

Solid Waste Advisory Committee City and Borough of Sitka, Alaska



Solid Waste Management Plan May 28, 2014

Presented by:
CB&I Environmental & Infrastructure, Inc.
WIH Resource Group



- **Current program, material quantities, costs**

- **Public survey responses**

- **Strengths, weaknesses**

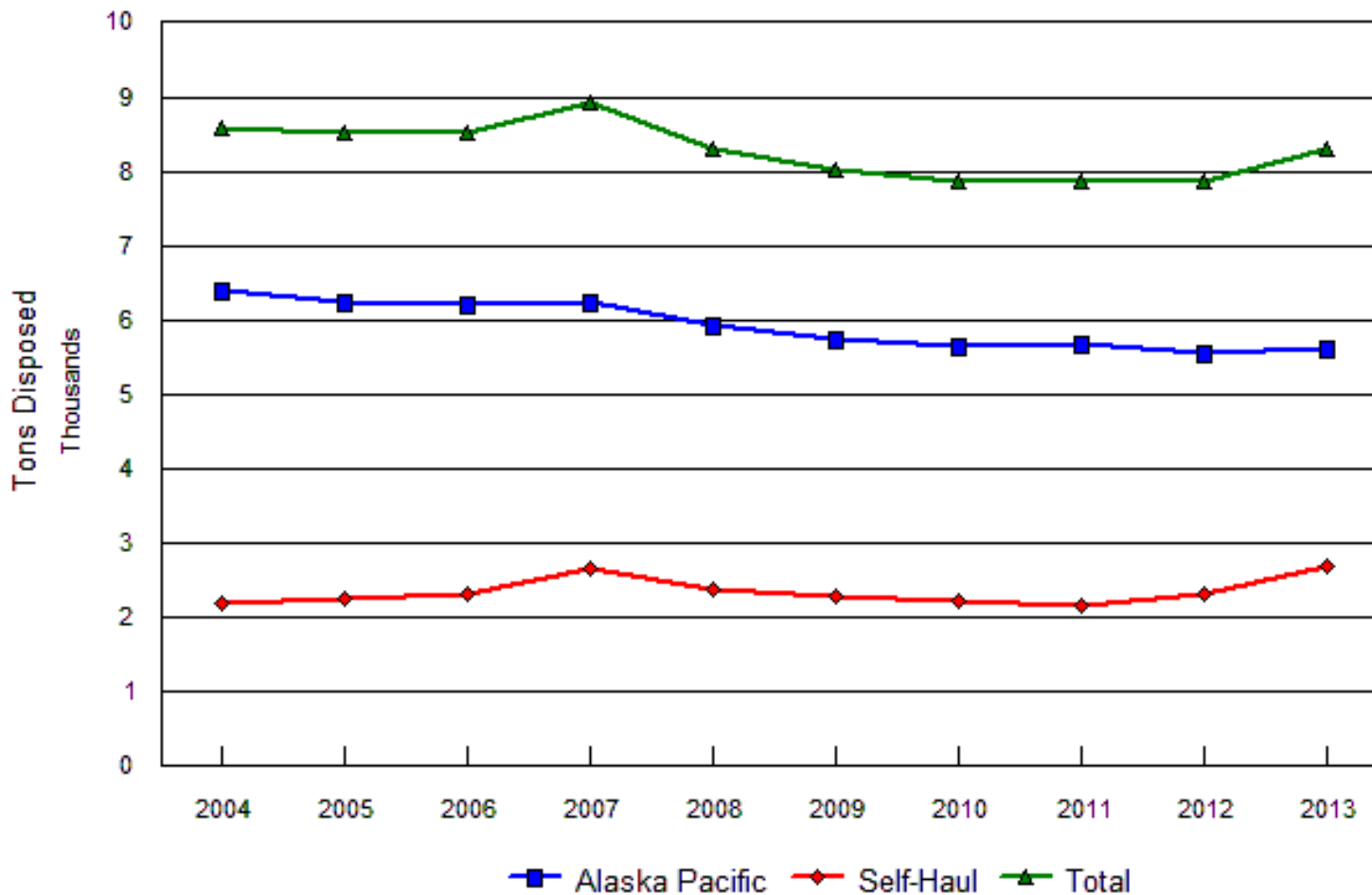
- **Main issues, future needs**

- **Initial realistic alternatives – primary, secondary**

- **Common starting point needed to get to common end point**

- **Is decreasing the amount of waste disposed and significantly increasing diversion a core priority for Sitka?**
- **Is maintaining/controlling user rates a core priority for Sitka?**
- **Is curbside recycling at the top of the agenda in the short-term?**
- **Is composting at the top of the agenda in the short-term?**
- **Should the policy of allowing residents to bring 200 pounds of trash to the transfer station free-of-charge be modified?**
- **Is off-island shipment of refuse to a landfill in Washington or Oregon the best disposal alternative for Sitka?**
- **Should bear issues be addressed individually or area-wide? Should costs be individual or within system?**

