



**KING COUNTY**

1200 King County Courthouse  
516 Third Avenue  
Seattle, WA 98104

**Signature Report**

**September 18, 2012**

**Motion 13727**

**Proposed No. 2012-0132.2**

**Sponsors Phillips**

1                   A MOTION acknowledging receipt of the solid waste  
2                   division Transfer Station Use Report as required by the  
3                   2012 Budget Ordinance, Ordinance 17232 Section 97,  
4                   Proviso P1.

5                   WHEREAS, the 2012 Budget Ordinance, Ordinance 17232 Section 97, Proviso  
6                   P1, states that \$1,000,000 shall not be expended or encumbered until the executive has  
7                   submitted for council consideration and acknowledgement by motion a report that  
8                   analyzes transfer station usage patterns in order to inform any proposed reductions in  
9                   services, and

10                  WHEREAS, the 2012 Budget Ordinance, Ordinance 17232 Section 97, Proviso  
11                  P1, requires the report to identify periods of the heaviest usage by transfer station and to  
12                  make recommendations for changes in operating hours based on the usage pattern  
13                  analysis, and

14                  WHEREAS, the 2012 Budget Ordinance, Ordinance 17232 Section 97, Proviso  
15                  P1, directs the report to include an implementation plan for the recommended changes in  
16                  hours of operation or other reductions in service, and

17                  WHEREAS, the 2012 Budget Ordinance, Ordinance 17232 Section 97, Proviso  
18                  P1, states that the report must also include an outreach plan that describes how the solid  
19                  waste division of the department of natural resources and parks will seek input from

20 affected constituencies, including, but not limited to, the metropolitan solid waste  
21 management advisory committee and key officials of affected municipalities, and

22 WHEREAS, the 2012 Budget Ordinance, Ordinance 17232 Section 97, Proviso  
23 P1, states that the report must be submitted to council by March 31, 2012;

24 NOW, THEREFORE, BE IT MOVED by the Council of King County:

25           The council acknowledges receipt of the Transfer Station Use Report, Attachment  
26 A to this motion, as required by Ordinance 17232, Section 97, Proviso P1.  
27

Motion 13727 was introduced on 4/9/2012 and passed by the Metropolitan King  
County Council on 9/17/2012, by the following vote:

Yes: 9 - Mr. Phillips, Mr. von Reichbauer, Mr. Gossett, Ms. Hague,  
Ms. Patterson, Ms. Lambert, Mr. Ferguson, Mr. Dunn and Mr.  
McDermott  
No: 0  
Excused: 0

KING COUNTY COUNCIL  
KING COUNTY, WASHINGTON



Larry Gossett, Chair

ATTEST:



Anne Noris, Clerk of the Council

**Attachments:** A. Transfer Station Use Report

# Transfer Station Use Report

Prepared in accordance with  
Adopted Budget Ordinance 17232  
Section 97 Solid Waste Proviso 1

**March 2012**



**King County**

Department of Natural Resources and Parks  
Solid Waste Division

## Contents

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Introduction .....	1
2012 Proposed Budget .....	1
Transfer Station Use Analysis .....	2
Summary of Findings .....	2
Charts –	
2011 Use By Month .....	3
2011 Use By Day of Week .....	4
2011 Urban Facility Average Weekday Tons By Hour .....	5
2011 Urban Facility Average Weekday Transactions By Hour .....	6
2011 Rural Facility Average Weekday Tons By Hour .....	7
2011 Saturday Average Tons By Hour .....	8
2011 Sunday Average Tons By Hour .....	8
2011 Tons and Transactions By Site .....	9
2011 Weekday Use By Site .....	10
2011 Saturday Use By Site .....	11
2011 Sunday Use By Site .....	11
Alternatives Considered .....	12
Recommendation .....	13
Implementation and Outreach .....	13
Conclusion .....	14

## **Introduction**

The King County transfer system is comprised of eight transfer stations that are used by commercial solid waste collection companies, businesses, and county residents to dispose solid waste, yard waste, and recyclable materials; and two rural drop boxes for the use of residential customers only. Commercial collection accounts for about 76 percent of all tonnage coming into the system. Self-haulers – all customers except for the commercial collection companies – account for only 24 percent of the tonnage in the system, but comprise 85 percent of all transfer station transactions.

Transfer station use, measured both by tonnage received and by customer transactions has dropped significantly in recent years in response to the recession. Tonnage appears to be stabilizing, with only a two percent drop in tons between 2010 and 2011, and with a flat forecast for 2012 and 2013. To remain consistent with the financial plan for the Solid Waste Division (division), the 2012 proposed budget included a number of significant changes to accommodate reduced tonnage, traffic, and revenues. The division eliminated administrative staff positions and significantly reduced program budgets in Recycling and Environmental Services. Free recycling service was eliminated from the urban transfer stations, and changes to the Renton Transfer Station operating hours were proposed. Adopted Budget Ordinance 17232 Section 97 Solid Waste Proviso 1 required a closer examination of the proposed changes to operating hours. The proviso states:

- Of this appropriation, \$1,000,000 shall not be expended or encumbered until the executive transmits a report and a motion that acknowledges receipt of the report that references the proviso's ordinance, section and number and the motion is adopted by the council.
- The report shall provide an analysis of transfer station usage patterns in order to inform any proposed reductions in services. The report shall identify periods of heaviest usage by transfer station and shall include recommendations for changes in operating hours based on the usage pattern analysis. The report shall include an implementation plan for recommended changes in hours of operation or other reductions in service and shall describe outreach plans to affected constituencies, including, but not limited to, the metropolitan solid waste management advisory committee and key officials of affected municipalities.
- The executive must file the report and motion required to be transmitted by this proviso by March 31, 2012, in the form of a paper original and an electronic copy with the clerk of the council, who shall retain the original and provide an electronic copy to all council members, the council chief of staff and the lead staff for the transportation, economy and environment committee or its successor.

## **2012 Proposed Budget**

From 2007 to 2010, the four most recent years for which data was available when the 2012 budget was being developed, overall tonnage received at transfer facilities fell 15 percent and tonnage received at transfer facilities on weekends dropped 25 percent. During this period, tonnage received at the Renton transfer station dropped 18 percent overall and weekend tonnage fell 28 percent.

Because of these significant and sustained decreases in both tonnage and traffic at transfer stations, even on weekends when self-haul customers visit the transfer stations most, the division proposed reducing hours at Renton as follows:

- Open 7.5 hours (7:30 a.m. to 3 p.m.) Monday through Friday instead of 9.5 hours
- Closed Saturday and Sunday

The change in operating hours would have resulted in reduced staffing, eliminating three FTEs. This would save costs on both regular wages and premium pay associated with the current shifts, as well as benefits. Combined, these changes were estimated to result in savings of about \$255,500 annually in direct costs.

