PAYT: WHAT’S HOT IN MATERIALS MANAGEMENT’S IMPACT ON CLIMATE CHANGE?

2017 NYS Recycling Conference

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WHAT WORKS IN MOVING THE NEEDLE ON CLIMATE CHANGE?

- Get more from existing programs
  - More for same $; Same for lower $
- Impacts and cost-effectiveness
  - Variety of options
  - What we can impact now
- Smart choices for next – GHG results – SERA work shows PAYT is most cost-effective GHG strategy (showed $/MTCE and Job creation)
**PROGRAM EVOLUTION**

1. **Drop-offs, voluntary added fee recycling, education**
   - 0 - 15% Diversions

2. **Embedded recycling, MF and commercial ed. / assistance, expanded D/O**
   - 10 - 25%

3. **PAYT with embedded rates, yard waste, commercial programs, continued ed.**
   - 20 - 45%

4. **Add Res Food scraps, mandates / bans, address MF recycling, hauler incentives, PAYT+**
   - 40% +

5. **Every-other-week MSW, mandatory commercial and MF, EPR, zero waste**
   - 50% +

Source: Skumatz Economic Research Associates, all rights reserved
# EFFICIENT, EFFECTIVE OPTIONS FOR STEPPING IT UP NOW

<table>
<thead>
<tr>
<th></th>
<th>High Diversion Impact</th>
<th>Savings / C/E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential: Pay As You Throw (PAYT) enhancements,</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Commercial: barriers, PAYT, new delivery</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Incentives / taxes, mandates / bans</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Education</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Measuring to goal</td>
<td>✓</td>
<td>✓</td>
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</tbody>
</table>

Source: Skumatz Economic Research Associates, Inc. analysis
PAYT - EFFECTIVE AND COST-EFFECTIVE

☐ Effectiveness:
   - Biggest impact*
     - DOUBLES recycling
     - Diverts ~1/5-1/6 from landfill
     - Curbside & D/O impacts
   - R, YW, SR; cost-effective
   - No cost increase for 2/3
   - Top driver in leading states
     - Goals/metrics, $, PAYT
     - Best performer

☐ Concerns:
   - Strengths & weaknesses-political will
   - Haulers – link to contracting
   - Haulers – other ways of implementing

☐ Considerations:
   - Known BMPs
   - Com’l PAYT

Source for graphs and figures: Skumatz Economic Research Associates, ©
PAYT - EFFECTIVE & COST-EFFECTIVE

- Cost-effective:
  - 1/3 of the effect costs ZERO (SR)
  - PAYT needs NO SEPARATE FUNDING – paid by users (more equitably)
  - No increase in costs for 2/3 communities (IA, WI)*
  - Cheap for reduction of both GHG and Landfills

- HH preference
- Performs better than credits or RB

*Iowa survey by Frable

Source for graphs and figures: Skumatz Economic Research Associates ©
PAYT MORE TONS, LESS COST THAN OTHER INCENTIVE OPTIONS (RecycleBank)

Incentives for recycling ONLY – <1/3

RecycleBank™ incentive (also towns & haulers)
- Towns considering because: Hauler partnerships, “turnkey”, jumpstart stalled recycling, no new billing (HOAs like it), strong marketing; having trouble getting recycling or PAYT in place... other
- Impacts – tons BEYOND single stream / containers; fees; rebates; cost per ton; redemptions
- See if it pencils out... can have both as well...
- Study “MATH”, outcomes & “deals” for other options...

Source: First graph from figures from EPA newsletter, 2009; 2nd graph from Skumatz study.
PAY-AS-YOU-THROW /
SAYT / RECYCLE & $AVE
FOUR MAIN TYPES OF PAYT SYSTEMS

- **Carts** by size – strong and growing, works best with automated,
- **Bags or Tags** by Number (with/without base fee)
- **Hybrid**
- **By Weight**
- **Drop-offs**