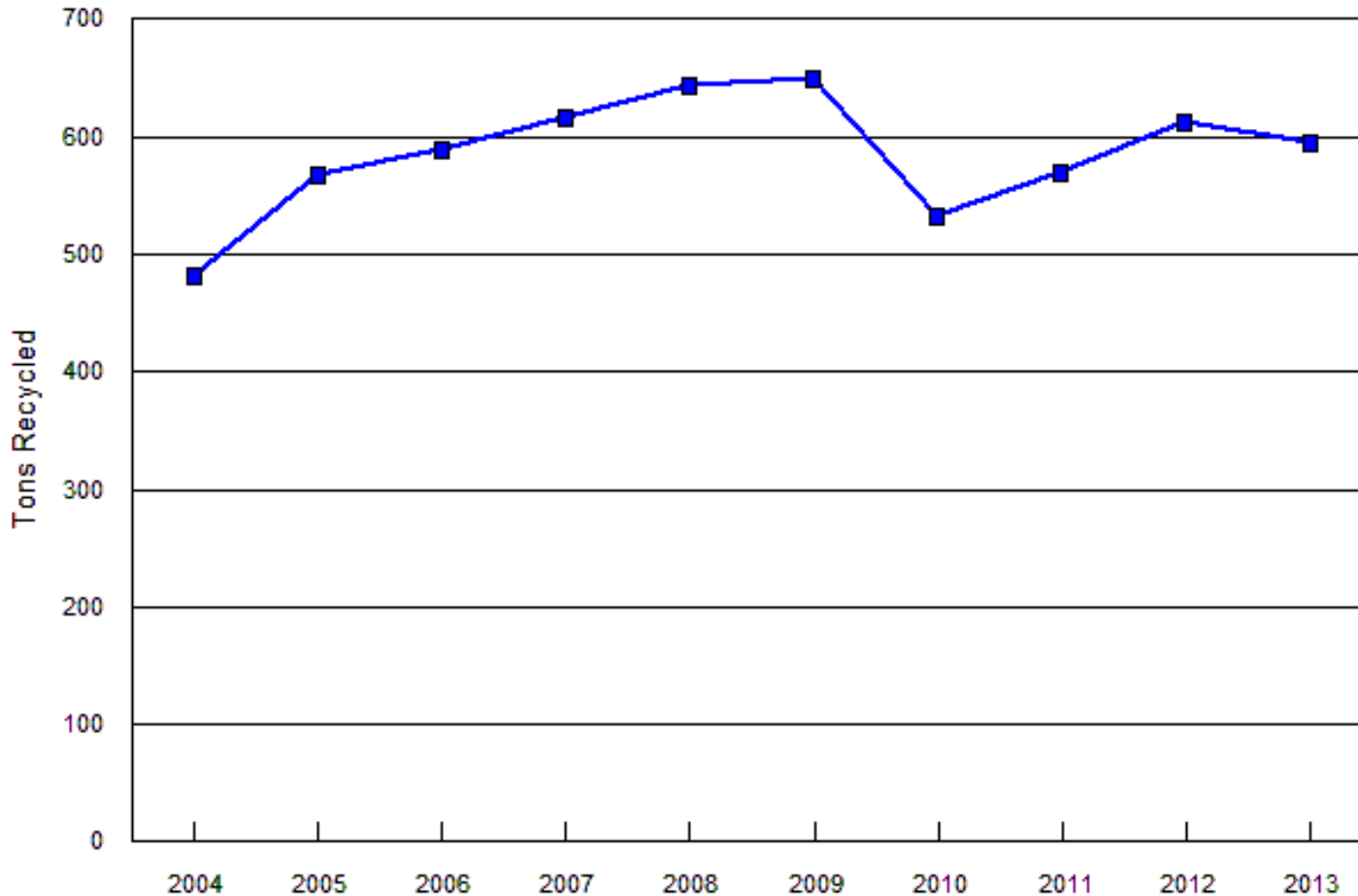
Waste Handled at Transfer Station



Observations

- Average: 8,218 tons/year
- 2013: 8,315 tons
- Alaska Pacific: 71 %
- Self-haul: 29 %
- 3 % overall decrease from 2004 to 2013
- Uptick in 2013
- Decrease beginning in 2007 likely due to impacts of economic downturn

Sitka Recycle Center

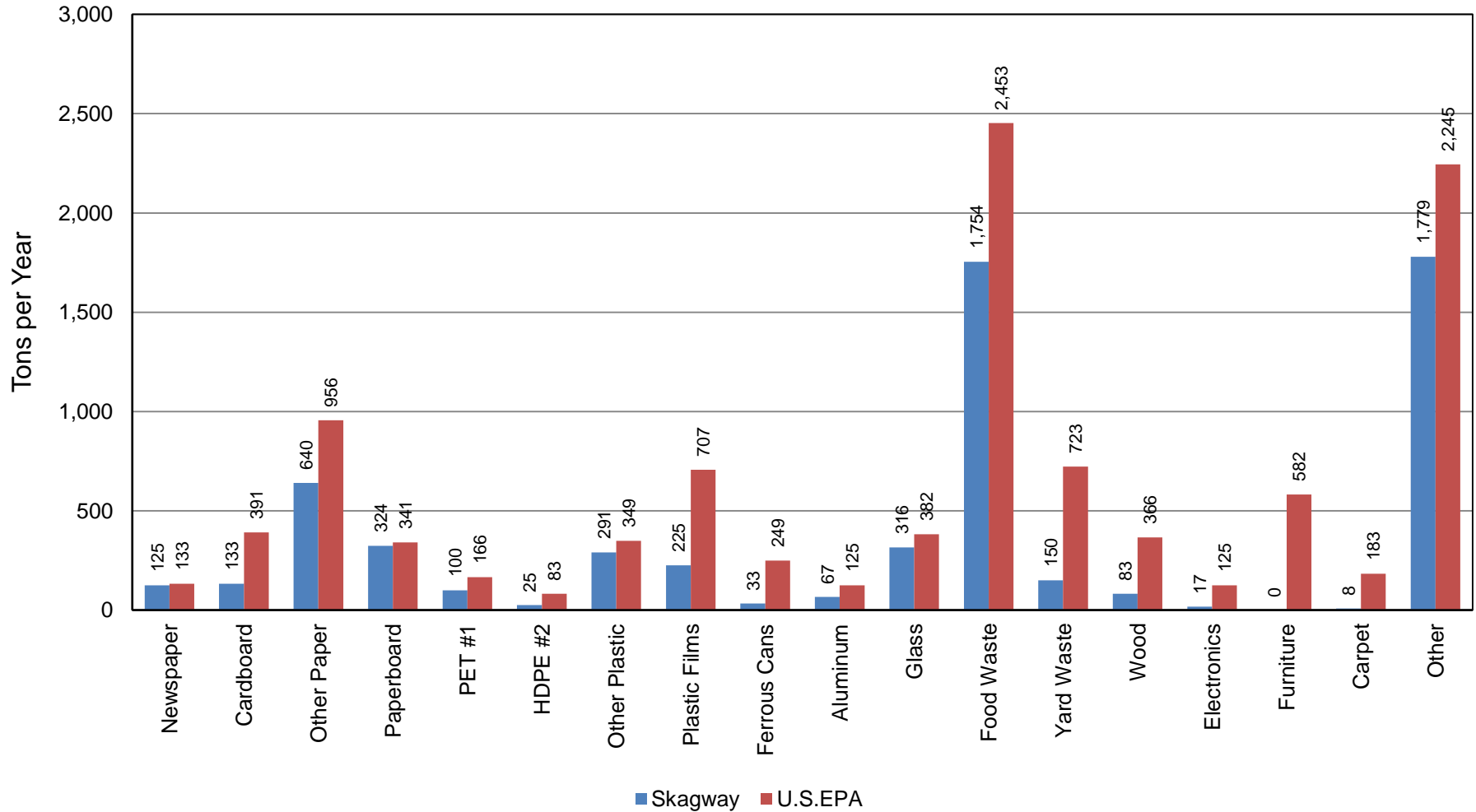


Observations

- Average: 587 tons/year
- 2013: 541 tons
- 24 % overall increase from 2004 to 2013
- Does not include aluminum cans at 11-13 tons/year donated to Swim Club
- Diversion rate: 6-7 %
- Junked vehicles/scrap metal: 6,193 - 7,499 tons/year over last 3 years (not included in diversion rate)

