Appendix C: Hauler Survey

King County Solid Waste Division Transfer Plan Review October 7, 2014

Questions for Haulers

- 1. How would the following changes to the current transfer system affect your company's costs capital and operating? How would it affect routing of collection vehicles? How many additional miles would collection trucks travel? How might cost increases be distributed to customers, i.e., would customers in certain cities or areas see higher costs?
 - a. Closure of the Renton Transfer Station no replacement facility

No current impact unless Factoria and/or Bow Lake are impacted.

b. Closure of the Houghton Transfer Station – no replacement facility

No current impact

c. Closure of the Houghton Transfer Station – replacement transfer station in service area (for purposes of analysis only, we are considering locations near the end of 520 in Redmond and in the Totem Lake area)

No current impact

2. In an effort to more evenly distribute tonnage in the transfer system, the county is considering directing solid waste collected curbside to particular transfer stations. Looking at the table below, if solid waste from the cities and surrounding unincorporated area was directed as shown, how would that change your company's capital and operating costs? How would it affect routing of collection vehicles? How many additional miles would collection trucks travel? How might cost increases be distributed to customers, i.e., would customers in certain cities or areas see higher costs?

	cities/surrounding areas directed to Factoria	cities/surrounding areas directed to Shoreline	cities/surrounding areas directed to Renton	cities/surrounding areas directed to Bow Lake
a)	Beaux Arts, Bellevue, Carnation, Clyde Hill, Hunts Point, Issaquah, Medina, Newcastle, North Bend, Redmond, Sammamish, Snoqualmie, Yarrow Point	Bothell, Duvall, Kenmore, Kirkland, Lake Forest Park, Shoreline, Woodinville	n/a – Renton closed or not accepting commercial	Mercer Island, Renton
b)	Beaux Arts, Bellevue, Carnation, Clyde Hill, Hunts Point, Medina, Mercer Island, Redmond, Sammamish, Yarrow Point	Bothell, Duvall, Kenmore, Kirkland, Lake Forest Park, Shoreline, Woodinville	Issaquah, Newcastle, North Bend, Renton, Snoqualmie	

Note: Cities/surrounding areas not shown in the table would not be directed to a specific transfer station.

3. If the Factoria Transfer Station were open until 10 or 11 p.m. would your company use the extended hours? If so, how many trucks would come in? At approximately what times? What station/hours do those trucks use now?

Yes, we would use the extended hours primarily for trucks coming from Issaquah or Carnation.

4. Are there other changes to station hours that your company would like considered? How many trucks would use the different hours? When are those trucks using the station now?

We recommend extending Bow Lake Transfer Station to 24 hours, 7 days per week. We support any extension of hours at the Factoria Transfer Station.

- 5. If the county were to reduce the regional direct fee at Cedar Hills, would your company bypass county transfer stations, instead using private transfer stations, and bring transfer-trailers to Cedar Hills? And if so:
 - a. How much waste?

See attachment [ISSAQUAH FACTORIA HAULS]

b. From which county transfer stations would waste be diverted?

This depends on the station closures but probably Factoria.

c. How would it affect routing of collection vehicles?

It would negatively impact the efficiency of our collection routes.

d. How would it affect total miles driven (collection vehicles and transfer-trailers)?

Going to Cedar Hills rather than Factoria for instance has the potential to add an additional 15,000 miles per month.

e. Is adequate private transfer capacity available or could it be made available?

We are not aware of viable capacity in this regard.

- f. Would additional transfer station(s) need to be constructed and/or permitted?
- g. Would additional trucks be needed? Additional staff?

Certainly diverting to Cedar Hills would create more inefficient routing, adding to staff time and truck time.

h. At what price point would it be worth it to make needed changes?

We would probably need the cost per ton to be at a lower price than the current transfer station fee in order to make this a viable, cost-effective alternative given the additional staff time, fuel use, and truck time.

