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SERA

# UNIT BASED PRICING OPPORTUNITIES IN CONNECTICUT

## Practical Implementation Strategies

35 years in UBP, Solid Waste Planning  
 and Evaluation, Rates & Funding,  
 Forecasting & Scenario Analysis  
[www.serainc.com](http://www.serainc.com)

CCSMM Working Group, 10/15/20

Source: SERA 2020; please cite if used

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## TOPICS

1. UBP's potential to help in CT
2. Strategies for communities:
  - Muni
  - Contract
  - Subscription / Private Haulers
3. Pricing and Containerization
4. Summary / Conclusions

Focused, because just 15 minutes. More details available.

### *Bio / Why Skumatz on UBP?*

*National leader in UBP. 35 years in UBP / PAYT and helping large & small Communities with all phases of UBP including feasibility/options/cost, rates, Impacts, RFPs, ordinances / legislation, Implementation. Much-cited quantitative research on UBP and 50+ publications. Databases & info, counts, design, performance nationwide for states & EPA. Provided statewide manuals, rate models, trainings / webinars, and hands-on tech assistance in many states. Residential & commercial PAYT expertise.*

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# UBP's Potential to Help in CT

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## UBP AND CONNECTICUT

- **CT is far short of its diversion goal**

35% is 25 percentage points short of 60% goal  
 UBP diverts 12-18 extra percentage points at the community level; with the high numbers in communities with organics programs in place.

*1/3 each for added recy, organics, and source reduction (SERA)*

Source: Skumatz / SERA

- **CT Recycling is mandatory**

UBP increases incentives to recycle more than any other program.

UBP works with curbside or drop-off recycling.

More recycling decreases the collection cost per ton.

- **Disposal fees are increasing from \$68-\$92/T (or more)**

Each ton recycled saves disposal costs.

Recycling fees increasing also, but would be expected to remain less than \$92/T.



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## UBP AND CONNECTICUT

- **UBP Implementation costs can be low**

UBP (itself) is mostly a new billing system, not new collection.

The program can be implemented with minimal change to existing collection, building onto existing collection systems.

Source: Skumatz / SERA

- **UBP is least costly, most cost-effective strategy**

As mentioned, UBP is mainly a new billing system, not new collection.

Statistical studies show UBP provides the greatest tonnage increase at least cost of more than a dozen strategies researched.

- **Citizens tend to favor UBP after the fact**

Between 89-95% of customers prefer UBP *after* it is implemented. The first 3-6 months can include complaints about change. Up front the majority think it is more fair.



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## UBP AND CONNECTICUT

- **Treats trash as a utility – Equitable and users pay – own funding source and slows tax increases**

UBP is its own funding source – users pay, and pay bills in a new way, based on use like electricity and water.

UBP slows tax increases by moving to a usage-based fee-type system.

Source: Skumatz / SERA

- **Citizens have more control over their costs and bill**

Households are able to get more control over the size of their bills, and small (or elderly, etc.) households no longer subsidize large disposers and non-recyclers.

- **Successful UBP programs in place in CT**

There are multiple successful UBP programs in the State, hundreds in the Northeast, and more than 10,000 programs nationwide in large, small, urban, suburban, and rural communities with curbside and drop-off programs and all collection arrangements. In addition, 6 states require UBP.



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## UBP AND CONNECTICUT - CONCERNS

Illegal dumping: Does not tend to increase litter / illegal dumping increases. When it happens, it is less than 3 months. → must have convenient methods for bulky waste (and some changes to periodic “clean-ups”).

Unpaid bills: addressed easily if combined with water service bills...

Plastic from UBP bags: discussion on both sides

Low Income households: Large disposers pay more, which is not necessarily low income. All can (including LI) save by recycling. Can offer discounted bags for LI qualified households. This policy choice is only in place in a small minority of communities.

More complicated rate study: The math is not hard, but a greater understanding of household setouts is needed to mitigate revenue risk.



Really about single hauler, or made to favor large haulers: UBP is in place with large and small haulers across the US. Some financing issue may arise with cart-based systems.

UBP does not require or favor single hauler or contracts. It is in place in areas with subscription haulers across the country.

Haulers should prefer the program; best practices deliver embedded recycling (costs and associated profits) for all households serviced meaning required business growth.

Source: Skumatz / SERA 7



# Implementing UBP in CT 2



## UBP BEST PRACTICES – BEST PERFORMING PROGRAM DESIGN

- Convenient recycling options available (large container if curbside)
- Incentivizing level of price difference
- Small trash container option available
- Recycling costs embedded in trash fee
- Parallel containerization
- Education
- Reporting / monitoring / access / enforcement (level playing field)
- ... Otherwise UBP may not be worth the administrative hassle...



Works with bag/tag, can, hybrid, drop-off collection systems

Source: Skumatz / SERA



## HOW CT COMMUNITIES CAN MOVE TO UBP

### Municipal Collection

- Resolution?
- Container choice
- Rate computation

+Normal change items –  
Facility checks, approval /  
public processes  
Enterprise or not?