However, based on feedback received during the budget process, it was determined that no changes should be made regarding transfer station hours pending the development of this report.

## **Transfer Station Use Analysis**

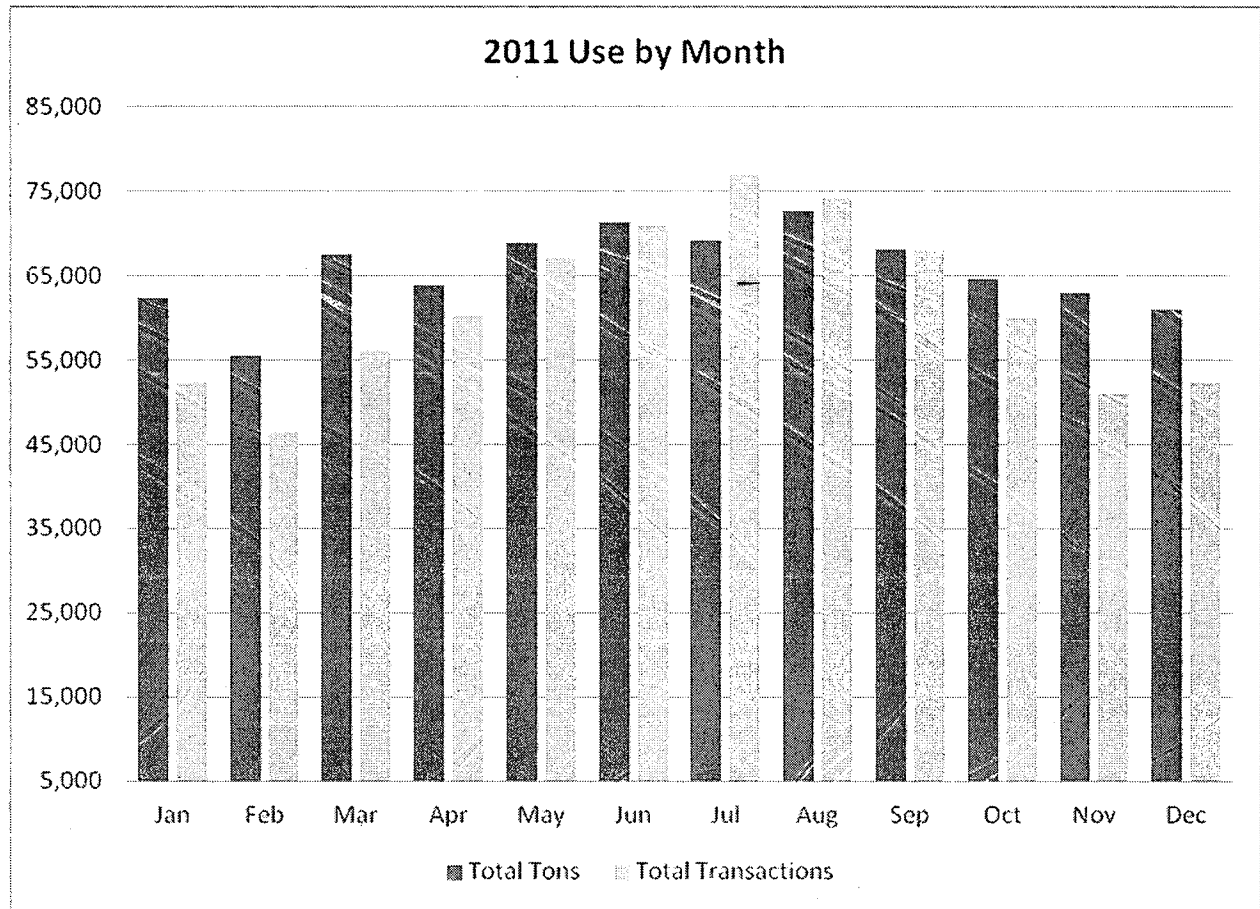
In preparing this report, the division reviewed data from 2008 through 2011, the four most recent years for which data is currently available, for overall patterns and trends. The division focused on 2011 as most representative of what is expected over the next two to three years. Both tonnage and transactions were considered. Data from 2011 were reviewed in detail by customer type, day of week, and by half hour increments. While garbage makes up the majority of what is received at the transfer facilities, yard waste and other recyclables factor in developing recommendations. Operational requirements, such as staffing, were also considered.

### **Summary of Findings**

There are definite patterns in transfer facility use. For example, some stations tend to be used more than others, certain days of the week and hours are more heavily used, and while we can generally say that summer months are busier than winter, the day-to-day weather is also an important factor. For example, as seen in January 2011, winter storms that delay garbage collection can mean unexpected short-term peaks during what might normally be a slower time of year. The first nice weekends of spring can also mean hectic days at most transfer facilities as people clean up yards and basements.

Charts on the following pages summarize use in 2011 by month, day of week, hour of day, and overall use by facility.

