding system
 - \acute{E} Can destabilize the revenue/cost balance for the Town
 - ó Leave us with a expensive T-station fixed expense with low usage
 - » Both Wayland and Sudbury seem to suffer this
 - » Residents leave T-station for private curbside
 - » Our high \$Inc/Cap suggests we would be at same risk
 - \acute{E} Our fundamentals of declining MSW tonnage seem ok already
 - $\acute{\mathrm{o}}$ PAYT does lower tonnage, however
 - \acute{E} Requires bulk items schedule and fee collection at T-station
 - ó Anything that doesnøt fit in bags. A new set of issues to deal with
 - $\acute{\mathrm{E}}$ Practically requires private distributor for bag retailers
 - ó Supermarket distribution is a problem for us, even with that
 - \acute{E} Would require further analysis, if asked to do so
 - ó Another option: shorten T-station hours per week
 - \acute{E} We are currently on the longer side, with 4 days
 - É No analysis done of savings or issues, but could be considered⁹

Analysis of Funding Choices

É Equitability analysis of our Current System

- ó Good Equitability Characteristics:
 - É Mostly paid by user fees (80%)
 - É Low Burden on non-users
 - ó Private curbside and commercial pay very little
 - É The Senior discount also meets some equitability tests
 - $\acute{\mathrm{o}}$ Seniors impose low costs relative to other segments
 - » Eg. School costs are huge. Households with school age children, 42% (estimate) \$30,000/yr average benefit per household.
 - » T-station and Sr. Center costs are tiny by comparison
 - $\acute{\mathrm{o}}$ One need not consider such equitability factors
 - » If one does, one may as well consider it quantitatively
 - ó Massachusetts has few legal options in the Levy law for varying burden based on use of municipal services
 - » So the Senior fee waiver has been a way of making a small compensatory equalization gesture

Analysis of Funding Choices

É Option: Levy Only ó No Sticker Fee

- ó Equitability
 - \acute{E} Much less equitable for non-users of T-station
 - $\acute{\mathrm{o}}$ These would pay for what they dongt use, or cannot use:
 - » Private Curbside Residents
 - » Commercial Entities
- ó Administrative
 - É We would still need stickers, so not much savings
- ó Fiscal
 - \acute{E} Need to add \$425,000 to the Levy and budget
 - $\acute{\mathrm{o}}$ To offset lost receipts
 - ó 0.9% Levy bump
 - \acute{E} Could be done, but not a small sum
 - \acute{o} Curbside customers rationally vote $\widetilde{o}No\ddot{o}$ at ATM

Analysis of Funding Choices

How can we balance Revenue and Costs?

- Lower costs, by rebuilding T-station to save labor
 É Economics not attractive ó 30+ year payback
- 2. Increase Revenue, selling more MSW tonnage
 - É We have low costs and spare capacity
 - ó In 2005 we moved 2700 tons more than in 2019
 - ó Our <= \$80/ton for MSW is very good right now
 - É Consider ways to take in more MSW at market or close to market prices
 - ó From sources in Town \$25-75,000 realizable, maybe
 - » 1100 tons (estimate) going through curbside
 - » Unknown commercial tonnage in Town
 - É This concept would require further investigation
 - But, if we sold the T-station to a private operator, and required they keep the current resident prices, this is what they would do, I think.

Analysis of Accounting Choices

É Change to Enterprise or Revolving Fund

- ó Not carefully analyzed in this study É What problem would we be solving?
- ó Observation: Revolving fund restrictions have caused problems in Wayland
 - É õ
Deficit not permittedö resulted in potential crisis
 - É Wayland DPW Chief now looking to terminate Revolving Fund accounting
- 6 Sudbury has Enterprise Fund and very high costs
- ó Lessons from Wayland and Sudbury
 - É Donøt confuse these accounting options with balancing revenue and expense
 - ó They don¢t automatically produce good operating results

Analysis of Licensing Choices

- É My õlnformationö Recommendation
 - ó Recommend Board of Health license private haulers
 - \acute{E} With a low license fee, to cover administration only
 - \acute{E} Require haulers to provide annual information
 - ó Number of tons and type of material
 - ó Number of customers
 - ó Disposition of refuse by type
 - ó Other, based on review of Towns that have license requirement
 - ó DEP wants this info
 - ó This information could help us defend our practices if the DEP should ever challenge us, and makes understanding the system much easier.
 - \acute{E} We should have this information, in my opinion
 - É We don*a*t have it
 - \acute{E} I suggest BOS and Advisory politely request BOH to implement

Concluding Summary

- É Fundamentals:
 - ó MSW Wheelabrator looks good ó best solution
 - ó Recycling is unstable, globally
 - $\acute{\rm E}$ Expect continued volatility, particularly of prices
- \acute{E} Lessons from Other Towns:

 - ó There are ditches you can drive into, if not careful
 - $\acute{\mathrm{E}}\,$ Get stuck with high costs and low value
 - $\acute{\mathrm{E}}\,$ Sudbury and Wayland for example
- É Choices:
 - ó Rebuilding the T-station
 - $\acute{\mathrm{E}}$ Would need some non-financial justification
 - Ó Consider adding MSW tons at market price/ton
 É Might work, might not, but needs further analysis

Concluding Summary

É Our current system works well ! ó Reasonably efficient municipal operation É Cost-effective service delivery overall É Currently avoiding pitfalls of some other Towns É Stable ó to the extent possible ó A reasonably equitable funding system É Low tax impact ó Provides citizen choices É At different price points

Follow-up

É Suggested

- 6 Research BOH regulations of other Towns
 É Draft suggested topics
- ó Investigate additional revenue potential of capturing more MSW tonnage É A feasibility review

É Possible

- ó Manage resident survey on curbside service
- ó Manage survey of new residents for usage trends
- 6 Investigate private ownership/operation of Transfer Station

Appendix

Mass DOR Data from Selected Towns

				FY 2020												
				Single	FY 2017 DOR								Assessed			CIP % of
				Family Tax	Income Per	FY 2018 EQV		Population	2018 Total	Assessed Value	Assessed Value	Assessed Value	Value Pers	Total Assessed	R/O % of	Total
DOR Code	Municipality	County	2018 Population	Bill	Capita	Per Capita	Land Area	Density	Road Miles	Residential	Commercial	Industrial	Prop	Value	Total Value	Value
277	Southborough	WORCESTER	10,169	10,569	117,088	253,902	14.02	725	85.77	2,113,654,047	283,702,891	142,899,300	85,193,300	2,625,449,538	80.51	19.49
175	Medfield	NORFOLK	12,904	12,062	97,217	217,102	14.40	896	80.32	2,625,162,353	92,256,017	29,262,300	35,068,620	2,781,749,290	94.37	5.63
219	Norwell	PLYMOUTH	11,115	10,814	93,513	252,595	20.93	531	91.06	2,359,178,932	317,751,447	30,953,000	53,673,680	2,761,557,059	85.43	14.57
288	Sudbury	MIDDLESEX	19,627		113,334	244,359	24.27	809	145.77	4,451,809,500	179,424,076	30,823,000	111,016,580	4,773,073,156	93.27	6.73
315	Wayland	MIDDLESEX	13,882	14,214	147,191	277,157	15.05	922	96.53	3,811,844,266	132,854,334	4,452,500	45,781,200	3,994,932,300	95.42	4.58