

Alternatives Excerpted from Transfer Plan Review Final Report Revised and Amended by King County Council, June 2014

Base Alternative (Current Transfer Plan)

(A recommended Alternative)

The Base Alternative implements the current Transfer Plan, which was adopted by the County Council in December 2007. This plan calls for the County to:

- Build a new Factoria recycling and transfer station as currently designed and permitted, with phase 1 (garbage) opening in 2016, and phase 2 (recycle and HHW) opening in 2017 with demolition of the existing Factoria transfer station
- Close Renton in 2018
- Build a new South County Recycling and Transfer Station (pending environmental review) to open in 2019
- Close the Algonia transfer station in 2020, making that property available for other use
- Site a new Northeast Recycling and Transfer Station somewhere in the service area currently being served by Houghton to open in 2020
- Close the Houghton transfer station in 2021
- All stations would provide pre-load compaction, three days storage capacity, self-haul service during all operating hours, and full recycling services as described in Figure 3.

The Base Alternative is the most expensive in terms of capital costs. However, with five transfer stations dispersed across the county, particularly in the forecast high growth areas of northeast and south county, collection costs are expected to be lowest in this alternative. This plan supports the targeted self-haul, recycling, and compaction objectives, providing the highest level of service of all options under consideration. The primary risks are associated with the typical siting challenges for a transfer station. This Alternative received the support of more cities than any other.

Cost

With a total of five newly constructed modern transfer and recycling facilities, three of which have yet to be built, this alternative has the highest capital costs. Preliminary planning-level estimates (in 2013 dollars) place future capital costs for this alternative at \$222 million; this would translate to an added cost of about \$1.08 per month for the average household (estimated median cost of capital debt 2014-2040). All new facilities would be subjected to value engineering and sized according to the most current tonnage forecasts for the area the facility would serve. Alternative project financing and delivery methods would be evaluated for each new station built to identify potential cost savings.

The Renton Transfer Station would close under this alternative, so collection cost for residents and businesses in the Renton area would increase as commercial haulers reroute to the Bow Lake and Factoria facilities. One area hauler estimates a less than one percent increase in operational or customer costs; a second hauler estimates an increase of \$1 to 2 million per year in added driver hours and trips and an additional \$3 to 6 million in capital costs such as additional trucks.

Service

This alternative would meet all of the level of service standards developed by consensus with regional stakeholders to evaluate satisfactory system performance. A full range of recycling services would be available to self-haulers and self-haul service would be available at all facilities during all hours of operation to support the region's recycling goal.

This alternative provides the greatest number of transfer facilities, evenly distributed throughout the regional system. Therefore all areas of the system would receive a uniform high level of service.

Environment

The Base Alternative minimizes impacts by incorporating compactors at every facility, which significantly reduces the number of transfer trailer trips generating traffic and GHGs. With the greatest number of full-service facilities evenly distributed throughout the system, this alternative also minimizes the environmental impacts of customer trips, as well as the intensity of impacts on streets neighboring each facility.

Risks/Challenges

This alternative requires siting two new facilities. Siting any new facility is challenging and comes with the risk that an appropriate site cannot be identified.

Alternative E

Alternative E was added in response to feedback received during the draft report comment period. This alternative explores the feasibility of serving the northeast county without a Northeast Recycling and Transfer Station and building Factoria without expanding onto the Eastgate property. This alternative retains the Renton Transfer Station for analytical purposes and builds a South County Recycling and Transfer Station, allowing Algona to close; it would close Houghton in about 2021. Details of the analysis of Alternative E are included in Appendix H.

In order for the system to absorb 165,000 tons and 125,000 transactions annually that would have gone through a Northeast Recycling and Transfer Station, the division identified three options.

1. Redirect some commercial traffic from Factoria Recycling and Transfer Station to Shoreline and Renton, which would remain open.
2. Limit self-haul services at Factoria Recycling and Transfer Station to evenings and weekends, eliminate recycling and HHW service at Factoria, and keep Renton open with extended hours.
3. Redesign and build a larger Factoria Recycling and Transfer Station, limit self-haul services at Factoria Recycling and Transfer Station to evenings and weekends, eliminate recycling and HHW service at Factoria, and keep Renton open with extended hours.

Alternative E Option 1

(A recommended Alternative)

This option for implementing this Alternative would require Council approval of a motion directing commercial haulers to specific transfer stations from 2021 until at least July 2028, when tonnage going to the Factoria Recycling and Transfer Station would drop as a result of some cities' ILAs expiring.