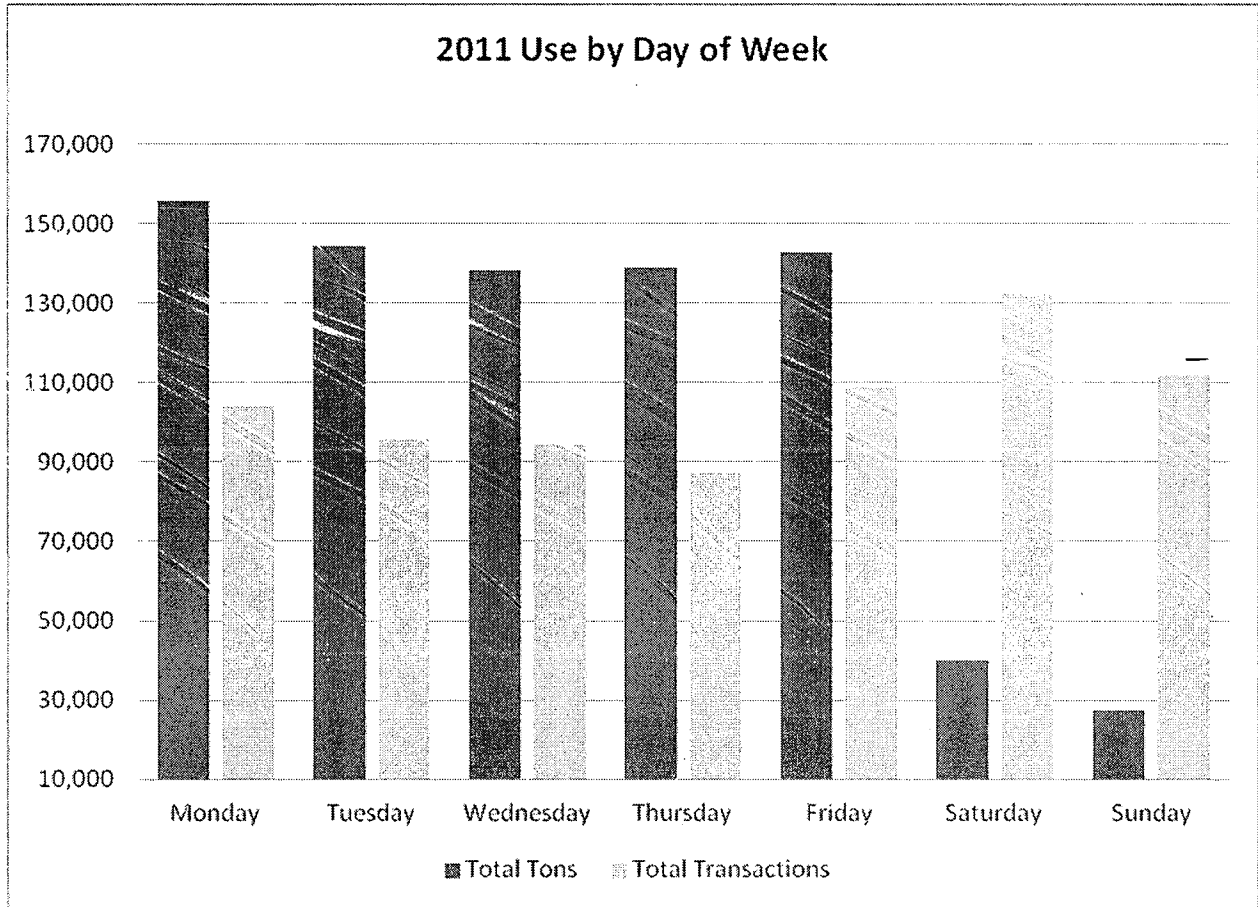
The chart below illustrates the seasonal variation in both tons and transactions. Although still apparent, seasonal variation has declined somewhat in recent years. The variation in transactions is greater than the variation in tons due to increased use by self-haulers during the summer months.



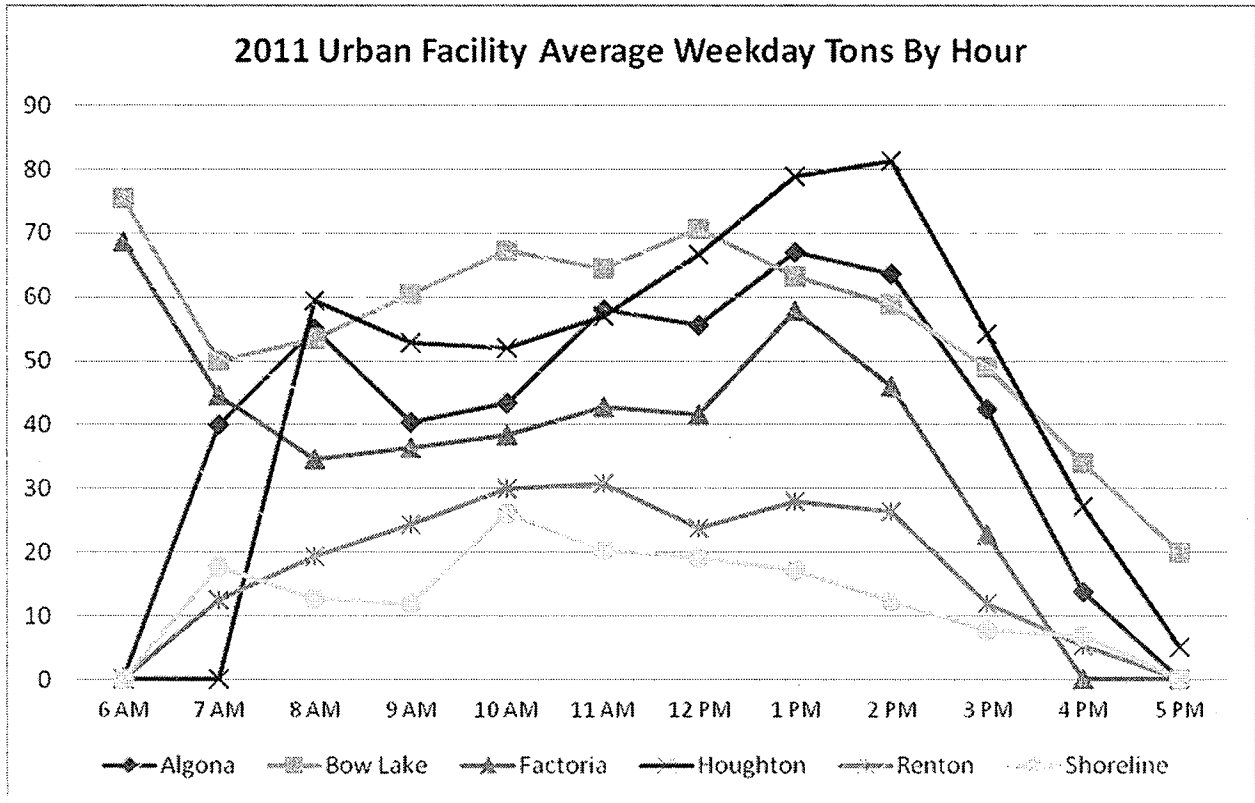
*Note: Tons received in January 2011 include garbage not collected in December 2010 due to snow.*



Most of the tons are received on weekdays, while transactions, due to self-haul trips, are higher on weekends.