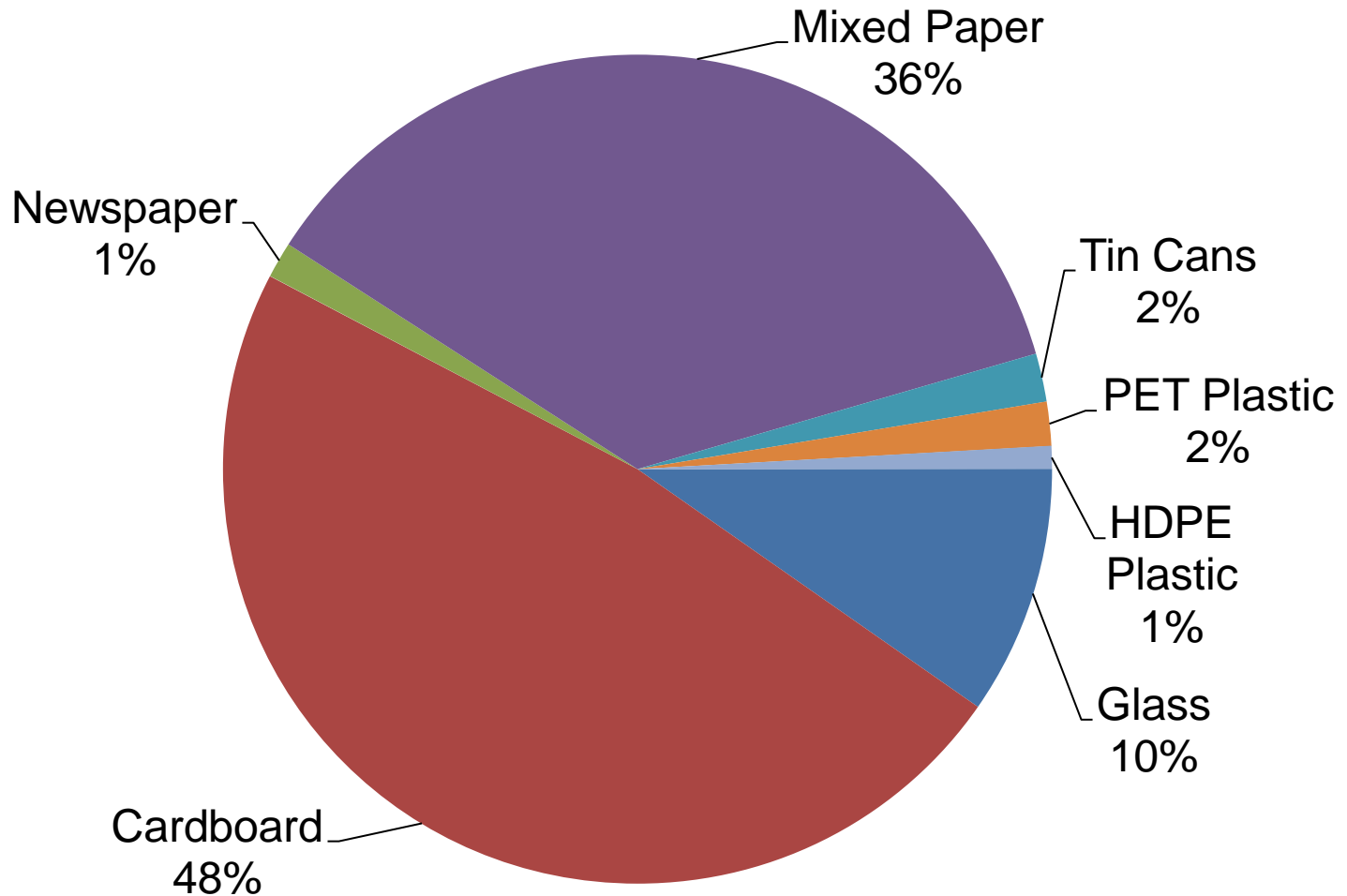
Note: Does not include aluminum at 11-13 tons per year donated to Barracuda Swim Club.

Estimated Tons in Disposed Wastestream

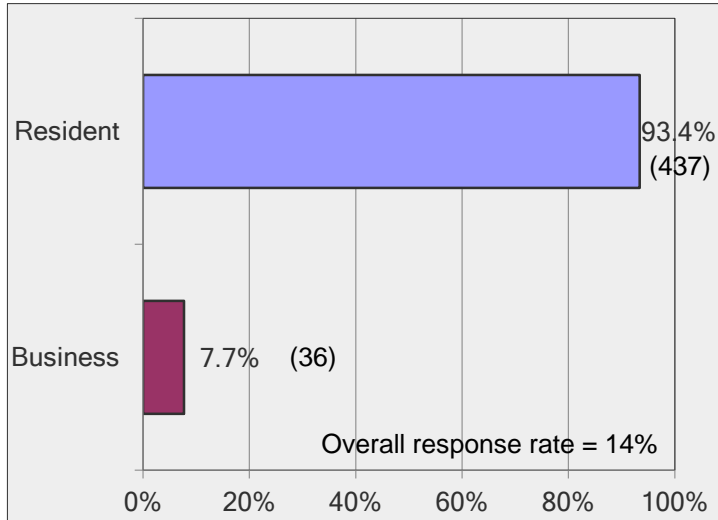


Source: Skagway Solid Waste Plan and U.S. EPA.

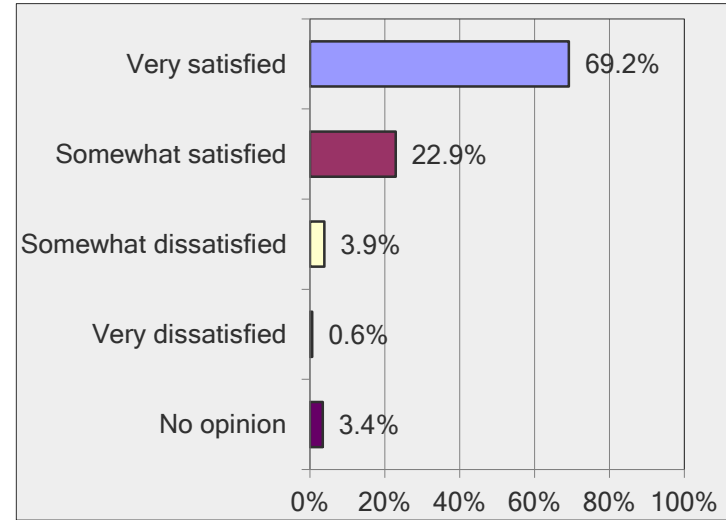
Sitka Recycle Center (2010-2013 Average)