### Contract Communities

- Negotiation if existing contract lasts long
- Discussion of recycling change capacity
- or RFP with updated UBP requirements

+Normal change items –  
Facility checks, approval /  
public processes

### Open Subscription Hauler

- Ordinance requiring all haulers operating to offer UBP with some specific requirements (% Recy)

OR

- RFP/Contract route (next page). Needs “notice”, etc.

+ Normal change items

Source: Skumatz / SERA



## UBP VIA ORDINANCE VS. CONTRACT FOR SUBSCRIPTION HAULER AREAS

Ordinance (and licensing) Advantages	Contract (and muni) Advantages
<ul style="list-style-type: none"> <li>➤ Fewer Hauler (“Taking”) &amp; Citizen Complaints (“Choice”)</li> <li>➤ Maintains competition</li> <li>➤ No need for “notice”</li> <li>➤ Quick</li> <li>➤ Can specify rate “structure”</li> <li>➤ Hauler does billing</li> <li>➤ Minimal City effort (RFP, etc.)</li> <li>➤ Retains “level playing field” for haulers – each implements the program and provides services knowing others will be operating under same rules.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Lower Cost / bills</li> <li>➤ Fewer trucks, “cleaner” set outs, reduced wear/tear on streets and emissions</li> <li>➤ One hauler to contact if problems arise.</li> <li>➤ City “control” including rates/setting; revenues; city OR hauler may do billing</li> <li>➤ More flexible / easier to enforce penalties than ordinance</li> <li>➤ Can “designate” facility destinations for materials</li> <li>➤ Potential revenue source</li> <li>➤ (Similar for franchise / district EXCEPT may not get lower bills if multiple awardees)</li> </ul>

Source: Skumatz / SERA

*We have sample language for ordinances and RFPs*

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# Pricing and Containerization

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## CARTS VS. BAGS

Carts and Bags AND combined (hybrid) systems work for UBP.

Cart advantages	Bag advantages	Hybrid
<ul style="list-style-type: none"> <li>➤ Cheaper for residents (5+ years)</li> <li>➤ More convenient for residents (don't run out)</li> <li>➤ More flexible in incentives</li> <li>➤ Less revenue risk (pay monthly)</li> <li>➤ Don't rip, easy to see</li> <li>➤ Less wear/tear on coll'n staff</li> <li>➤ Addressing LI a little easier</li> </ul>	<ul style="list-style-type: none"> <li>➤ More flexible in sizing / set outs even wkly; pay for what you use weekly</li> <li>➤ No billing system needed (invoicing only)</li> <li>➤ A little more difficult for large items</li> <li>➤ Doesn't require up-front purchase cost</li> <li>➤ Doesn't take up room in garage / yard</li> <li>➤ Servicing easily at stores, via contracts</li> <li>➤ Doesn't need special trucks</li> <li>➤ No cart changes/labor/storage</li> </ul>	<ul style="list-style-type: none"> <li>➤ Don't need to change base collection or containers</li> <li>➤ Don't need to add new billing system</li> <li>➤ Doesn't work with fully-automated collection</li> </ul>
Steps for Adding Carts	Steps for Adding Bags	Steps for Hybrid
<ul style="list-style-type: none"> <li>➤ Ownership decision</li> <li>➤ <u>Funding</u> purchase</li> <li>➤ Choice/Order/Assembly/Roll-out</li> <li>➤ Switches and storage</li> <li>➤ Billing system required;outreach</li> </ul>	<ul style="list-style-type: none"> <li>➤ RFP for logo-ed bag purchase (choose sizes) and/or purchase &amp; supplying (see prices from statewide contracting)</li> <li>➤ Availability, invoicing, enforcement</li> <li>➤ Outreach</li> </ul>	<ul style="list-style-type: none"> <li>➤ Same as steps for bag</li> <li>➤ Outreach for clarity</li> </ul>

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## DECISIONS AND ANALYTICAL STEPS – CONTAINERIZATION CHOICE

### Currently have carts

- Add a new smaller cart option (or 2) \*\*
  - Repurposing / are recycling carts big enough
- If carts small-ish, can go to cart/bag hybrid (depends on collection truck type)
- Logo-ed bags in cans (enforcement)

### Currently have / allow bags

- Switch to requirement for logo-ed bags & education
- Add carts if going to automated collection (1 size if bags in carts or multiple sizes) (need billing system)

### Customers supply their own containers

- Hybrid, adding bags to current system (clarify "minimum")
- Switch to logoed bags
- Switch to carts if planning in longer run

(\*\*) funding new carts can be an issue: can discuss upon request (with more time) options including leasing, loans, loans from other funds, customer purchase, using contracts to finance carts paying balance after 3-5 year contract. Cart ownership is also an important discussion issue.