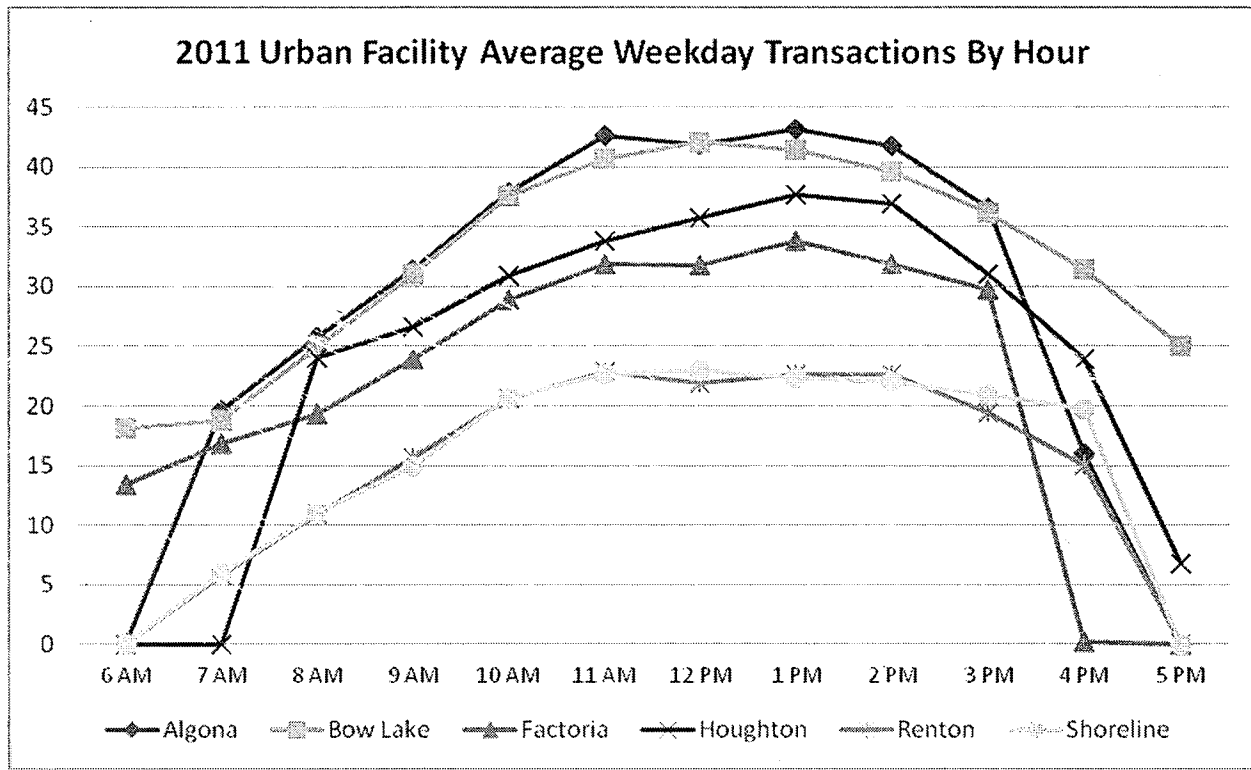


On weekdays, the early hours at urban transfer stations are critical for commercial haulers. Based on tons received, heaviest use by time of day is largely related to the use patterns of the commercial haulers. Peaks occur during the opening hour of each transfer station and again in early to mid-afternoon as the commercial haulers bring in garbage collected curbside.



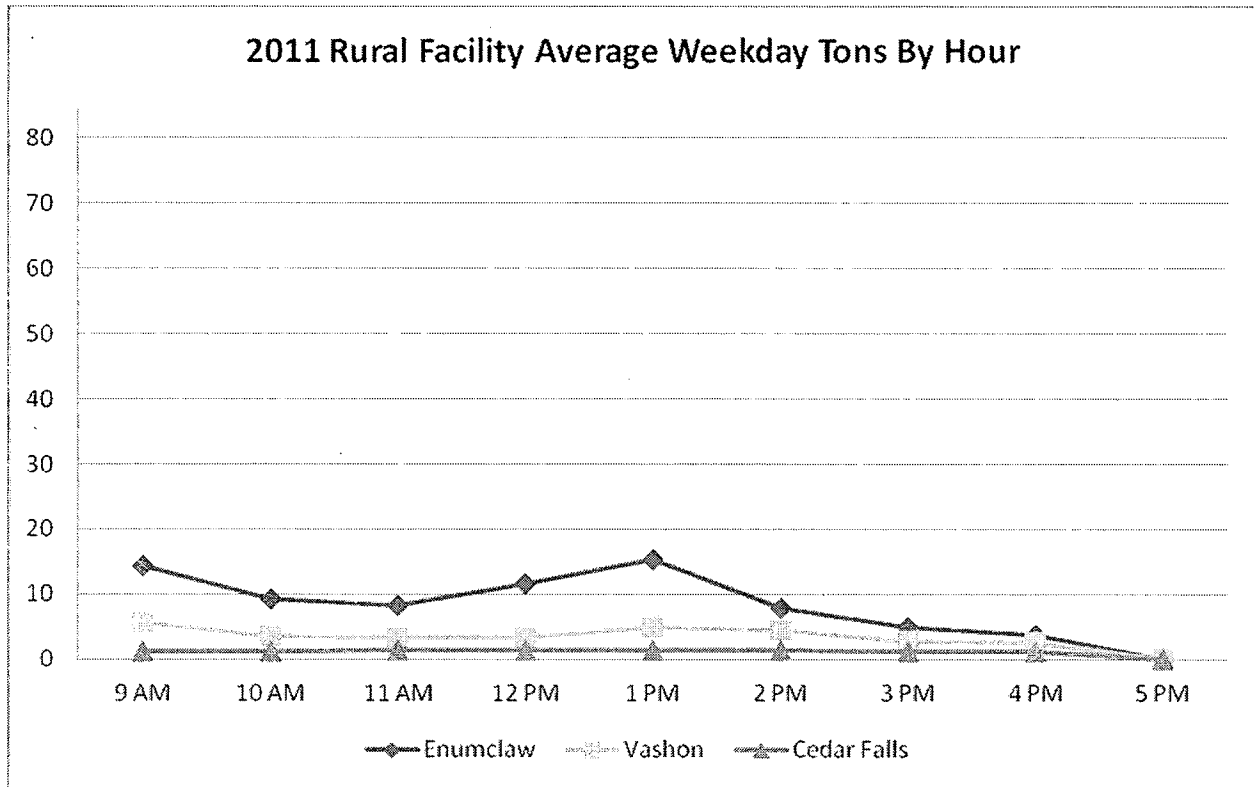
Note: Does not include Bow Lake transfer station evening/night hours.

Overall transactions peak between 11 a.m. and 3 p.m. as both commercial and self-haul customers access the transfer stations.

