

WE'RE STUCK!



Strategies for Communities with Mature Recycling & Composting Programs



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OVERVIEW OF PRESENTATION

- Residential options
- Commercial
- Mandates & Outreach
- Measurement

- "Now" options

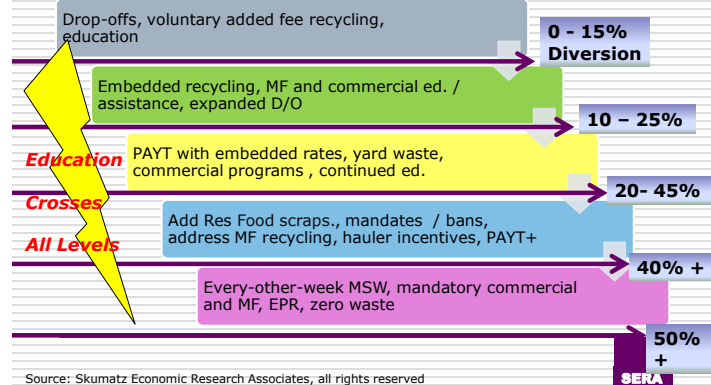
Perspective – Quantitative, Best Practices, Implementable Research to advise communities

HIGH, BUT STUCK – PICKING WHAT WORKS

- Get more from existing programs
- Smart choices for next
- Impacts and cost-effectiveness
- Efficiencies –
 - More for the same OR The same for less...
 - Use stops / programs effectively - Get more at every stop
 - What we can impact now
- ...Findings based on work for leading towns



PROGRAM EVOLUTION



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SERA BEST PRACTICES RESEARCH TONS & COST ANALYSIS –

- Results from this presentation based on statistical analysis of SERA's database of 1,300 communities

Source: SERA 1996-2015
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EFFICIENT, EFFECTIVE OPTIONS FOR STEPPING IT UP NOW

	High Diversion Impact	Savings / C/E
Residential: PAYT enhancements, Coll'n optimization & Food scraps, Ordinances to get more; Organized collection	√	√
Commercial: Barriers and Bidding PAYT with embedded recycling New delivery	√	√
Incentives, Mandates / bans	√	√
Education / Outreach	?	?
Metrics and goals	?	?

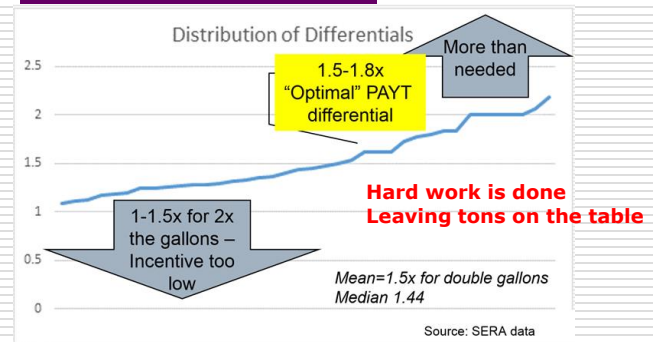
Source: Skumatz Economic Research Associates, Inc. analysis



RESIDENTIAL STRATEGIES READY NOW

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RESIDENTIAL PAYT OPTIMIZATION



Similar data for bag/tag programs

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EVEN IN CALIF, PAYT NOT OPTIMIZED & CITIES ARE LEAVING TONS ON THE TABLE



- Our research showed only 42% of CA's programs were designed with best design practices...

Source: Econservation Institute and SERA



PAYT OPTIMIZATION

Can Size & Frequency

- Meaningful differential
- 32 gallon option
- Mini or micro can
 - Well-established, years
 - Successful, integrates



Source: SERA



OPTIMIZING COLLECTIONS – HOW FAR CAN YOU GO?