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## DECISIONS AND ANALYTICAL STEPS – PRICING, STRUCTURE, INCENTIVES

### Principles & Options

Need substantial-enough variable portion to provide incentive  
 Better to embed recyc cost; don't line-item  
 ANY option can be all in or two-part, using enviro fee plus user fee. Reduces revenue risk, but this pulls away from meaningful variable incentive  
*REDUCE revenue risk with set out survey & calculation of reductions AND comparison to other communities – and Phase-out*

### Carts

Need small cart option to provide meaningful reward  
 Differential must be 50-80% more for double the service volume to change recycling behavior.  
 Can be / should be less than 100% for double volume.  
 Billing is fixed repeated \$

One or 2 part ok; Math is easy

### Bags (or hybrid)

Can do one (or 2) sizes to provide options; naturally provides options  
 Differential should be substantial per bag (~\$1.75-\$2 minimum per 30-35 gallon bag)  
 One or 2 part rate OK; math is very easy

No billing needed

Source: Skumatz / SERA

## DECISIONS AND ANALYTICAL STEPS – BILLING SYSTEM



	Going to Carts	Going to Bags	Going to hybrid
Currently billed in Taxes	<ul style="list-style-type: none"> <li>➤ Consider removing from taxes over time</li> <li>➤ Maybe keep enviro fee</li> <li>➤ Must install new billing system; consider joint bill with other city utilities if possible; w/water best</li> <li>➤ Only needs to be recurring fixed bill amount</li> </ul>	<ul style="list-style-type: none"> <li>➤ Consider removing from taxes over time</li> <li>➤ Maybe keep enviro fee</li> <li>➤ No new billing system needed; households pay directly for bags</li> </ul>	<ul style="list-style-type: none"> <li>➤ Remove variable portion to assign to bag fee</li> <li>➤ No billing system required</li> </ul>
Currently Bill	<ul style="list-style-type: none"> <li>➤ Change to recurring fixed amount</li> <li>➤ Keep a small enviro fee or eliminate</li> </ul>	<ul style="list-style-type: none"> <li>➤ No household billing needed</li> <li>➤ Keep small enviro fee or eliminate</li> </ul>	<ul style="list-style-type: none"> <li>➤ Same as bag</li> </ul>
No bill but muni bill available	<ul style="list-style-type: none"> <li>➤ Move fees to combined billing, especially if water; change trash to last credited if partial payments received.</li> </ul>	<ul style="list-style-type: none"> <li>➤ No household billing needed</li> <li>➤ May choose to add base enviro fee; change to last credited if partial payment</li> </ul>	<ul style="list-style-type: none"> <li>➤ Same as bag</li> </ul>

Source: Skumatz / SERA



## DECISIONS AND ANALYTICAL STEPS – MINIMIZING REVENUE RISK

- Require mandatory collection service (with enforcement)
- Conduct a set-out survey
  - and put in excel, reduce for diversion and stomping effects and see distribution
- Look at set outs for other similar communities
- Use carts or include a base or environmental fee with bags or cans
- Phase out of current funding system

Source: Skumatz / SERA

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## DECISIONS AND ANALYTICAL STEPS

- Decision-making
- Public Process
- Facilities

These are *your* issues to address... ! (☺)

Source: Skumatz / SERA

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# Summary 4



## A FEW EXAMPLE UBP COMMUNITIES

### CT

- Mansfield
- Norwich
- Waterbury
- Manchester
- Coventry
- Greenwich
- Fairfield
- New Haven
- Stonington\*

### Nearby states

- Concord NH\*
- Portland ME\*
- Waterville ME\*
- Worcester MA\*
- Providence RI\*
- Brookline MA\*

### National leaders

- San Francisco, Bay Area, much of CA
- Seattle, Portland, surrounds, and States of WA and OR
- Boulder, CO
- 10,000 communities across US have access to UBP using cans, bags, tags

Examples of:  
 Private haulers / Bags: Greenwich, CT  
 Contracted hauler / Carts: Mansfield CT

Source: Skumatz / SERA

\*-bag, otherwise cart

## SUMMARY –

### ***MOST COST-EFFECTIVE WAY TO 60%, CONTROLS COSTS, FAIRER, REASONABLE IMPLEMENTATION APPROACHES FOR EACH SITUATION***

- 15 minutes, so giving a high level picture
- UBP is biggest bang option for jumping toward CT's 60% goal
- Cheapest, most cost-effective option
- Makes existing programs more cost-effective
- Perceived as fairer
- Fee-based; cost control
- Affordable implementation - No new trucks / mainly billing change
- Math isn't hard – revenue risk takes a little planning
- Successful across CT and US / trend
- Straightforward implementation in multiple situations – in place in rural, urban; hauler, muni, contract.
- Negatives can be dealt with if political will to do so.
- ***Can be implemented in straightforward way in CT. Known steps for each situation.***

Source: Skumatz / SERA

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# ***THANKS!***

***(Win-Win. You can totally do it)***

## **Questions?**

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Or call us; we have models and other resources and can usually help at basic levels for free.

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