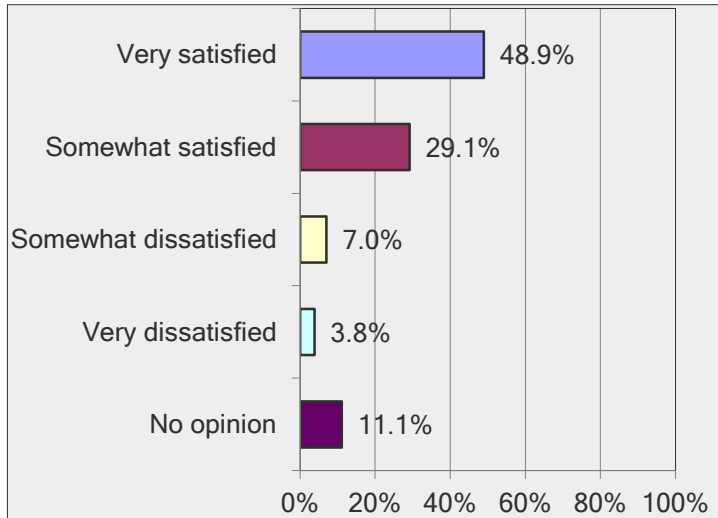
Are you responding as resident or business?



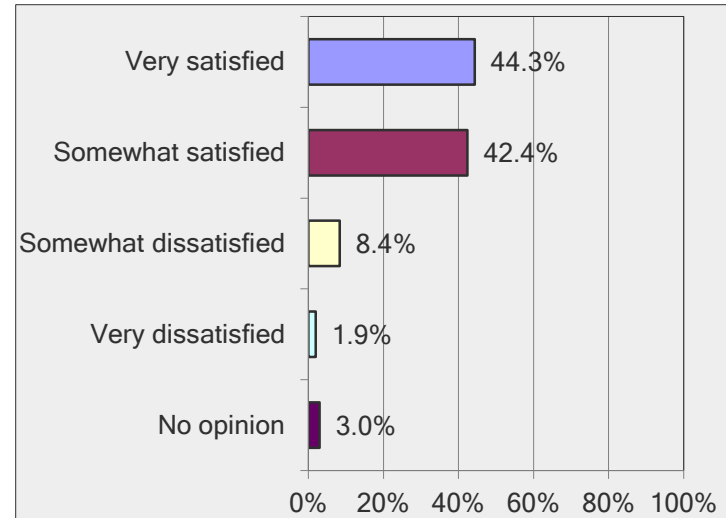
How satisfied are you with the current collection service?



How satisfied are you with your current access to recycling service?



How satisfied are you with the current solid waste program in Sitka?





Waste Collection

Waste Tons	2013	2012	2011	2010
Alaska Pacific Tons	5,613	5,552	5,695	5,651
Self-Haul Tons	2,702	2,307	2,167	2,228
Total Tons	8,315	7,859	7,862	7,878
A.P. Tonnage %	67.5%	70.6%	72.4%	71.7%
Self-Haul Tonnage %	32.5%	29.4%	27.6%	28.3%

2013 Collection Activity	Amount
Monthly Customers	3,463
Collected Waste Tons	5,613
Collected Commercial Waste Tons	1,605 (29%)
Collected Residential Waste Tons	3,784 (67%)
Collected Litter Receptacle Tons	4
City Containers Collected Waste Tons	219 (4%)

Observations

- 3,229 residential accounts
- 234 business accounts
- Residential accounts:
 - 32 Gallon: 26%
 - 90 Gallon: 62%
 - 350 Gallon (shared): 12%



Monthly Customer Rates

Container Volume	Weekly Pick-Ups					
	1	2	3	4	5	6
32 gal. cart	\$25	\$50	\$75	\$100	\$125	\$150
90 gal. cart	\$42	\$84	\$126	\$168	\$210	\$252
350 gal. tub	\$170	\$340	\$510	\$680	\$850	\$1,020

- **Primary source of revenue to support solid waste system**
- **The rates are intended to recover the following costs:**
 - **Collection Costs** for services provided by Alaska Pacific
 - **Disposal Costs** for transfer, transport, and disposal
 - **CBS Administration Costs** for Household Hazardous Waste Disposal, City Operations, General and Administrative Costs, and Depreciation
 - **Recycling Costs** that are not covered by material revenues



Disposal Costs per Ton

Year	2013	2012	2011	2010
Transport & Disposal	\$113.77	\$111.18	\$108.68	\$108.47
Transfer Station Operations	\$31.52	\$30.80	\$30.11	\$30.05
WA refuse tax	\$1.87	\$1.80	\$1.55	\$1.72
Total Cost per Ton	\$147.16	\$143.78	\$140.34	\$140.24

- **Contract rates paid to Republic.**
- **Includes cost to operate transfer station, transport waste to Roosevelt Landfill in Washington State and dispose waste at landfill.**
- **Variable cost based on tonnage handled at transfer station.**

External Costs

Year	2013	2012	2011	2010
Material Tons	541	497	535	516
Baling Materials in Sitka	\$65.87	\$64.38	\$62.93	\$62.81
AML Transport	\$63.12	\$61.69	\$60.30	\$60.18
Processing / Marketing	\$52.70	\$51.50	\$50.34	\$50.25
Material Value (Average)	\$(146.96)	\$(142.69)	\$(203.58)	\$(154.14)
Recycling Cost per Ton	\$34.73	\$34.88	\$(30.01)	\$19.10

- Includes costs paid to Republic for processing, shipping and marketing of materials
- Tonnage is for Sitka Recycling Center (excluding glass)