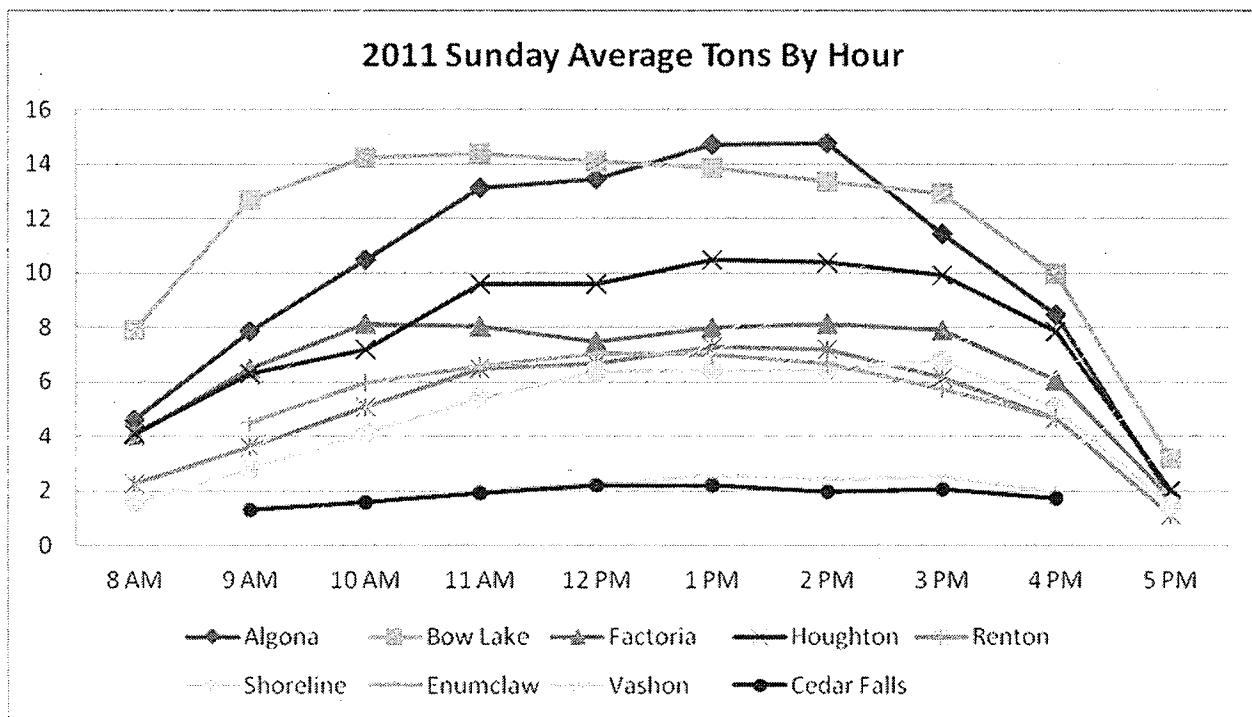
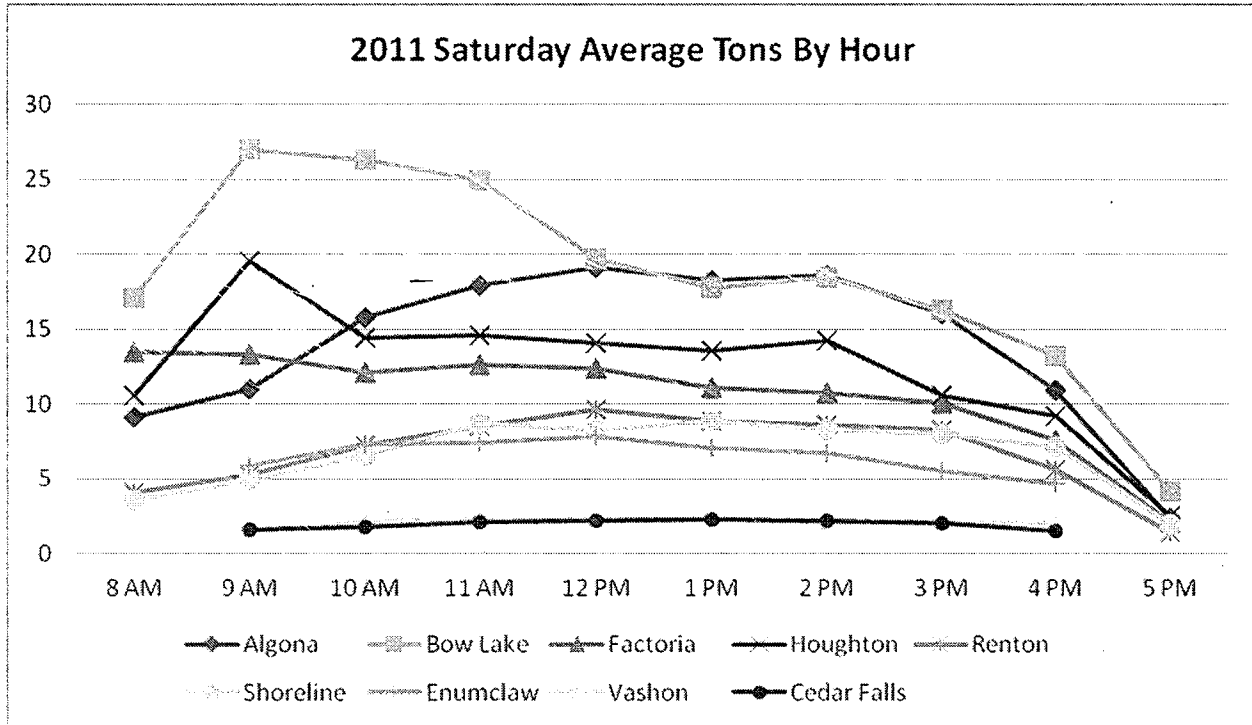


Note: Does not include Bow Lake transfer station evening/night hours.

At the rural facilities, tons and transactions are mostly flat throughout the day on weekdays, with slight peaks in tonnage at the Enumclaw transfer station at about 9 a.m. and again at about 1 p.m. when the commercial haulers tend to arrive.