LOWER COST/MONTH

M O R E D I V E R S I O N	3 stops / week – old style! (Trash 2x/wk) Recy wkly	2 stops / week Trash wkly Recy wkly	
	3 stops / week Trash wkly Recy wkly Org wkly	2 stops / week Trash wkly Orgs & Recy Alt	1.5 stops / week Trash LOW Recy & Org Alt
		2 stops / week Orgs Wkly Trash & Recy Alt	

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TRADE A STOP - ITS ALL ABOUT THE COLLECTIONS! TIP FEE TRADEOFF TABLE

MONTHLY CHANGE IN TIPPING PORTION - Moving to Organics from disposal - positive (red) means increase in costs

MONTHLY incremental tipping portion of cost assuming 70 lbs of organics collected per MONTH, whether collected weekly, every other week, or... Bold lines are range for common tip fees for organics processing

LF Tip across; YW tip down	\$10	\$20	\$30	\$40	\$50	\$60	\$70	\$80	\$90	\$100
Organics	\$0.00	-\$0.35	-\$0.70	-\$1.05	-\$1.40	-\$1.75	-\$2.10	-\$2.45	-\$2.80	-\$3.15
tip fee	\$0.35	\$0.00	-\$0.35	-\$0.70	-\$1.05	-\$1.40	-\$1.75	-\$2.10	-\$2.45	-\$2.80
per ton down	\$1.05	\$0.70	\$0.35	\$0.00	-\$0.35	-\$0.70	-\$1.05	-\$1.40	-\$1.75	-\$2.10
matrix	\$50	\$1.40	\$1.05	\$0.70	\$0.35	\$0.00	-\$0.35	-\$0.70	-\$1.05	-\$1.40
	\$60	\$1.75	\$1.40	\$1.05	\$0.70	\$0.35	\$0.00	-\$0.35	-\$0.70	-\$1.05
	\$70	\$2.10	\$1.75	\$1.40	\$1.05	\$0.70	\$0.35	\$0.00	-\$0.35	-\$0.70
	\$80	\$2.45	\$2.10	\$1.75	\$1.40	\$1.05	\$0.70	\$0.35	\$0.00	-\$0.35
	\$90	\$2.80	\$2.45	\$2.10	\$1.75	\$1.40	\$1.05	\$0.70	\$0.35	\$0.00
	\$100	\$3.15	\$2.80	\$2.45	\$2.10	\$1.75	\$1.40	\$1.05	\$0.70	\$0.35

*=Per Month

Tip Diffc	\$0.00	\$10.00	\$20.00	\$30.00	\$40.00	\$50.00	\$60.00	\$70.00	\$80.00	\$90.00
\$/mo	\$0.00	-\$0.35	-\$0.70	-\$1.05	-\$1.40	-\$1.75	-\$2.10	-\$2.45	-\$2.80	-\$3.15

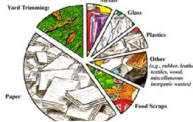
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ALLOCATING TOTAL COLLECTIONS



- Add Organics by reducing other collection to EOW
 - EOW – half as many trucks (& staff)...
 - Lose little in recycling (1-3% percentage points) -
 - Gain double digit stream (15% plus)
 - Nearly "free" – only tip fee change (and large containers)
 - Cost / ton better & total tons better ... and it "keeps".
- Consider EOW Trash (& weekly organics)
 - Get more FW – drives reluctant people to divert food
 - Vancouver (47%) – optional EOW, Monthly (16% choose)
 - Portland (54%=>70%) – citywide, trash down 38%
 - Renton- +25% R; +44%O; -20%G



Source: Skumatz Economic Research Associates, Inc. analysis

CONSIDER ORGANIZING COLLECTION - OPTIONS

- Consider moving to...
 - Ordinance or Contracting for collecting
- Moving from multiple haulers working in your town, you achieve;
 - Economies of scale
 - Better control over offering / design of recycling and organics programs
 - Fewer trucks, sometimes lower rates
- But pros and cons of course –political decision!

*Economies of scale
Control / mandates
Fewer trucks...
Substantial savings
... but...*

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CONSIDER ORGANIZING COLLECTION – NOT SPLITTING COLLECTION

- Our models show 10-25% savings if trash and recycling by same collector (city, hauler, whoever!). Efficiencies in:
 - Backup trucks
 - Staffing
 - Billing, bad debt, etc. etc.

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OTHER ADVANCED RESIDENTIAL STRATEGIES

- "No bin no barrel"
- Higher rate if you DON'T set out recycling or organics

Source: SERA

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INTEGRATED DECISIONS – AFFECTED BY...