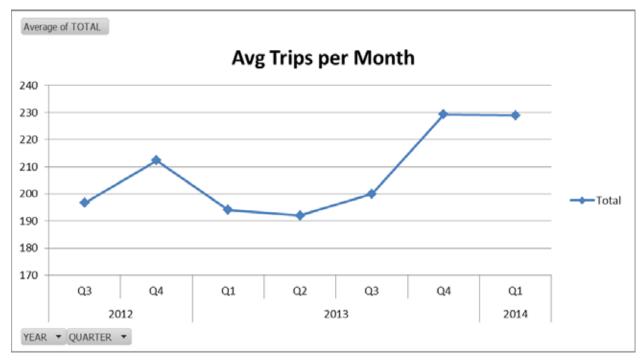
6. So that we can consider possible environmental impacts related to changes in miles driven, what type of fuel are your company's vehicles currently using? Do you anticipate changes to fuel type and/or fuel efficiency?

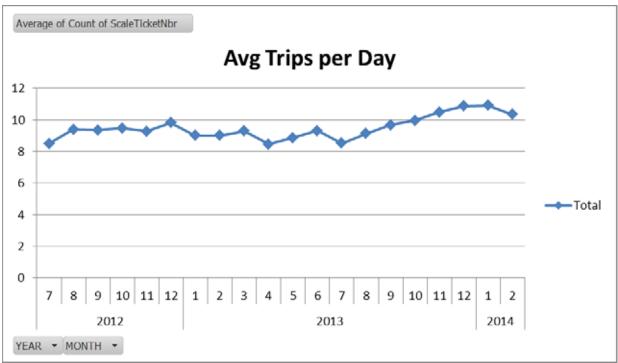
We primarily use compressed natural gas in our collection fleet.

Appendix C: Hauler Survey

- 7. Because a significant portion of the waste brought to the transfer stations by self-haulers is bulky waste, such as furniture, it may be beneficial to collect more of this type of waste curbside does your company have ideas that would make this service more convenient and cost effective for customers? What would need to change? Costs?
 - We currently offer curbside bulky collection to several of our communities at different rate structures. Some are allowed a free collection of one yard worth of material once per year in lieu of a community collection event.
- 8. Is there other information you think would be helpful in our analysis of options?

ISSAQUAH FACTORIA HAULS





Supplemental Hauler Questions January 16, 2015

- 1. If your trucks could no longer use the Renton transfer station, what would the cost impacts be to the curbside customers in the area? For the average 1-can residential customer?

 Recology CleanScapes does not currently use the Renton Transfer Station except for rare instances.

 The closure of the Renton Transfer would not have any impact to the cost of our operations.
- 2. If your trucks could no longer use the Houghton transfer station and there was no NERTS, what would the cost impacts be to the curbside customers in the area? For the average 1-can residential customer?
 - Recology CleanScapes submitted a proposal to the City of Bothell for service based on the assumption that our garbage would be directed to the Shoreline Transfer Station. While we occasionally use the Houghton Transfer Station, we estimate there would be limited cost impacts to our operations based on the closure of Houghton.
- 3. If your trucks were directed to use transfer stations as shown in the table below, what would the cost impacts be to the curbside customers in the area? For the average 1-can residential customer? Recology CleanScapes would only be impacted through the options outlined below in Issaquah. If our trucks from Issaquah were directed to use the Renton Transfer Station rather than Factoria, we project this to have a negative impact to the productivity of our Issaquah routes. This would add approximately 20 miles of round trip driving, most of which would occur on a very congested highway. We estimate that this would result in us adding an additional hour of cost to each haul coming from Issaquah. In addition to the potential for cost increases through inefficient routing we would be concerned about the environmental impacts resulting from increased drive time and increased time idling in traffic.

Without knowing if there will be additional wait times at the transfer station, we can only estimate a range of 2-3% increase, which would lead to \$0.29 to \$0.43 per month on top of the current rate of \$14.33 for a 35 gallon cart in Issaguah.

	cities/surrounding areas directed to Factoria	cities/surrounding areas directed to Shoreline	cities/surrounding areas directed to Renton	cities/surrounding areas directed to Bow Lake
a)	Beaux Arts, Bellevue, Carnation, Clyde Hill, Hunts Point, Issaquah, Medina, Newcastle, North Bend, Redmond, Sammamish, Snoqualmie, Yarrow Point	Bothell, Duvall, Kenmore, Kirkland, Lake Forest Park, Shoreline, Woodinville	n/a – Renton closed or not accepting commercial	Mercer Island, Renton
b)	Beaux Arts, Bellevue, Carnation, Clyde Hill, Hunts Point, Medina, Mercer Island, Redmond, Sammamish, Yarrow Point	Bothell, Duvall, Kenmore, Kirkland, Lake Forest Park, Shoreline, Woodinville	Issaquah, Newcastle, North Bend, Renton, Snoqualmie	

Note: Cities/surrounding areas not shown in the table would not be directed to a specific transfer station.