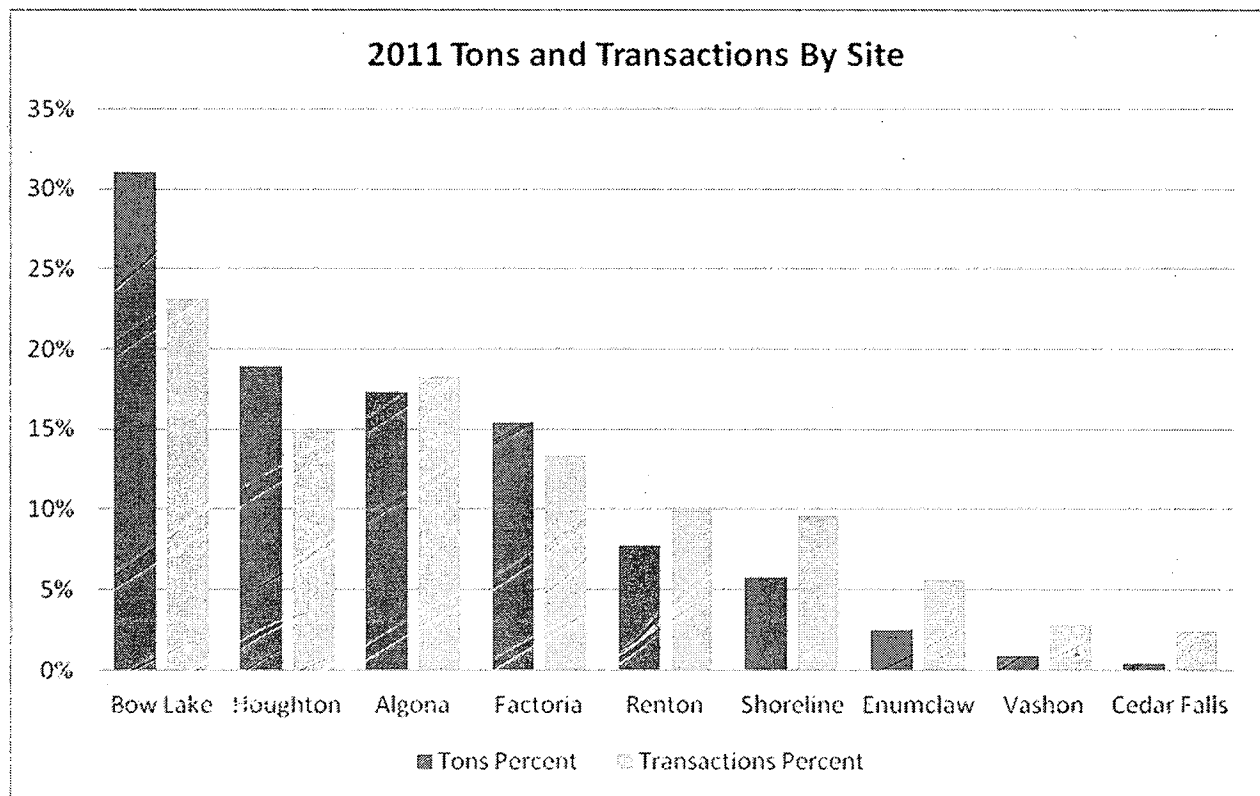


On weekends, Saturdays are busier than Sundays. System-wide, weekend transactions tend to build towards the middle of the day, peaking at about 1 p.m. On Saturdays, incoming tons peak at about 11 a.m., while on Sunday the peak is slightly later in the day at about 1 p.m. The earlier Saturday peak in tonnage is due to tons delivered by commercial haulers.

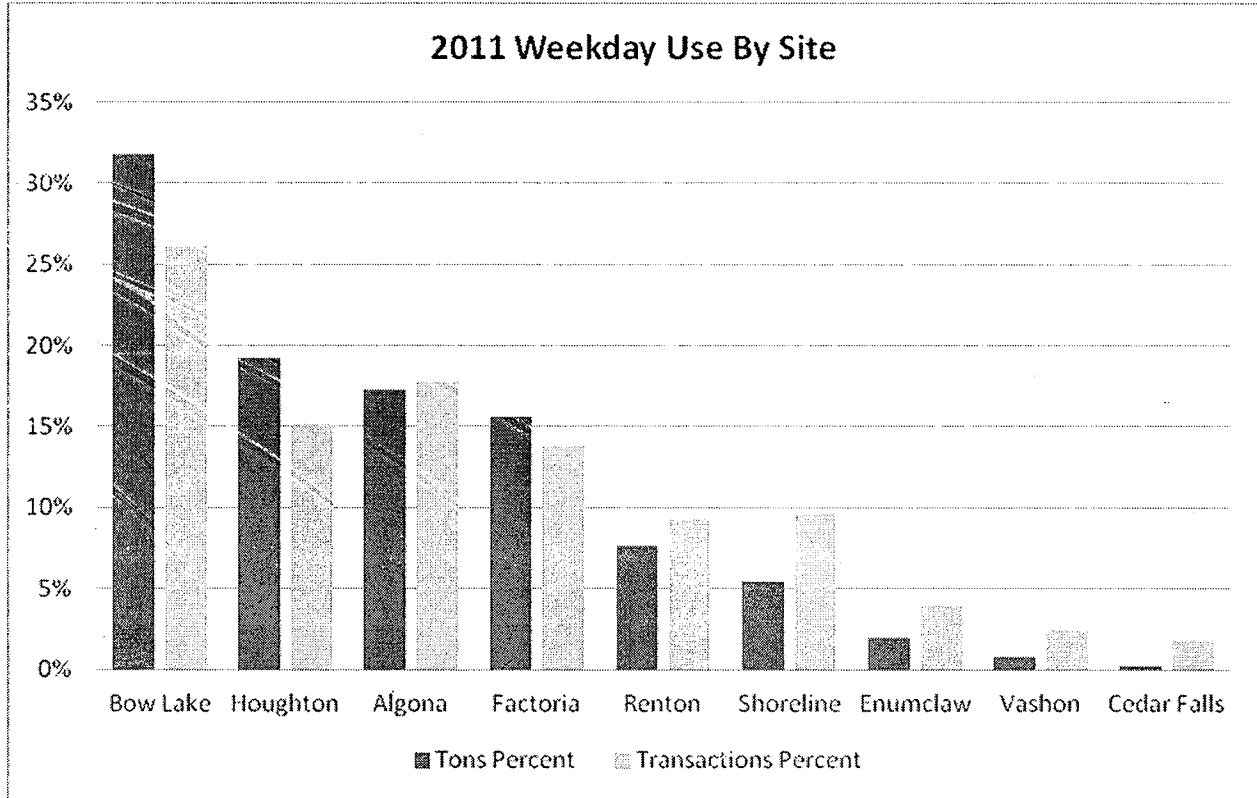


The division also looked at two other factors that indicate whether operating hours are meeting customer demand. One is time on site. Data for 2011 indicate that the average time on site, that is the time from when a customer crosses the inbound scale to when a customer crosses the outbound scale, is well within the standards of 16 minutes for commercial haulers and 30 minutes for self-haulers. The second factor is use specifically around the beginning and end of the day. While tonnage data indicates that commercial haulers make use of those important early morning hours, the majority of the transactions are low in the opening and closing hours, indicating that not only the number of open hours, but also the specific hours are meeting or exceeding customer demand.