- Commercial haulers directed to specific transfer stations from 2021 until at least July 2028
- Retains full recycling and HHW service at Factoria Recycling and Transfer Station
- No restrictions on self-haul services
- Factoria Recycling and Transfer Station built with second compactor, additional scales, and a queuing lane
- Operating hours at Factoria Recycling and Transfer Station extended

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- Renton refurbished and remains open
 - Factoria replacement project proceeds on schedule without major cost increases
 - Houghton closes

Cost

Constructing only two new facilities, Factoria and South County, Option 1 for Alternative E provides about \$85 million (\$2013) in capital cost savings from the Base Plan, placing it in the middle of the capital cost range. This would translate to an added cost of about \$0.66 per month for the average household (estimated median cost of capital debt 2014-2040). The division would likely experience higher hauling costs and there would be environmental impacts from the additional hauling (because more garbage would likely be going to Shoreline, which is the furthest transfer station from Cedar Hills). There would also be higher collection cost for areas where the hauler is redirected. The division is still working with haulers to obtain collection cost data, but can anticipate that collection costs would likely increase for customers whose commercial hauler was redirected though these could be offset by reduced capital costs as the result of foregoing construction of a facilities or other approaches.

Service

During limited “peak” periods, it is anticipated that there could be significant traffic volumes and wait times, although a variety of approaches might be able to reduce these potential impacts. Retention of the Renton Transfer Station means that the compaction, recycling services, and FEMA immediate occupancy standards would not be met.

Environment

This alternative would direct additional tonnage to the Shoreline Recycling and Transfer Station, the farthest transfer station from Cedar Hills, which would likely result in more miles driven and therefore more GHGs compared to the Base Alternative. Lacking a Northeast Recycling and Transfer Station, some customers would have to travel outside their current service area, increasing the environmental impacts of customer trips compared to the Base Alternative. Impacts on streets neighboring Factoria, Renton, and Shoreline would increase relative to the Base Alternative.

Risks/Challenges

This alternative requires a policy change and council approval to allow redirecting commercial hauler traffic. Permitting would be required to add a second inbound scale and a queuing lane; the addition of these elements in the future does not affect Factoria’s schedule or current permits.

Alternative E Option 2

(A recommended Alternative)

A second option for meeting tonnage capacity requirements would be to limit self-haul service at the newly constructed Factoria Recycling and Transfer Station and locate household hazardous waste service at a separate location.

- Factoria Recycling and Transfer Station open only to commercial haulers and account customers before 4 p.m. on weekdays
- No recycling, except yard waste, at Factoria
- No HHW service at Factoria
- New HHW facility sited and built elsewhere in service area

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- Hours of operation at Factoria extended
 - Factoria Recycling and Transfer Station built with second compactor, additional scales and queuing lane
 - Renton refurbished and remains open with extended hours
 - Factoria replacement project proceeds on schedule without major cost increases
 - Houghton closes

Cost

Constructing only two new facilities, Factoria and South County, Option 2 for Alternative E provides about \$76 million (\$2013) in capital cost savings from the Base Plan. This would translate to an added cost of about \$0.70 per month for the average household (estimated median cost of capital debt 2014-2040).

Service

This option imposes limits to self-haul customers that do not have a contract with the County and as a result may affect some small businesses currently relying on self-haul service.

This option would also lead to increased traffic around the Factoria and Renton facilities – potentially significant increases at peak times -- although various strategies may be able to reduce impacts. This option also eliminates most recycling at Factoria and requires removing household hazardous waste service from Factoria and siting and constructing a new HHW facility at another location. Retention of the Renton Transfer Station means that the compaction, recycling services, and FEMA immediate occupancy standards would not be met.

Environment

Without a Northeast Recycling and Transfer Station, some customers would have to travel further, increasing the environmental impacts of customer trips compared to the Base Alternative. Impacts on streets neighboring Factoria and Renton would increase compared to the Base Alternative.

Risks/Challenges

This option can only be implemented with Council action to allow the division to set limits on self-haul service. This option requires siting and constructing an HHW facility at a new location and would require permitting to add a second inbound scale and a queuing lane; adding scales and a queuing lane in the future does not affect Factoria's schedule or current permits.

Alternatives Comparison

Base Plan (New Northeast)	E1 – No Northeast Redirect Commercial	E2 – No Northeast Limit Self- Haul
No delay or cost increases for replacing Factoria	No delay or significant cost increases to replace Factoria	No delay but moderate cost increases to site a household hazardous waste (HHW) facility offsite
Some facilities underutilized, at least initially	Facility use maximized	Shoreline underutilized; Factoria at times over utilized
Most capacity for future growth	Limited flexibility for future growth	Some flexibility for future growth
Shortest wait times	Marginally increased wait times	Potentially significantly increased wait times for self-haulers during peak hours
Highest level of service (self-haul, recycling, HHW)	High level of service (self-haul, recycling, HHW)	Lower level of service (self-haul, recycling, HHW)
Shortest hauling distances/lowest hauling costs and impacts	Longer hauling distances/higher hauling costs and impacts	Potential for additional hauling costs and impacts
Highest capital cost of all alternatives	Largest reduction in capital cost of the alternatives that do not build a Northeast Recycling and Transfer Station	Lower reduction in capital cost than E1