King County Solid Waste Division Transfer Plan Review October 7, 2014

Questions for Haulers

- 1. How would the following changes to the current transfer system affect your company's costs capital and operating? How would it affect routing of collection vehicles? How many additional miles would collection trucks travel? How might cost increases be distributed to customers, i.e., would customers in certain cities or areas see higher costs?
 - a. Closure of the Renton Transfer Station no replacement facility

114 loads per month from Division 176 would be diverted to Bow Lake resulting in an additional 570 miles per month and 19 hours (at \$100 per hour = \$1,900 per month x 12 months = \$22,800 in additional labor / fuel and maintenance costs). In addition we put approximately 2,340 operating hours on a collection vehicle each year, with the additional 19 hours per month x 12 = 228 additional hours per year. Roughly 10% more, thereby pulling forward the life of the vehicle 10%. Typically we depreciate a collection vehicle over 10 years, so we would be looking at increased maintenance costs or depreciating over a short time frame. Estimated impact is \$3k per year. So total impact is \$26k.

b. Closure of the Houghton Transfer Station – no replacement facility

253 loads per month for Division 172 would be diverted to Factoria resulting in an additional 1874 miles per month and 62 hours(at \$100 per hour = \$6,200 per month x 12 months = \$74,400 in additional labor / fuel and maintenance costs).

In addition we put approximately 2,340 operating hours on a collection vehicle each year, with the additional 62 hours per month x 12 =744 additional hours per year. Roughly 10% more, thereby pulling forward the life of the vehicle 10%. Typically we depreciate a collection vehicle over 10 years, so we would be looking at increased maintenance costs or depreciating over a short time frame. Estimated impact is \$3k per year. So total impact is \$77k.

c. Closure of the Houghton Transfer Station – replacement transfer station in service area (for purposes of analysis only, we are considering locations near the end of 520 in Redmond and in the Totem Lake area)

253 loads per month for Division 172 would be diverted to Totem Lake resulting in an additional 989 miles per month and 33 hours(at \$100 per hour = \$3,300 per month x 12 months = \$39,600 in additional labor / fuel and maintenance costs). In addition we put approximately 2,340 operating hours on a collection vehicle each year, with the additional 19 hours per month x 12 = 396 additional hours per year. Roughly 10% more, thereby pulling forward the life of the vehicle 10%. Typically we depreciate a collection vehicle over 10 years, so we would be looking at increased maintenance costs or depreciating over a short time frame. Estimated impact is \$3k per year. So total impact is \$43k.

Republic Page 6

2. In an effort to more evenly distribute tonnage in the transfer system, the county is considering directing solid waste collected curbside to particular transfer stations. Looking at the table below, if solid waste from the cities and surrounding unincorporated area was directed as shown, how would that change your company's capital and operating costs? How would it affect routing of collection vehicles? How many additional miles would collection trucks travel? How might cost increases be distributed to customers, i.e., would customers in certain cities or areas see higher costs?

We would prefer the County did not direct tons to specific transfer station. Option B would be the best choice if required. In Option A Taking Mercer Island to Bow Lake and North Bend to Renton would be problematic.

	cities/surrounding areas directed to Factoria	cities/surrounding areas directed to Shoreline	cities/surrounding areas directed to Renton	cities/surrounding areas directed to Bow Lake
a)	Beaux Arts, Bellevue, Carnation, Clyde Hill, Hunts Point, Issaquah, Medina, Newcastle, North Bend, Redmond, Sammamish, Snoqualmie, Yarrow Point	Bothell, Duvall, Kenmore, Kirkland, Lake Forest Park, Shoreline, Woodinville	n/a – Renton closed or not accepting commercial	Mercer Island, Renton
b)	Beaux Arts, Bellevue, Carnation, Clyde Hill, Hunts Point, Medina, Mercer Island, Redmond, Sammamish, Yarrow Point	Bothell, Duvall, Kenmore, Kirkland, Lake Forest Park, Shoreline, Woodinville	Issaquah, Newcastle, North Bend, Renton, Snoqualmie	

Note: Cities/surrounding areas not shown in the table would not be directed to a specific transfer station.