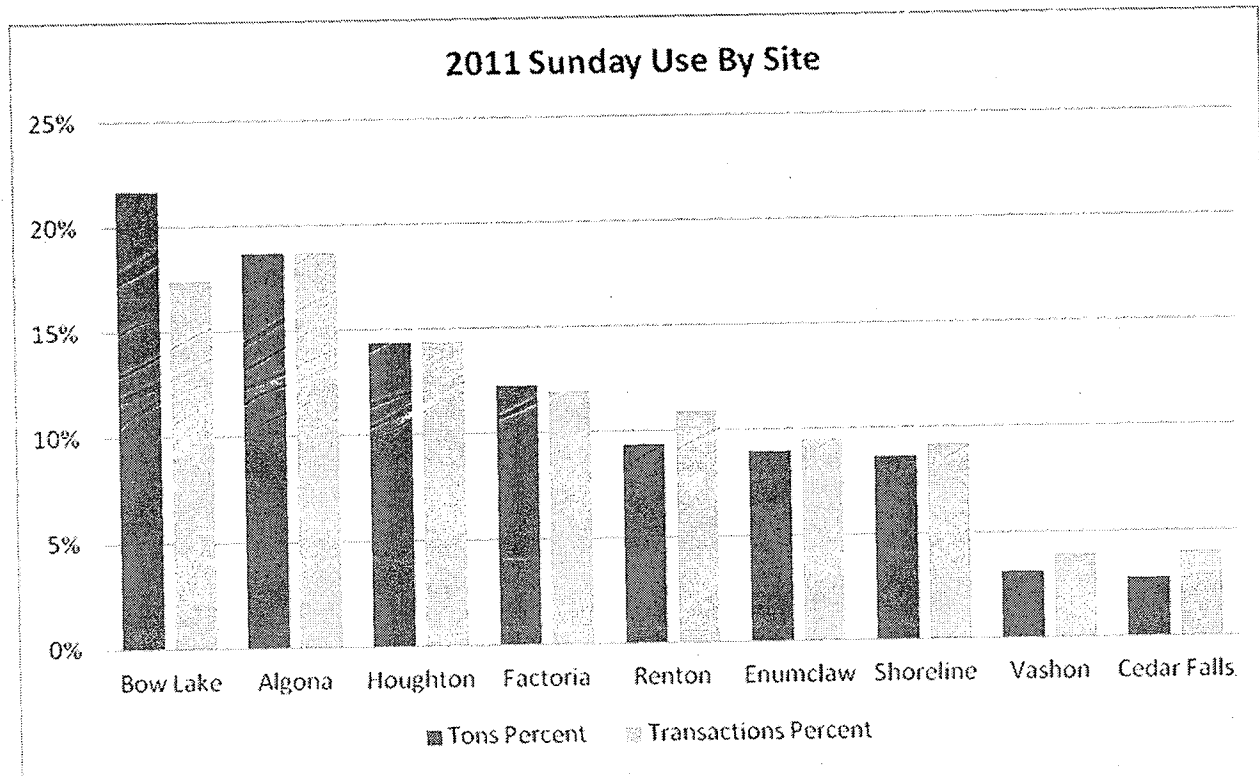
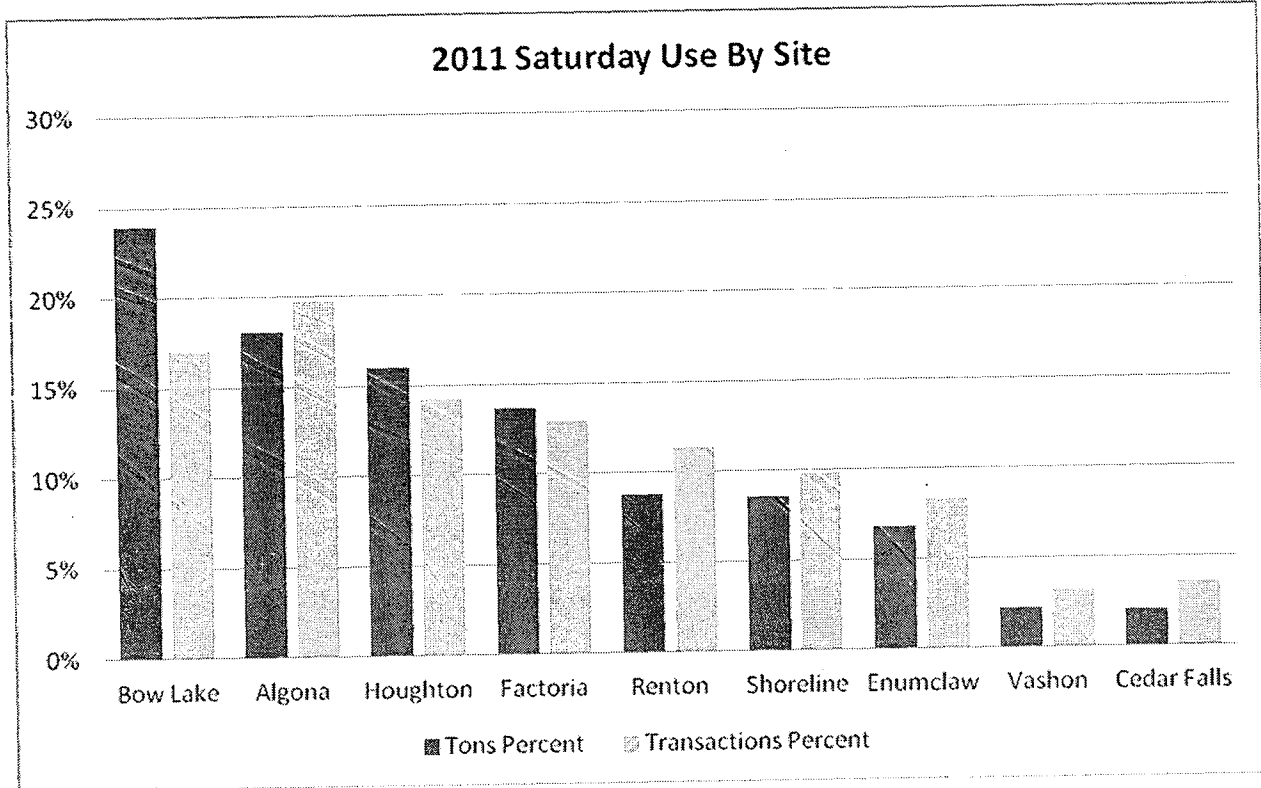
Overall use of the transfer system is another important factor. As illustrated below, the Bow Lake Transfer Station is the most heavily used facility in the transfer system, receiving about one-third of all the garbage tonnage coming into the transfer system, while the Renton and Shoreline transfer stations receive the least tonnage of the urban facilities. The Enumclaw transfer station receives the most tonnage of the rural facilities and Vashon and Cedar Falls each receive less than one percent of system tonnage.