All but last in place around US
Each has pros / cons
## PAYT PROS / CONS

<table>
<thead>
<tr>
<th>Key Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rewards all diversion activities</td>
<td>Concerns about illegal dumping, equity (low income, large families), MF (see FAQs), change…</td>
</tr>
<tr>
<td>No new trucks down street (&amp;wear/ tear)</td>
<td>More complex rate study, outreach</td>
</tr>
<tr>
<td>Behavior / reminder; choice</td>
<td>Hauler concerns (alternate implementation methods)</td>
</tr>
<tr>
<td>Utility; equity</td>
<td>Costs &amp; savings - “Net” depends on local conditions</td>
</tr>
<tr>
<td>Works in variety of systems, tailor</td>
<td></td>
</tr>
<tr>
<td>NEEDS NO SEPARATE FUNDING! – OWN FUNDING SOURCE - JUST A DIFFERENT WAY OF BILLING</td>
<td></td>
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PAYT BEST PRACTICES

To get best effects, there are key elements of design.

- Recycling available / embedded best
- Optimal incentive levels (containers & $)
- Small containers available
- Parallel containerization
- Education / information
- Clear bill & reporting
- Enforcement / Level playing field

... (or it isn’t worth it)

There are currently “tons left on the table!”
OPTIMAL PAYT RATE DIFFERENTIALS?

- Not too high...
- Not too low...

- Biggest cost is getting truck to the door...
- Covering costs an issue... - what if you’re too successful!?
- SERA Statistical work studied diversion performance vs. rate diffs.
EVEN IN CALIFORNIA – TONS LEFT ON THE TABLE!
(work for EPA)

MISSED OPPORTUNITIES TO INCREASE DIVERSION / TONS BEING LEFT BEHIND!!

Source: Econservation Institute and SERA
PAYT LEGISLATION

Oregon
Rate structure per average weight
Requires mini can
Multi-unit pricing

Washington
Incentives for source separation
Establishes recycling, could include organics

Minnesota
Rates based on volume or weight
  Weight – Unit sizing
Multi-unit pricing
PAYT LEGISLATION

New Vermont Legislation

Increased diversion
Multi Stream
PAYT Definition
Compliance
MAIN WAYS TO GET PAYT IN PLACE

- Ordinance
  - If multiple haulers servicing area and want minimal disruption in service providers

- Contracting / districting / franchising
  - If multiple haulers servicing area and want economies of scale, single provider

- Municipalization
  - Do it yourself, local decision-making, local action
## GETTING PAYT IN PLACE: ORDINANCE VS. CONTRACT - COMMUNITY PERSPECTIVE

<table>
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<tr>
<th>Ordinance Pros</th>
<th>Contract Pros (similar for munic)</th>
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<tr>
<td>❑ Fewer Hauler (“Taking”) &amp; Citizen Complaints (“Choice”)</td>
<td>❑ Lower Cost / bills</td>
</tr>
<tr>
<td>❑ Maintains competition</td>
<td>❑ Fewer trucks, “cleaner” set outs, reduced wear/tear on streets</td>
</tr>
<tr>
<td>❑ No need for “notice”</td>
<td>❑ One hauler to contact if problems arise.</td>
</tr>
<tr>
<td>❑ Quick</td>
<td>❑ City “control” including rates/setting; revenues</td>
</tr>
<tr>
<td>❑ Can specify rate “structure”</td>
<td>❑ More flexible / easier to enforce penalties than ordinance</td>
</tr>
<tr>
<td>❑ Minimal City effort (RFP, etc.)</td>
<td>❑ Can “designate” facility destinations for materials</td>
</tr>
<tr>
<td>❑ Retains “level playing field” for haulers – each implements the program and provides services knowing others will be operating under same rules.</td>
<td>❑ Potential revenue source</td>
</tr>
<tr>
<td></td>
<td>❑ (Similar for franchise / district EXCEPT may not get lower bills if multiple awardees)</td>
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Sample language available for State legislation, contracts, ordinances, etc. at [www.paytnow.org; paytwest.org; www.paytinfo.org](http://www.paytnow.org; paytwest.org; www.paytinfo.org)

Source: SERA publications
**PROBLEMS: FEARS GREATER THAN REALITY**  
Solvable... see faqs

<table>
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<th>Reality</th>
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| Illegal dumping | Minimal / low, short-lived – have BULKY option  
| Confusion, resistance to change | Continuing education (prior, free stickers)  
| Non-compliance | Minimal  
| Contamination | Minimal  
| Burning | Banned (60%, illegal, seasonal, warn once then remove, charge more)  
| Self-haul and by-pass | Base fee, mandatory (impacts on rates and setouts)  
| Revenues (esp. haulers) | Less volatile systems, work with haulers in design, pilot  
| Private/multiple haulers | Multiple colors, work with haulers  
| Local and regional economics | Depends on markets, LF ownership, processing, cost structure, prices  

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**Illegal dumping**
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BUT WHAT ABOUT...