3. If the Factoria Transfer Station were open until 10 or 11 p.m. would your company use the extended hours? If so, how many trucks would come in? At approximately what times? What station/hours do those trucks use now?

Yes-Division 172 would take full advantage of the extended hours. 20 trucks per day if there is distribution requirements, 40 trucks per day if no distribution requirements. 7pm to 10pm. Currently use Houghton, Shoreline

4. Are there other changes to station hours that your company would like considered? How many trucks would use the different hours? When are those trucks using the station now?

Having early morning hours 4am would allow us to dump previous day routes. Number of trucks is undetermined at this time.

- 5. If the county were to reduce the regional direct fee at Cedar Hills, would your company bypass county transfer stations, instead using private transfer stations, and bring transfer-trailers to Cedar Hills? *Yes possibly* And if so:
 - d. How much waste?

Republic Page 7

Undetermined at this time

e. From which county transfer stations would waste be diverted?

Mostly Bow Lake and Algona

f. How would it affect routing of collection vehicles?

Undetermined at this time

g. How would it affect total miles driven (collection vehicles and transfer-trailers)?

Undetermined at this time

h. Is adequate private transfer capacity available or could it be made available?

Not at this time

i. Would additional transfer station(s) need to be constructed and/or permitted?

Yes

j. Would additional trucks be needed? Additional staff?

Undetermined at this time

k. At what price point would it be worth it to make needed changes?

Undetermined at this time

6. So that we can consider possible environmental impacts related to changes in miles driven, what type of fuel are your company's vehicles currently using? Do you anticipate changes to fuel type and/or fuel efficiency?

Diesel & CNG. More conversions to CNG if the future.

7. Because a significant portion of the waste brought to the transfer stations by self-haulers is bulky waste, such as furniture, it may be beneficial to collect more of this type of waste curbside – does your company have ideas that would make this service more convenient and cost effective for customers? What would need to change? Costs?

We currently offer special pickup services for these types of items with a different type of truck. Rates vary depending on the area.

8. Is there other information you think would be helpful in our analysis of options?

Republic Page 8

King County Solid Waste Division Transfer Plan Review October 7, 2014

As we communicated during the first transfer plan review, Waste Management fully supports the Base Plan option, which includes building a Northeast facility, likely in the Redmond area. Building a Northeast facility, as part of a well-dispersed transfer station network, ensures that costs and impacts are more equitably distributed across the solid waste system and among the ratepayers. Level of service would also be more relatively uniform across the regional system.

As between Alternative E1 and E2, we would strongly advocate that King County choose Alternative E2, if the Council requires the choice of between those two alternatives; otherwise, we continue to support the Base Plan option. Alternative E1 requires redirecting haulers to underutilized transfer stations, which would be an expensive option for ratepayers, particularly in the cities which will be redirected. Conversely, Alternative E2 only limits self hauler use of the Factoria Transfer station until after 4:00pm, weekdays. Although, a certain amount of self haulers might be affected by the hours restriction under Alternative E2; many, many more ratepayers will be impacted if the County selects Alternative E1. Thus, we strongly urge King County to not select Alternative E1 in this transfer review process.