Commercial haulers, who bring in garbage that is collected curbside from customers throughout the county, bring the majority of tonnage into the system. Because commercial haulers bring the majority of tonnage in during the week, little variation is seen between the overall use pattern (shown above) and weekday-only use.



On weekends, there is some increase in overall use of the Renton and Shoreline transfer stations and the rural facilities. Self-haulers, whose visits to the transfer station are concentrated during the weekends, represent the majority of customer transactions despite the relatively small quantity of garbage they bring to the system.





## Alternatives Considered

For this report, the division considered two alternative transfer station operating-hours scenarios. Neither scenario proposes any changes to the hours at the Algona, Bow Lake, Factoria, or Houghton transfer stations, and both scenarios provide service on at least one weekend day at every site. The division also considered a no change alternative that would continue the current hours.

### Alternative One

Alternative One distributes changes throughout the system to minimize impacts to customers in any one area.

#### Urban

- Renton
  - Open 7.5 hours (7:30 a.m. to 3 p.m.) Monday through Friday instead of 9.5 hours
  - Open Saturday 8:30 a.m. to 5:30 p.m., closed Sunday
- Shoreline
  - Open 7.5 hours (7:30 a.m. to 3 p.m.) Monday through Friday instead of 9.5 hours
  - Open Saturday and Sunday 8:30 a.m. to 5:30 p.m. to maximize use of available recycling opportunities and due to lack of nearby alternatives

#### Rural

- Enumclaw
  - Open 7.5 hours (9 a.m. to 4:30 p.m.) Monday, Tuesday, Friday instead of 8 hours
  - Closed Saturday, open Sunday 9 a.m. to 5 p.m.
- Vashon
  - Open 7.5 hours (9 a.m. to 4:30 p.m.) Monday, Wednesday, Friday instead of 8 hours
  - Open Saturday 9 a.m. to 5 p.m., closed Sunday
- Cedar Falls
  - Closed on Monday, which is the least used day
  - Open Wednesday and Friday 7.5 hours, 9 a.m. to 4:30 p.m.
  - Closed Saturday, open Sunday 9 a.m. to 5 p.m.

These changes would save about \$600,000 annually in direct costs. Additional savings would also be realized from indirect costs. Although these are more difficult to project, they can be significant. Indirect cost savings of about \$290,000 are possible from this alternative. These savings would have a rate impact between 75 cents per ton and \$1.05 per ton.

### Alternative Two

A second alternative has fewer customer impacts and lower savings. Since the rural facilities are already closed two days per week, changes to rural facilities that were considered in Alternative One were eliminated from Alternative Two.

- Renton
  - Open 7.5 hours (7:30 a.m. to 3 p.m.) Monday through Friday instead of 9.5 hours
  - Open Saturday 8:30 a.m. to 5:30 p.m., closed Sunday

- Shoreline
  - Open 7.5 hours (7:30 a.m. to 3 p.m.) Monday through Friday instead of 9.5 hours
  - Open Saturday and Sunday 8:30 a.m. to 5:30 p.m. to maximize use of available recycling opportunities and due to lack of nearby alternatives

These changes would save about \$270,000 annually in direct costs. Additional savings would also be realized from indirect costs. Although these are more difficult to project, they can be significant. Indirect cost savings of about \$180,000 are possible from this alternative. Combined, these savings would have a rate impact between 35 cents and 55 cents per ton.

### **No Change Alternative**

Continued operation at current operating hours will be included in the rate study that will be transmitted to Council later this year. Higher fees could support this alternative. Besides simply raising the tipping fee, some advisory committee members raised the possibility that rates for self-haulers be increased to support hours that are primarily used by them.

### **Recommendation**

The division is not recommending any changes to transfer facility hours in 2012. Based on the division's analysis, customer impacts may outweigh the value of the potential savings, so the alternatives will be presented in conjunction with the upcoming rate study to allow decisions about operating hours to be made in context of the entire solid waste rate.

### **Implementation and Outreach**

In February 2012, the division had preliminary discussions regarding transfer station use and hours with the Metropolitan Solid Waste Management Advisory Committee (MSWMAC) and the Solid Waste Advisory Committee (SWAC). The City of Renton expressed support for closing the Renton Transfer Station one weekend day a week. Generally, all expressed a desire to maintain at least one weekend day at every site.

Currently, King County Code 10.10.020 requires urban transfer stations to be open at least between 9 a.m. and 4 p.m., seven days per week. Rural transfer facilities are required to be open to the public at least between 9 a.m. and 4 p.m., four days per week, including at least one weekend day. Alternatives One and Two presented in this report would require a code change prior to implementation.

Should any changes be made to transfer station hours, there will first be an opportunity for public comment. Notice shall meet or exceed the requirements of KCC Title 10.10.025. The division will notify all stakeholders, including MSWMAC and SWAC, all cities in King County's regional solid waste system, regulatory agencies, the commercial collection companies, area tribes, Unincorporated Area Councils, transfer station customers, and the general public of the changes. Notice shall be made at advisory committee meetings as well as via electronic mail, letters, fliers distributed at the affected transfer stations, signage at the stations, county websites and through news releases. In addition, all necessary steps will be taken to not only ensure that changes are consistent with existing labor contracts, but that division employees and county agencies receive timely and accurate communications about the change.

## **Conclusion**

This report analyzed transfer station usage patterns in order to inform transfer facility operating hours. Data from 2011 were reviewed in detail by customer type, day of week, and by half hour increments to identify periods of heaviest usage by transfer station. While garbage makes up the majority of what is received at the transfer facilities, yard waste and other recyclables factored in developing recommendations. Operational requirements, such as staffing, were also considered.

The analysis of usage patterns revealed that current operating hours meet or exceed customer demand. While alternative hours offer potential savings, customer impacts may outweigh their value. Therefore, the division is not recommending any changes to transfer station hours in 2012. The rate study that the division is currently preparing will include consideration of the alternative scenarios to allow decisions about operating hours to be made in context with their impact on the entire solid waste rate.