

Sixty-two people attended the workshop, including representatives from 17 cities, the Solid Waste Advisory Committee, the Metropolitan Solid Waste Management Advisory Committee, Sound Cities Association, 4 collection companies operating in King County, and staff from the King County Council, Auditor, Executive Office, Department of Natural Resources and Parks, and Solid Waste Division (SWD).

Presentations, reference documents, and more information about the Transfer Plan Review project are available at <http://your.kingcounty.gov/solidwaste/about/plan-review.asp>. Web links to presentations and reference documents from Workshop 1 are provided in this meeting summary.

Welcome and Introductions/Planned Approach

SWD Director Pat McLaughlin provided an overview of the workshop format and plan for the day. Participants were provided with index cards to record their thoughts and questions, either to share with the group at the end of each session or to turn in at the end of the day.

Presentation – Reconcile Third Party Review

SWD Assistant Director Kevin Kiernan presented the findings and recommendations of an [independent review](#) of the [Solid Waste Transfer and Waste Management Plan](#).

Questions

Q: Did GBB look at mandatory collection? Did they recommend continuing with self-haul? Were there capital recommendations or was there a time-of-use consideration?

A: GBB recommended maintaining self-haul service. They didn't comment on mandatory collection, but did recommend expansion of curbside bulky waste services to reduce self-haul demand.

Q: Did GBB look at Life Cycle Analysis concepts in detail?

A: No.

Q: Why would the County compete with private firms on a potentially profitable service like recycling?

A: We partner with private firms who process the recyclables from our stations.

Comments

- The County should explore the idea of making the transfer stations multipurpose with community input, as we do with the closed landfills.

Presentation – Reconcile 2011 Performance Audit

SWD Assistant Director Kevin Kiernan presented the conclusions of a [2011 performance audit](#) that focused on the division's rate model, financial plan, and transfer system capital projects.

Questions

Q: What is the useful life of the proposed facilities?

A: The requirement to build to FEMA immediate occupancy standards results in a longer-lasting facility. The audit used 50 years.

Q: What decisions increase cost and how were they evaluated?

A: Various policy decisions such as self-haul and recycling impact capital and operational costs. Costs, along with service and environmental impacts, will be considered during this review process.

Q: Is there a public health question with having only one compactor?

A: No. The risk related to having one piece of critical equipment is mitigated by 1) the ability to accommodate three days' storage on site, 2) equipment support contracts requiring 24-hour repair turnaround, and 3) bypass systems – for example, at Shoreline we can return to a top-load system by using the yard waste chutes for garbage.

Q: Are data available regarding the cost versus revenue of providing services?

A: Yes. Some initial data will be discussed today and additional analysis will be completed with system configuration models in future workshops.

Comments

- Many of the decisions made in the transfer plan seem to have been made piecemeal, and the division never did a full analysis of cost-effectiveness, and the audit did not look into full cost-effectiveness, either. I am glad to see that happening now.
- Regarding the “42 percent” [slides 12 and 13], I understand that redundancy is often necessary in operations to manage downtime and repairs.
- SWD should look at variables within alternatives, such as providing self-haul at all, some, and no facilities. These are not single-layer issues.

Presentation – 2040 Tonnage Forecast and Assumptions

SWD Economist Alexander Rist presented the data and assumptions used to develop the division's tonnage forecast.

Questions

Q: How is C &D [construction and demolition waste] handled now?

A: We partner with the private sector through contracts that will expire in 2014. We are currently exploring our options for managing C&D after the contracts expire.

Q: Why did you use 70 percent as the recycling rate in your charts?

A: Seventy percent is the goal set in the draft Comprehensive Solid Waste Management Plan. The current estimated recycling rate is 52 percent.

Q: What would be the impact of Bellevue's exit on Factoria?

A: Cities that have not signed the new ILA [Bellevue, Clyde Hill, Hunts Point, Medina and Yarrow Point] represent about 50 percent of the tonnage currently received at the Factoria transfer station. That tonnage will remain in the system to at least July 2028. The system as a whole and facilities specifically must be designed with flexibility in mind. The current design plans provide ample configuration options.

Q: Have studies been done on population demographics? It seems like the composition of the population increase would affect the tonnage generated.

A: We have no data on shifts in the overall population demographics up to 2040, but yes, it could have some impact on tonnage. We always have to adjust as new data becomes available.

Requests for Information

- Historical recycling rates for the last 10 years, for single- and multi-family, and total.
- Percentage of garbage from multi-family.
- The average King County system recycling rate without Bellevue, which has a high rate.

Comments

- Life Cycle Analysis around product disposal versus recycling is necessary to provide transparency about the true cost of recycling.

Presentation – Compaction

SWD Planning and Communications Manager Thea Severn presented considerations and impacts of installing pre-load compactors at the transfer stations.

Questions

Q: How much space do compactors take?

A: We will provide that analysis. There are two primary considerations: the size of the machine itself and the space required for trailers to back up to the compactor. There isn't enough room for this at the Algona or Renton transfer stations; Houghton could be modified.