☐ HOAs?
☐ MF?
☐ Commercial?
COMMERCIAL PAYT

- Like MF, Commercial is a volume based system
- Bag programs exist (as does weight) but very rare in the US
- **Key** is recycling embedded in trash rate (50-150%, min opts too)
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
COMERCIAL PAYT
– EMBEDDED (BEST ELEMENTS)

- Embedded – NO extra fee, no exceptions
- Specific size geared to goal plus minimum
  - Same size=50% recycling; 75% recycling needs 150% size recycling;
- Supporting elements
  - Clear materials – recycling and/or organics
  - Convenience
  - Education
- Enforcement
  - Plan, inspection / drive by, other
  - Leery of hauler responsibility
COMMERCIAL STRATEGY & IMPLEMENTATION PHASES

Phase 1. Community prep, research, goals, ID authority

Phase 2. Hauler / business info & goals, Ordinances

Phase 3. Business incentives, technical assistance, recognition

Phase 4. Partnerships for programs & facilities; small business attention

Phase 5. Bans, mandates, targeted streams or sectors; requirements & enforcement

Phase 6. Policies, contracting, markets and facility development; framework for “net zero”

Adapted from SERA 2013
HUNDREDS OF RESIDENTIAL CASE STUDIES

- Ordinance
- Contract
- Rural options
- State requirements

- Some of my best case studies are coming next!!
CASE STUDY: FORT COLLINS

- One of earliest in Colorado
- Multiple haulers
- Require haulers to charge via PAYT
  - Early years allowed “base fee”
  - Later 100% differential for all
  - Now undergoing revisions as part of URO
- High performing community – strong recycling and diversion
CHALLENGE HIGHLIGHT: Refuse carts

- Elderly concerned about maneuvering
- Brochure picture
CASE STUDY: VAIL – “ORDINANCE”

- Resort community located in Central Mountains of CO
- Population of 5K year round, swells to about 45K during peak times, 335” of snow a year
- Open-hauler system
- Low recycling rate for a number of reasons
**RATES vs. BILLS/ACCEPTABILITY**

- Highlight winners (and losers) -- % and $
- Rates vs. BILLS
  
  For example:

  70% pay same or less!
  
  (vs. $/can increased)
  (but note here, average bill increased $0.80 -- outcome depends on structure, changes)

  3 cans=$26/hh/mo
  PAY $8 more/mo!
  
  2 cans plus recycling=$18/hh/mo
  
  1 can plus recy
  = $10/hh/mo
  SAVE $5.00!

**NEW OPTIONS**

**LAST YEAR**

Unlimited service= $18.00/hh/mo

HIGHLIGHT BEHAVIORAL POTENTIAL, not rate comparison
CASE STUDIES – FLEXIBILITY IN PAYT

• Work in Large, small, urban, suburban, rural
• Multiple program types
• Multiple ways to implement
• Lessons available – case studies online
Q&A

- Types? – appropriate for your town?
- Rate Differentials?
- Key best practices?
- Hauler issues?
- Contract vs. ordinance? (contracting tips)
- Resonate with your council?
- Soon / longer term?
- Other recall?
- How planning on meeting NY Goal?
PAYT SUMMARY

- PAYT effective, cost-effective, flexible, demonstrated
  - Flexibility in design and implementation
  - Negatives manageable with political will (and possible renaming to get past “pay”!)
- Quickest, least expensive, most effective approach to achieve diversion, equity, and environmental goals
- Don’t forget commercial
- BEST WAY FOR NY TO GET TO GOALS (STATEWIDE PAYT LAW?)
- Resources available to all (paytnow.org)
  - Go to www.paytnow.org or call 303/494-1178
QUESTIONS / ASSISTANCE:

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Free assistance & Websites – www.paytnow.org, paytwest.org, paytinfo.org