Questions for Haulers

- 1. How would the following changes to the current transfer system affect your company's costs capital and operating? How would it affect routing of collection vehicles? How many additional miles would collection trucks travel? How might cost increases be distributed to customers, i.e., would customers in certain cities or areas see higher costs?
 - I. Closure of the Renton Transfer Station no replacement facility When we worked on the transfer station review last year, the estimates we presented for various alternatives each assumed the closure of the Renton Transfer Station. We projected an increase of \$1 to \$1.5 million in operating expenses (any operating expenses presented are on an annual basis) and an approximate \$3 million surge in capital costs.
 - m. Closure of the Houghton Transfer Station no replacement facility With the closure of Houghton, our trucks which currently visit Houghton, would be instead routed to Factoria. We would incur at least an increase of \$1 million in operating expenses with this change. We estimate that the capital costs could be upwards of \$1.5 to \$3 million, as additional trucks will be required.
 - n. Closure of the Houghton Transfer Station replacement transfer station in service area (for purposes of analysis only, we are considering locations near the end of 520 in Redmond and in the Totem Lake area). As stated above, we definitely support the construction of a new facility in Northeast King County. However, even with the construction of a Northeast facility, Houghton would be closed and thus, there would still be operating expense and capital cost increases of \$1 to 2 million and \$3 million, respectively.
- 2. In an effort to more evenly distribute tonnage in the transfer system, the county is considering directing solid waste collected curbside to particular transfer stations. Looking at the table below, if solid waste from the cities and surrounding unincorporated area was directed as shown, how would that change your company's capital and operating costs? How would it affect routing of collection vehicles? How many additional miles would collection trucks travel?

How might cost increases be distributed to customers, i.e., would customers in certain cities or areas see higher costs?

	cities/surrounding areas directed to Factoria	cities/surrounding areas directed to Shoreline	cities/surrounding areas directed to Renton	cities/surrounding areas directed to Bow Lake
a)	Beaux Arts, Bellevue, Carnation, Clyde Hill, Hunts Point, Issaquah, Medina, Newcastle, North Bend, Redmond, Sammamish, Snoqualmie, Yarrow Point	Bothell, Duvall, Kenmore, Kirkland, Lake Forest Park, Shoreline, Woodinville	n/a – Renton closed or not accepting commercial	Mercer Island, Renton
b)	Beaux Arts, Bellevue, Carnation, Clyde Hill, Hunts Point, Medina, Mercer Island, Redmond, Sammamish, Yarrow Point	Bothell, Duvall, Kenmore, Kirkland, Lake Forest Park, Shoreline, Woodinville	Issaquah, Newcastle, North Bend, Renton, Snoqualmie	

Note: Cities/surrounding areas not shown in the table would not be directed to a specific transfer station.

2(a): If the listed cities were redirected to either Factoria or Shoreline, we would experience an increase of \$3 to 4 million in operating expenses. Capital costs, in the form of adding new trucks, would rise by \$3.5 million. Any city that is redirected would see their costs rise, including those cities in which a transfer station closes.

2(b): In the second scenario, operating expenses would augment by \$2.5 million to \$3 million. Capital costs would increase by \$2.6 million. Again, any municipalities which are redirected would expectedly experience an increase in rates.

- 3. If the Factoria Transfer Station were open until 10 or 11 p.m. would your company use the extended hours? If so, how many trucks would come in? At approximately what times? What station/hours do those trucks use now? We would not need to use the extended late hours at Factoria. However, opening Factoria one hour earlier would be operationally beneficial for some of our routes.
- 4. Are there other changes to station hours that your company would like considered? How many trucks would use the different hours? When are those trucks using the station now? We favor the proposal, as part of Alternative E2, of keeping Factoria open only to commercial haulers and account customers before 4:00pm on weekdays and limiting self haul customer use until after 4:00pm. This would better facilitate the flow of commercial traffic in and out of Factoria and ultimately benefit our customers.
- 5. If the county were to reduce the regional direct fee at Cedar Hills, would your company bypass county transfer stations, instead using private transfer stations, and bring transfer-trailers to Cedar Hills? And if so:
 - o. How much waste? Approximately 50,000 tons annually.