Q: How many compactors are we using now?

A: We have one compactor each at Enumclaw, Vashon, and Shoreline, and there are two at Bow Lake.

Q: Does Slide 31 include labor?

A: Yes, it includes truck driver hours.

Q: How does compaction affect landfill efficiency?

A: Fewer vehicles coming to the landfill means faster, more efficient operations, but compaction is lost when garbage is tipped out of the trailers, so there is no effect on landfill density.

Q: What are the hazards related to compaction?

A: We don't have any specific hazard concerns. Because waste is unloaded on the floor rather than dumped directly into the trailer there is more opportunity to remove any potentially dangerous materials, such as propane tanks. However, one potential downside for pre-load compactors is that they may use more energy.

Q: How does compaction impact roads?

A: Current systems don't allow for top-loaded trailers to be weighed before they leave the station. Conversely, every compacted load is weighed, ensuring a legal weight. Compaction reduces the risk of over-weight loads, which could have road impacts.

Q: If there were waste-to-energy in the future, what would the effects of compaction be?

A: There would not be any effects because unloading the trailers un-compacts the waste.

Comments

- Compaction is essential. It creates efficiency and decreases costs.
- If there will be long-haul in the future, it makes compaction essential.
- GBB looked at self-haul only facilities without compaction. If we are looking at self-haul satellite facilities, those would be smaller and cheaper without compaction.
- You should look at the ability to pull recycling afterwards, for example, at a waste-to-energy facility. You have to pull recycling at a transfer station before compaction.

Presentation – Retention and Repair Costs of Existing Transfer Stations

SWD Engineering Services Manager Victor Okereke presented cost analysis for retaining the existing Algona, Factoria, Houghton, and Renton transfer stations in their current configurations.

Questions

Q: Upgrading the roof at Houghton cost seven million dollars several years ago, and yet the total cost summary for Factoria [slide 43], which needs a new roof, is only eight million?

A: Yes, that does include strengthening and raising the roof.

Q: Adding recycling counts as repair. I didn't see repair costs to add recycling.

A: It is not possible to add recycling to the Algona and Factoria transfer stations because there is no space to provide the service. Therefore, no costs for such activities are reflected in that analysis.

Q: Compaction has advantages, and it seems the decision of location is affected by the decision to compact. For example, you can't compact at the existing Algona site. Will the EIS process for siting in South County inform this [transfer plan review] process?

A: Yes. This process is connected to the South County siting process. The EIS looks at environmental impacts of three action alternatives and a no action alternative. The no action alternative is part of what we are considering in this transfer plan review.

Comments

- It seems unwise to invest in old facilities when they're not efficient within the overall system.
- You should include alternatives with changing service levels in retention and repair models.
- There are opportunity costs of retaining the existing stations.

- It would be helpful to see past repairs for the last five years to help see what kind of useful life is necessary to recoup those investments.

Presentation – Self-Haul

SWD Planning and Communications Manager Thea Severn presented data on the nature and habits of self-haul customers and their impacts on the solid waste system.

Questions

Q: How was the data in slide 62 gathered?

A: The charts are based on information from the [Waste Characterization Study](#). The survey recorded both the city and zip code of the respondent. Slide 62 references the reported city.

Q: Where do the unincorporated areas show up on slide 62?

A: They are included in “Other”, because they make up less than five percent of the total.

Q: Can you break the data down into days of the week?

A: Yes, that data will be provided before the next workshop.

Q: How does self-haul affect rates?

A: It’s hard to say. The calculations become very complex very quickly. Once built, how do you include the capital costs? Self-haul activity is concentrated on the weekends, when commercial activity is low.

Q: Bow Lake is 33 percent of the tons and 25 percent of the self-haul, while Shoreline is six percent of the tons and 11 percent of the self-haul. Why are some stations magnets for self-haul?

A: Bow Lake gets more commercial tonnage because of its location in the industrial Kent Valley, and because of its extended hours. Shoreline, in a largely residential area, has always had more self-haul.

Q: What is the County’s stance on the substantial percentage of Algonia’s self-haul that comes from out-of-county? Is there a rate impact?

A: There is no clear indication that there is a measurable impact on costs. From the self-reported survey, about seven percent comes from outside the county. It’s uncertain how much traffic actually comes from outside the county because customers could be from outside of King County within Auburn or Pacific.

Comments

- Most self-haulers want service on weekends.
- Enumclaw is closed to self-haulers two days a week. It has been okay once people got used to it. It’s helpful to drill into the impacts on business self-haul and how to accommodate them.
- If you eliminate self-haul people will dump illegally.
- Self-haul is a subject that is always emotional. Residents want these services.

Presentation – Transfer Station Recycling

SWD Recycling and Environmental Services Manager Jeff Gaisford presented information on the recycling services currently provided at transfer stations and options for the future.

Questions

Q: How will household hazardous waste be handled in this plan review?