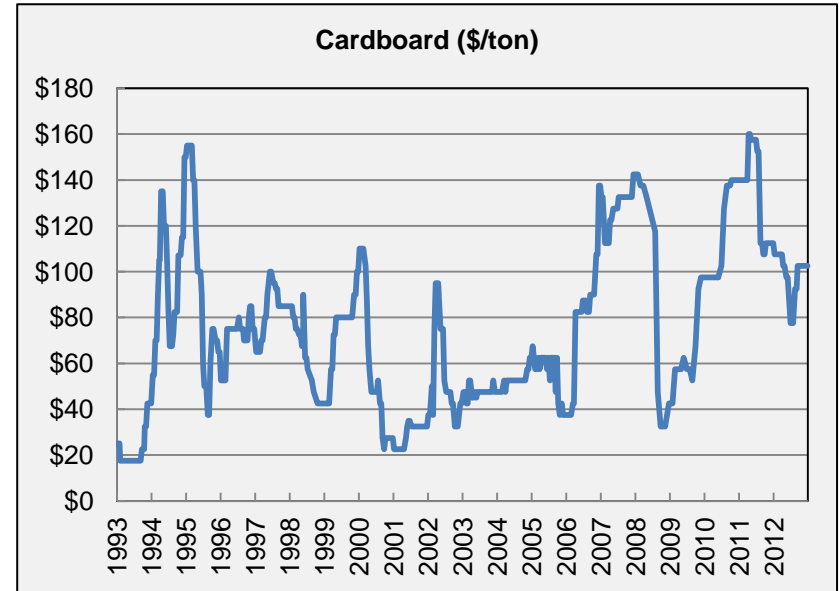
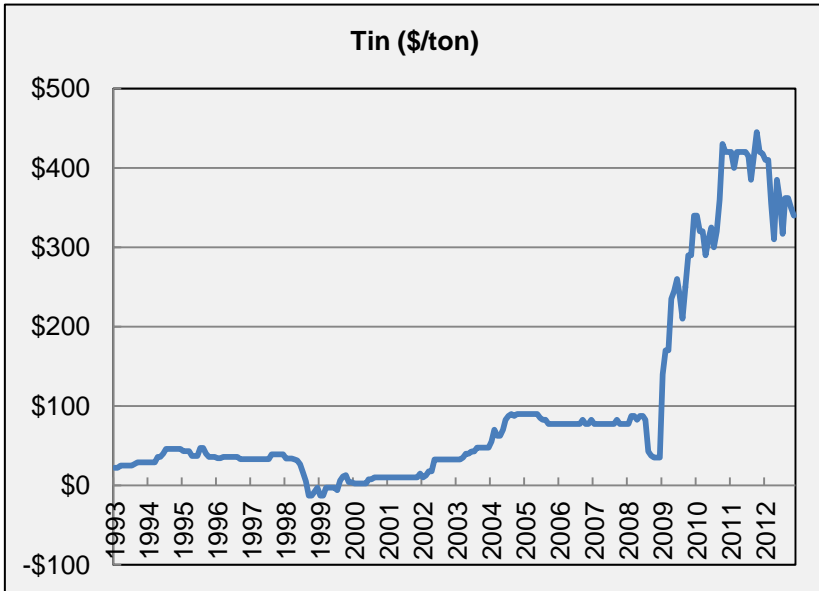
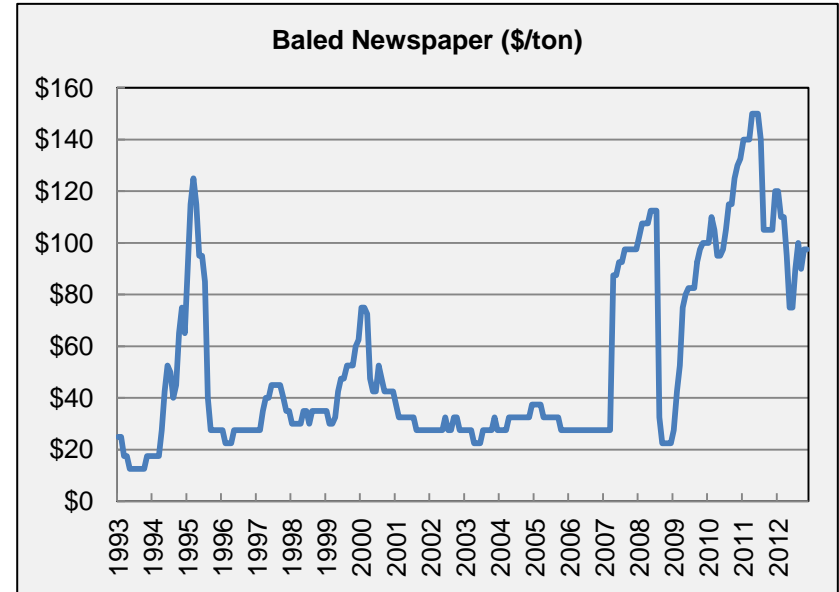
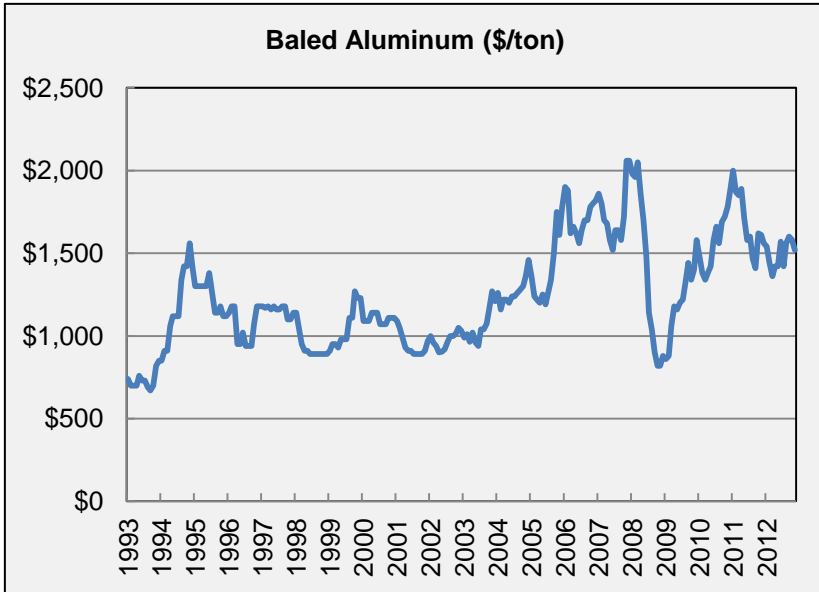
Internal Costs