- Are trucks flexible?
 - Fully-automated helps... easily shift between materials
 - Don't have to bring materials to same location like split trucks
- Recycling processing
 - Single stream (& large containers) helps... one collection, large containers that can wait
 - Can do dual stream by alternating material weeks
- Organics processing essential
- Education concerns
 - Which week? Very manageable
- Perception & containerization
- Health departments & regulators
 - For every other week collection
 - For food scraps composting



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Oversubscribed customer

COMMERCIAL STRATEGIES READY NOW

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EFFICIENT, EFFECTIVE OPTIONS FOR STEPPING IT UP NOW

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Education / Outreach	?	?
Metrics and goals	?	?

Source: Skumatz Economic Research Associates, Inc. analysis

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KEY COMMERCIAL STRATEGIES

- #1 PAYT
 - Mandate recycling cost embedded in trash fee (50%-150% of trash size)
 - Organics embedded
 - Small commercial
 - Eliminates barrier of 'recycling adds avoidable cost'
 - Space / screening issues

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KEY COMMERCIAL STRATEGIES

- Tip Fee Incentives
 - Surcharges; tax forgiveness
 - SERA Research on uptake of programs
- ABC Law
- Invoicing / bidding improvements for recycling uptake & savings
 - Barrier
 - Invoice & contract issues
 - Encourage bidding / education / website

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INCENTIVES / MANDATES READY NOW

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BIG BANG EFFICIENCIES:

- Mandates and bans
 - Cost-effective & big tonnage impact
 - Addresses 'Chicken and egg'
 - Never first pick by stakeholder groups...
- Differential tip fees for incentives (cities, haulers)
- What's the barrier?
 - Political will
 - Spend political capital wisely



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RECENT SERA STUDY - IMPACT COMPARISON

SERA analysis shows... SAME City Budget – 11-30 times more tons if you make sure bans / mandates are part of the solid waste plan – not just the “usual suspects” (focused on outreach) that many stakeholder groups want.

Spend your political capital where it will really deliver tons!

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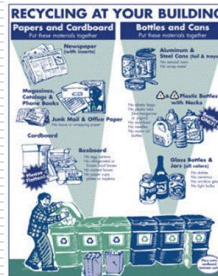
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MAKING EDUCATION & OUTREACH MORE EFFECTIVE

- Don't focus on traditional outreach (awareness focus).
- 1. Self-efficacy
- 2. Market what motivates
- 3. Social marketing ROI



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THE DIFFICULTIES: REFLECTING PROGRESS → IN A WAY THAT...

Reflects goals	<ul style="list-style-type: none"> Variety –maybe multiple metrics / confusing?- Next page 	Represent Criteria (others too)
Compare over time	<ul style="list-style-type: none"> Affected by economy? 	
Compare to other towns	<ul style="list-style-type: none"> What's included; Varied sophistication levels 	
Low Cost	<ul style="list-style-type: none"> Too much or expensive data (or calcs) 	
Multiple haulers / facilities	<ul style="list-style-type: none"> Data col'n, authority Estimations 	
Supports next steps / causal	<ul style="list-style-type: none"> Actionable rec'm's 	

GOALS – TO REFLECT IMPACTS

Successful diversion of recyclables	Successful diversion of organics	Source reduction
Diversion of HHW	Cost-effectiveness	Toxics reduction
Sustainability	Triple Bottom Line (TBL)	Satisfaction, participation, set outs, indirect effects, others...

NEW METRIC

- PRR – Percent Recoverables Remaining (or “Good Stuff Left”)
 - Data from 1 source / reporting issue
 - Tracks what you asked for
 - **Tells you what to do next**
 - Flexible
- PRR-G (GHG)
- PRR-V (\$)
- Add to list; measurement protocols...
 - See SERA article, Resource Recycling last summer

TAKEAWAYS – THERE ARE NEAR TERM OPTIONS

- Get max out of what you've got, or MORE with the same, or SAME for less...
- Residential
 - Enhanced PAYT (differentials, mini/micro)
 - Collections: EOW, including trash
 - Organize Collection
 - Strategies to “force” use
- Commercial
 - PAYT / embedding
 - Contracts & invoices & right-sizing
 - New delivery method
 - Incentives; surch/taxes
- Bans / Mandates
- Education
 - Drives uptake & efficiency; motivate, don't just inform
- Reconsider Metrics
 - Measure what you care about; inform decisions & next steps

THANK YOU!!

Questions?

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Web resources: www.paytnow.org;

www.paytinfo.org; serainc.com