- p. From which county transfer stations would waste be diverted? *Renton Transfer Station*.
- q. How would it affect routing of collection vehicles? *The final disposition point would, of course, change, but the routing of the collection trucks in the municipalities (for example, Newcastle) or within the County itself would not change.*
- r. How would it affect total miles driven (collection vehicles and transfer-trailers)? *Our collection vehicles would increase miles driven by approximately 255,000 per year.*
- s. Is adequate private transfer capacity available or could it be made available? We believe that additional private transfer capacity could be made available, but would need to explore this further.
- t. Would additional transfer station(s) need to be constructed and/or permitted? *Unknown at this time*.
- u. Would additional trucks be needed? Additional staff? *Given that the mileage would dramatically increase as provided above in 5(d), we could see additional trucks needed over time.*
- v. At what price point would it be worth it to make needed changes? *Because any rate* changes would likely be a passed through to the rate-paying customer, it would be difficult to ascertain a price point that would entice us to travel to Cedar Hills Landfill.
- 6. So that we can consider possible environmental impacts related to changes in miles driven, what type of fuel are your company's vehicles currently using? Do you anticipate changes to fuel type and/or fuel efficiency? We currently have approximately 216 compressed natural gas (CNG) trucks operating in the Puget Sound area. We expect to add a few additional CNG trucks to the fleet.
- 7. Because a significant portion of the waste brought to the transfer stations by self-haulers is bulky waste, such as furniture, it may be beneficial to collect more of this type of waste curbside does your company have ideas that would make this service more convenient and cost effective for customers? What would need to change? Costs? We would be happy to discuss cost effective curbside collection solutions for bulky items, if King County goes down this path with whichever Alternative is selected.
- 8. Is there other information you think would be helpful in our analysis of options? *If King County chooses Alternative E1, we would welcome offsets in terms of lower fees or incentive pricing; although, as communicated above, we do not advocate the selection of Alternative E1 as a viable option for the regional transfer station system.*

Supplemental Hauler Questions January 16, 2015

We cannot emphasize enough that, for all of the following answers, the rate impacts are very rough and mutable estimates. There are too many variables and uncertain information in play to provide determinate numbers. We are also providing cost impacts for the average residential curbside customer. The cities would have to deconstruct the rate impacts to determine the average one can customer rate. In calculating these estimates, we utilized the capital cost and operating expense figures that were previously provided during this transfer review process (see answers submitted on 12/2/14)

- 1. If your trucks could no longer use the Renton transfer station, what would the cost impacts be to the curbside customers in the area? For the average 1-can residential customer? For the cities of Renton, Newcastle, Tukwila, and the UTC area of Seattle (Rainier), we estimate that there would be an increase of the collective average rate of \$5.00 to \$7.00. Stated differently, curbside customer rates could rise by 24% to 34% with the closure of the Renton transfer station.
- 2. If your trucks could no longer use the Houghton transfer station and there was no NERTS, what would the cost impacts be to the curbside customers in the area? For the average 1-can residential customer? For the cities of Bothell (remaining annexation), Duvall, Kirkland, Redmond, Snoqualmie, Sammamish, and the UTC area of Northeast King County which includes Woodinville, we estimate there will be an escalation in the collective average rate of \$2.50 to \$3.75. Alternatively, curbside customers rates could increase by 12% to 18% with the closure of the Houghton transfer station and without the construction of the NERTS.

3				
	cities/surrounding areas directed to Factoria	cities/surrounding areas directed to Shoreline	cities/surrounding areas directed to Renton	cities/surrounding areas directed to Bow Lake
a)	Beaux Arts, Bellevue, Carnation, Clyde Hill, Hunts Point, Issaquah, Medina, Newcastle, North Bend, Redmond, Sammamish, Snoqualmie, Yarrow Point	Bothell, Duvall, Kenmore, Kirkland, Lake Forest Park, Shoreline, Woodinville	n/a – Renton closed or not accepting commercial	Mercer Island, Renton
b)	Beaux Arts, Bellevue, Carnation, Clyde Hill, Hunts Point, Medina, Mercer Island, Redmond, Sammamish, Yarrow Point	Bothell, Duvall, Kenmore, Kirkland, Lake Forest Park, Shoreline, Woodinville	Issaquah, Newcastle, North Bend, Renton, Snoqualmie	

Note: Cities/surrounding areas not shown in the table would not be directed to a specific transfer station.

3(a). For the cities of Bothell, Newcastle, Duvall, Kirkland, Redmond, Snoqualmie, Sammamish, and the UTC area of Northeast King County which includes Woodinville, the collective average curbside rate would rise by \$5.50 to \$8.00. Or, alternatively, residential curbside customers would

Waste Management

experience rate increases of 27% to 38% if their solid waste was redirected to either Factoria or Shoreline.

3(b). For the same cities previously discussed in 3(a) with the addition of Tukwila and Renton, the collective average rate would increase by \$3.15 to \$4.75. Stated differently, residential curbside customer rates would escalate by 15% to 22% with the redirect scenarios are given.