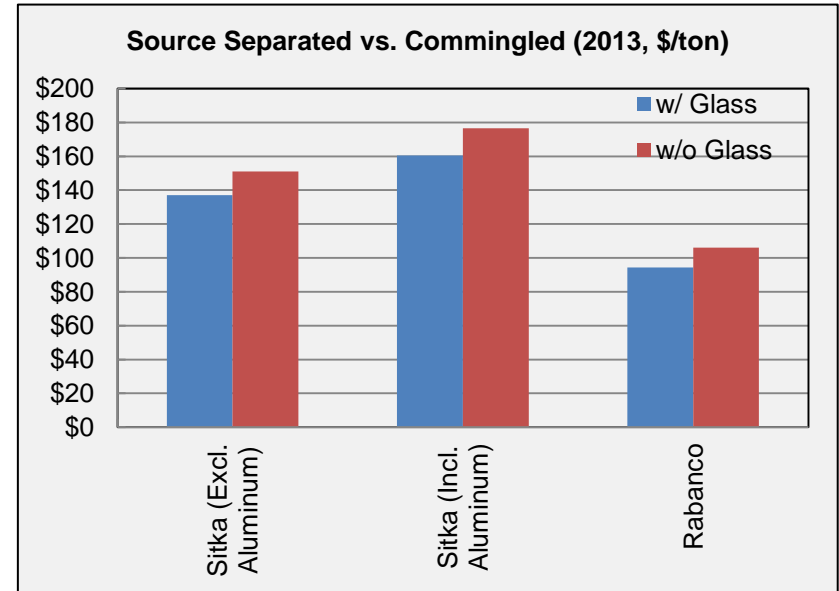
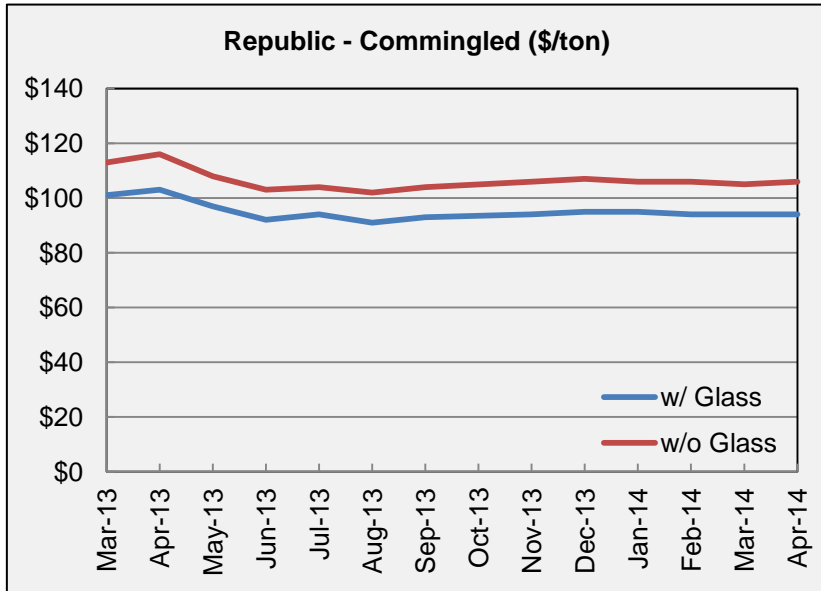
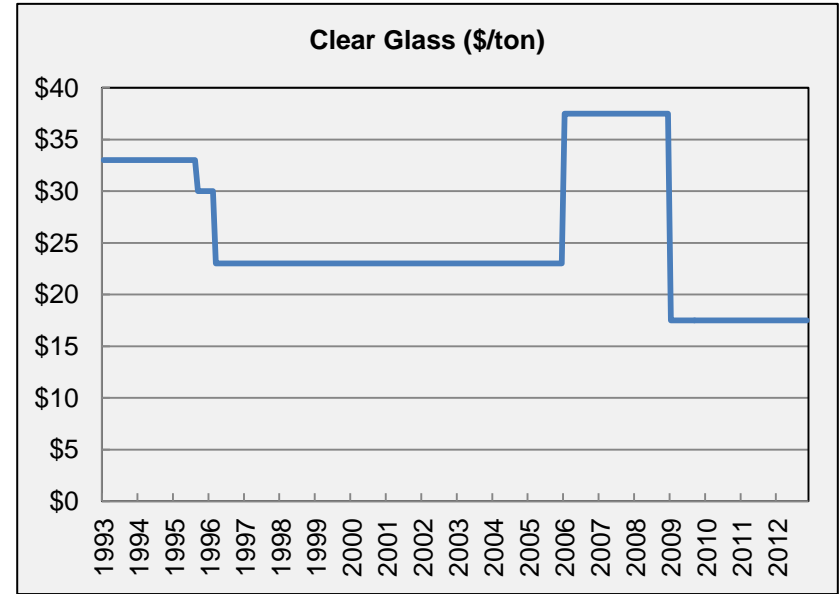
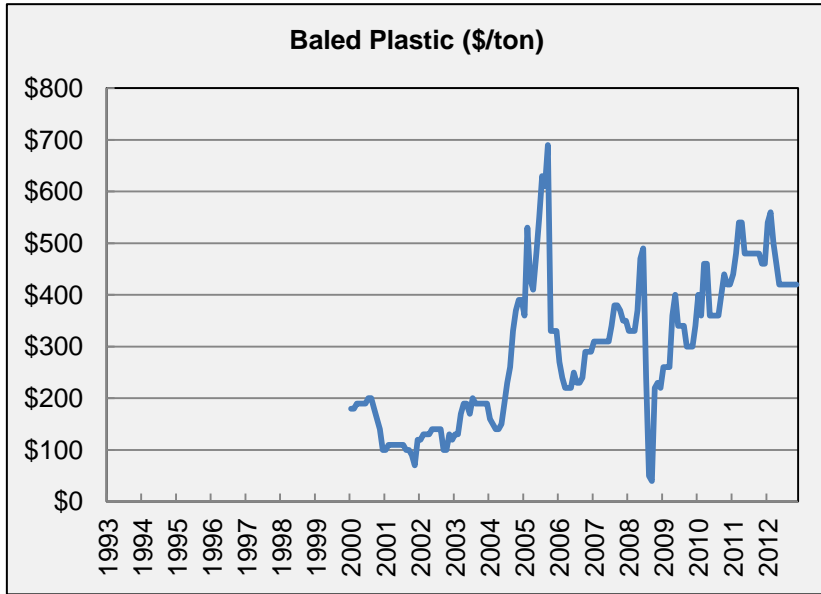
Year	2013	2012	2011	2010
Coordinator	\$33,938	\$36,000	\$36,000	\$33,200
Recycling Expenses	\$3,872	\$1,634	\$1,171	\$1,090
Total CBS Recycling Costs	\$37,810	\$37,634	\$37,171	\$34,290
Total Material Tons	541	497	535	516
CBS Cost per Ton	\$69.91	\$75.72	\$69.48	\$66.45

- Includes City costs for handling some materials

Combined Costs

Year	2013	2012	2011	2010
Internal Cost	\$69.91	\$75.72	\$69.48	\$66.45
External Cost	\$34.73	\$34.88	\$(30.01)	\$19.10
Total Cost per Ton	\$104.64	\$110.60	\$39.47	\$85.55







Junk Vehicles / Scrap Metals

Cost Component	2013	2012	2011	2010
Labor Scrap Metal	\$173,337	\$176,558	\$167,352	\$181,352
Operations Scrap Metal	\$72,342	\$51,069	\$34,838	\$9,739
Transport Scrap Metal	\$151,158	\$77,562	\$90,528	\$93,530
Revenue - Metals	\$(211,991)	\$(168,256)	\$(353,455)	\$(321,261)
Net Metal Cost / (Revenue)	\$184,846	\$136,934	\$(60,737)	\$(36,640)
Scrap Metal Tons	7,499	6,193	6,460	N A
Cost per Ton	\$24.65	\$22.11	\$(9.40)	N A