A: That is governed by a separate plan, prepared by the Local Hazardous Waste Management Program. They are currently looking at the need for more service in the south county area and we are keeping track of that process.

Q: Are people bringing yard waste mixed with garbage to the transfer stations, or are they bringing whole loads of yard waste? Is it an education issue?

A: Some people bring yard waste mixed with garbage, but others do bring whole loads. They come to us because it's convenient. We continue our efforts with the cities to educate and inform system users of the importance of careful separation.

Q: I would like to see what happens to collected materials listed in slide 78.

A: Yard waste goes to Cedar Grove. Fiber and containers is the same as curbside. The end point is controlled by the private companies that process these materials.

Q: If 50 percent of what goes into the landfill is recycling, who is the culprit?

A: Slide 73 shows that self-haulers and single-family residents throw away about the same amount of recyclable materials.

Q: Is there data on residue resulting from contamination or lack of markets?

A: All materials go to the same MRF that curbside-collected materials go to. There is some residual at those facilities, but most of the material is recycled.

Q: Is there a market for all the materials collected?

A: For carpet no, for paper yes. Markets are constantly changing.

Q: Do efforts to expand recycling at our facilities have an impact on the private sector?

A: Any recycling at transfer stations now is processed by the private sector. Even with the high level of service available from the private sector at the curb, there is still demand for service at the stations.

Information Requests

- Information about system costs, not just transfer station costs, but also collection costs.

Comments

Transfer Station Recycling

- We should highlight Styrofoam in the future. Also, mattresses and box springs are banned from Canadian landfills.
- There is a ban on yard waste in the curbside garbage, but yard waste is still allowed in the garbage at transfer stations. There is potential in a ban of self-haul organics in the garbage.
- Consider the potential revenue from managing these materials directly rather than supporting the private sector.
- Recycling at transfer stations looks low because most folks have curbside recycling and use it. Transfer stations will never get a recycling rate high as the residential recycling rate.
- There is no incentive to recycle if you can go somewhere close to dump but have to go far to recycle. Then you're just relying on people's ethics. What is the goal? Is it to keep materials out of the landfill? You need a clear goal to inform the decision.

Bulky Waste Collection

- There are both costs and opportunities to increase recycling. For example, bulky waste collection improves the likelihood those materials will be recycled.
- Bulky waste collection is available through most city contracts, but is cost prohibitive for most residents. We have to look for a more cost effective method.
- Collection events are not a no-cost option. Bellevue's two events cost in the \$200,000 range. We have to get away from the idea that recycling is or should be free. Everything has costs.
- It's a public policy debate of subsidizing. Should one person pay \$25, or should 1.3 million people pay a dollar each? At the heart of the question is, "What is an appropriate subsidy?"

Presentation – Drive Time Analysis

SWD Economist Alexander Rist presented the analysis of the effect of transfer station location on the level of service criterion for drive time (30 minutes for 90 percent of users). All scenarios examined met the standard.

Questions

Q: When is the drive time taking place in this analysis?

A: The data available to us does not account for traffic or specific times of day. The same was true with the analysis associated with the current transfer station plan. So, while this enables comparison between plans, it lacks insight to the true customer impacts.

Q: Can you work with the haulers to get actual drive times?

A: Yes. We will reach out to our business partners to explore this further.

Q: If Google Maps can give specific drive times, why can't you?

A: These numbers are estimates based on averages over a full day. Google is "in the minute."

Q: Does the conclusion on slide 95 mean “Even without new stations and with closing existing facilities,” or do you mean “even without new stations and without closing existing facilities?”

A: The conclusion means that the drive time standard will be met even if Houghton, Algona, and Renton close and even if no new stations are built.

Comments

- Miles = time and time = money for the haulers. A small difference could mean significant costs.
- There could be a scenario in which waste-to-energy displaces a transfer station. Regional direct is small now but a change in pricing structure could eliminate the need for a transfer station.
- You should reconsider drive time with final scenarios and provide percentages.

What’s Next?

Using show of hands, the division asked for input on what to include in models.

<i>Should we model a system with one or more self-haul only stations?</i>	Little interest (less than 5)
<i>Should we model a system with commercial-only stations?</i>	Some interest (less than 10)
<i>Should we model a system with commercial weekdays and self-haul on weekends?</i>	Majority interest
<i>Is it okay for a transfer station to have no recycling?</i>	Little interest (less than 5)
<i>Is it okay for a transfer station to have limited recycling?</i>	Some interest (less than 10)
<i>Should transfer stations that serve commercial haulers all have compactors?</i>	Confirmed – yes
<i>Should we consider a system with no South County transfer station?</i>	Little interest (less than 5)

Questions

Q: What are the assumptions about closing stations?

A: There are no assumptions. That question will be addressed through this process.

Thank you for attending.

The next workshop is Thursday, August 22, 10 a.m. – 2:30 p.m.

at the [Mercer Island Community Center](#).

RSVP required.