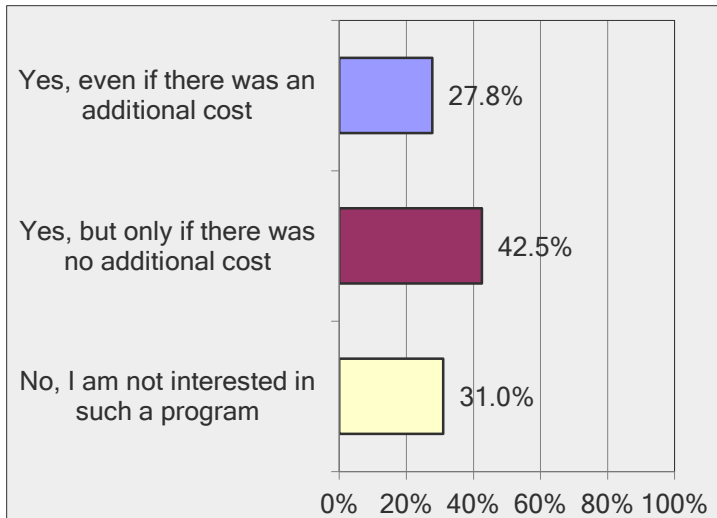


Strengths/Weaknesses

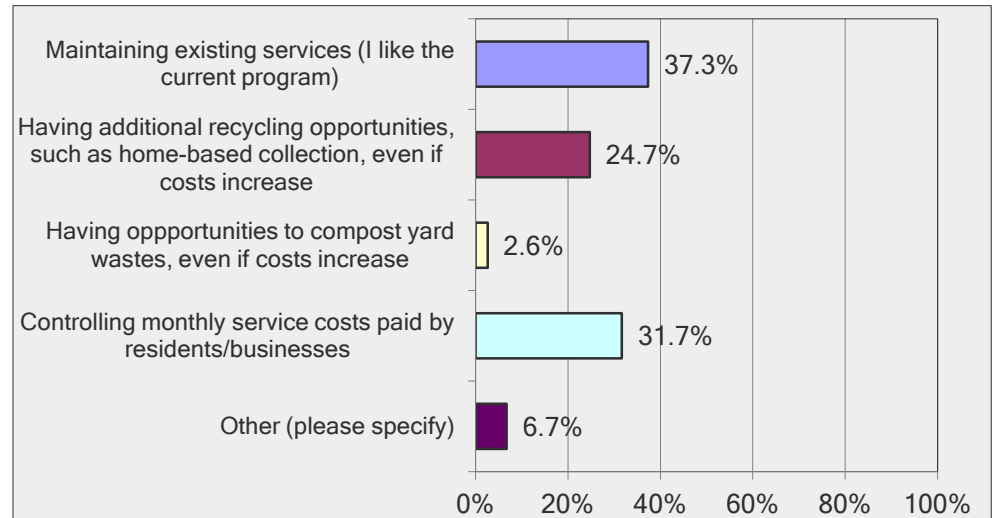
Strengths	Weaknesses
Central location of Recycling Center	Remote location
Automated refuse collection, supports operation efficiency and worker safety	Limited access to island
Single, experienced vendor for processing and marketing recyclables and handling of waste	Facilities are located on opposite ends of town
Survey indicates satisfaction with services	Baling facility near or at capacity
Access to modern landfill with energy recovery	Recyclables hauled from Recycling Center to scrap yard, then across town to port
Local disposal of inert debris	Free disposal (200 lbs/month) at transfer station provides a service, but may encourage disposal rather than diversion
Glass re-used in Sitka	Relatively small wastestream constrains number and type of capital investments
Spring cleanup/HHW collection events	Suitable sites for alternative disposal options constrained
Scrap metal recycling	Collection fleet is aged
Universal service policy - all generators billed for trash service	
Variable rate structure in-place	
Community interest in diversion	

- **Prior planning efforts recommended curbside recycling**
- **Survey results indicate citizen interest in curbside recycling**
 - Sensitivity to costs with this option
- **Curbside recycling more important than composting**

Would you prefer to have recyclable materials collected at your home or business?

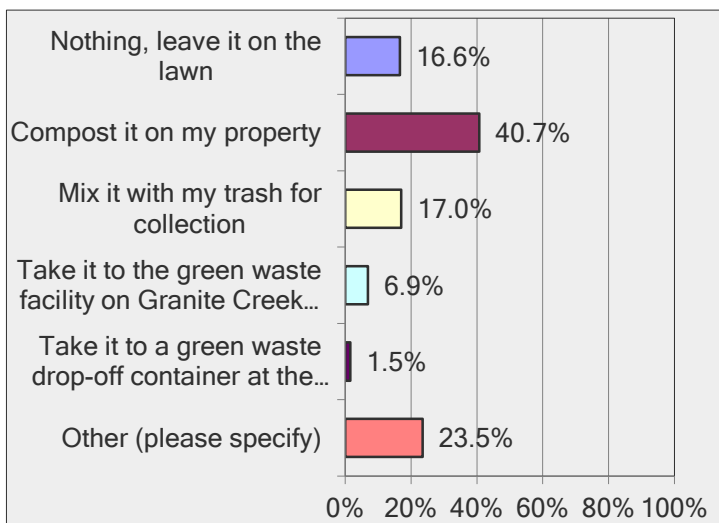


Regarding garbage and recycling services and programs in Sitka, what is most important to you?

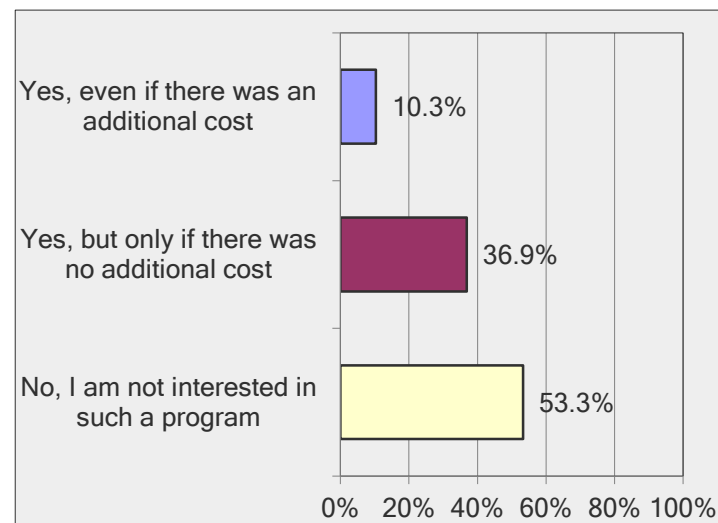


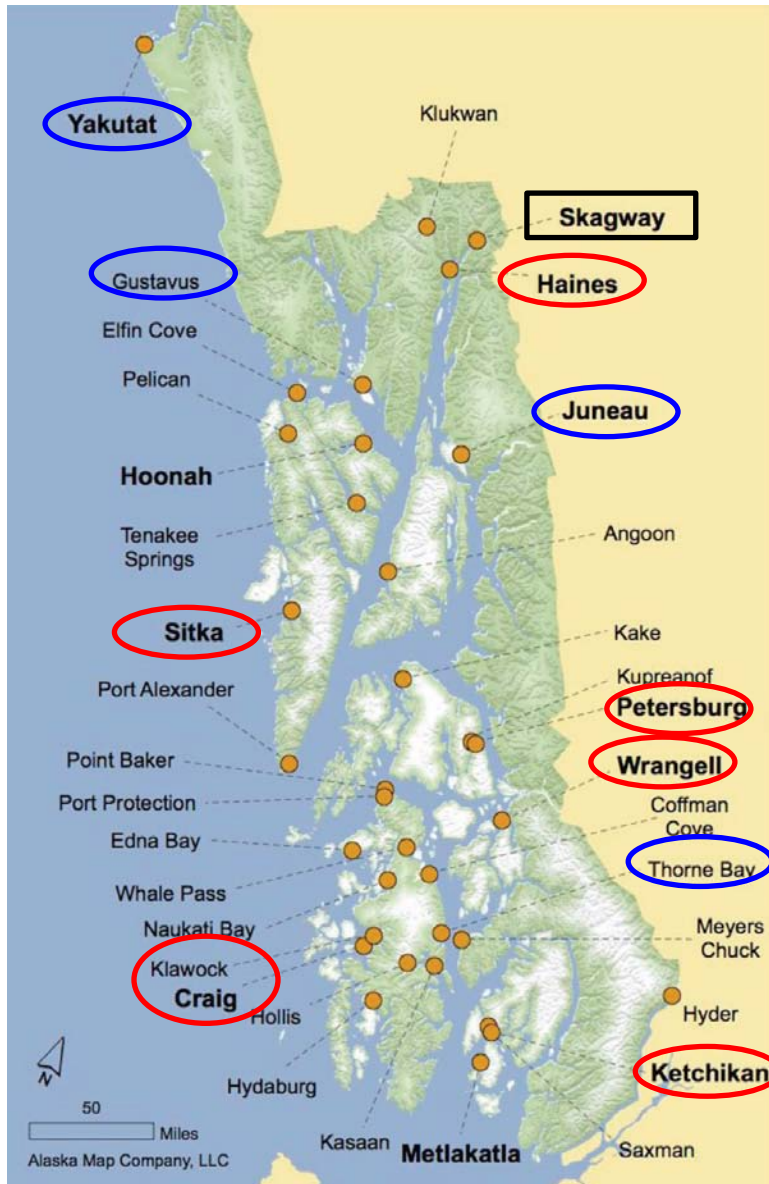
- **Prior planning efforts recommended composting**
- **Citizen survey indicated some resident interest in composting**
 - Nearly 60% of respondents indicate they manage green waste at home now, either by leaving it on the lawn or composting it. “Other” category indicated burning, “have none”, or use as fill on property.
 - More limited interest in composting of green waste than in curbside recycling
 - Sensitivity to costs with this option

What do you currently do with your yard waste such as grass clippings, tree or brush trimmings, or leaves?



Another option being looked at is composting of yard waste. Would you participate in such a program?



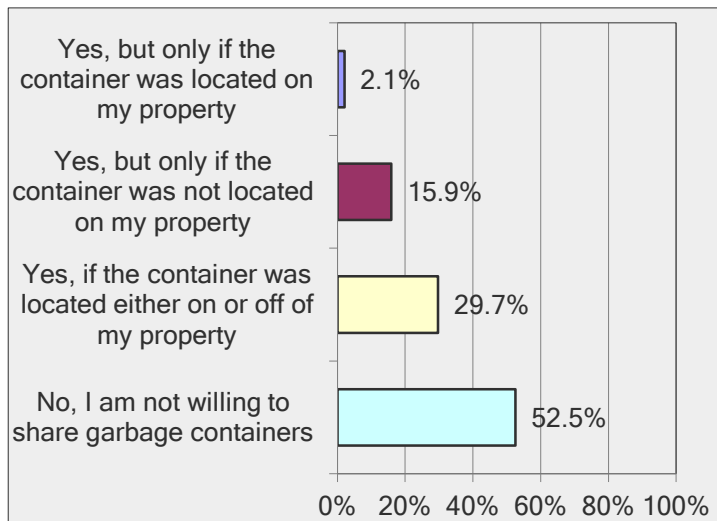


- Rabanco (barge/rail/landfill) used by a number of Southeast Alaska communities
- Waste Management owns/operates a landfill in Juneau (\$130/ton)
- One incinerator
- Key trade-off: exporting waste a variable cost, local facility a fixed cost. Variable costs are incentive to divert waste, fixed costs are a disincentive.

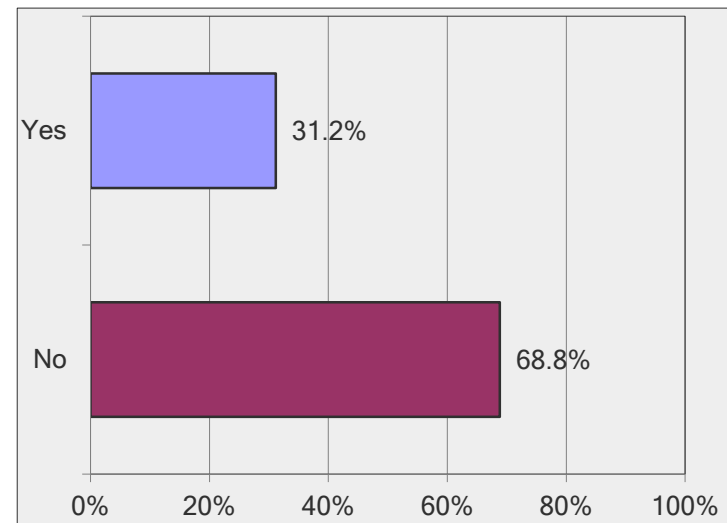
▪ **Citizen survey indicates resident interest in addressing bear issues, but there are widely-varying attitudes and sensitivity to how costs are allocated**

- Enforce current ordinance and issue fines
- Bear-resistant carts should be for residents/areas with problems
- Control bear population
- More/continued education

Would you be willing to place your garbage in a centralized container or share a container in your neighborhood or business area?



Another option being looked at is bear-resistant carts. Would you support an increase in monthly rates to address bear issues?



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