

# South County Recycling and Transfer Station

## Equity Impact Review Report



**King County**

Department of  
Natural Resources and Parks  
**Solid Waste Division**

Waste  
Prevention

Resource  
Recovery

Waste  
Disposal

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## Executive Summary

The purpose of this Equity Impact Review is to ensure that equity impacts are considered during the siting for a new South County Recycling and Transfer Station (SCRTS).

The existing Algona Transfer Station is one of the oldest, busiest transfer stations in the King County solid waste system. The station is located on a constrained site, and provides limited solid waste disposal services. In 2015, the station handled 134,347 transactions from both commercial haulers and self-haulers. The South County service area includes the surrounding communities of Federal Way, Auburn, Algona and Pacific with a population of approximately 200,000 people. The cities in this service area have lower rates of recycling than other areas of the county. There are two sites under consideration for the SCRTS. They are in relative proximity (1 ½ miles) to each other, so there is very little difference in terms of the impacts of the project to the area. For instance, many of the transportation routes that would be used by transfer station users would be the same for either site.

Siting a new transfer station in South King County will be an overall benefit to the region. The SCRTS will replace a transfer station that has no capacity to expand services due to its constrained site and cannot accommodate any recycling. The project is pro-equity because it is bringing services to the south county service area that are currently provided at other recycling and transfer stations in the King County solid waste system. By providing recycling services at a new station, the overall rate of recycling in the area would improve since residents would have more opportunities to recycle a variety of materials. The Final Environmental Impact Statement analysis showed that although there may be some temporary impacts during construction, the benefits to the service area of providing a full-service recycling and transfer station outweigh those short-term burdens in the long term.

In addition to the analysis conducted in the Final Environmental Impact Statement, this Equity and Social Justice Impact Review looks at the site-based benefits and burdens to the surrounding communities at the two sites under consideration. Using an ESJ score that consolidated the demographic information for people of color, English proficiency, and median household income by census tract, the analysis shows that the Alternative 1 site is located in a census tract that includes more diversity, lower income, and lower English proficiency population than the Alternative 2 site. This information, along with the information from the Economic Report and the Final Environmental Impact Statement will be used to make the final site determination.

## Background

The purpose of this Equity Impact Review is to ensure that equity impacts are rigorously and holistically considered and advanced in the siting, design and operation of the proposed South County Recycling and Transfer Station (SCRTS). This report is about the siting process that is currently underway.

The King County Solid Waste Division (division) operates eight transfer stations, two dropboxes, and the Cedar Hills Landfill. The 2007 Transfer and Waste Management Plan (Transfer Plan) recommended closing the existing Algona Transfer Station and locating a new site for a new SCRTS. The Algona Station is one of three transfer stations that was built in the mid-1960's. The division has been replacing transfer stations according to the direction of the Transfer Plan. (see Figure 1 for a map of station location and year it was built). Transfer stations are located throughout the county to allow equitable access for all county residents.

Both the *King County Strategic Plan 2010 – 2014: Working Together for One King County* and the *Equity and Social Justice Strategic Plan 2016 – 2022* (ESJ Plan) establish goals to achieve equitable opportunities for all people and communities in King County. “Equity” means all people have full and equal access to opportunities that enable them to attain their full potential. In particular, the ESJ Plan specifically states as a goal to “Develop facility and system improvements responsive to the values and priorities of residents and stakeholders and achieve pro-equity outcomes.” The Equity Impact Review tool was developed to assist project teams to meet this goal.

The Equity Impact Review tool consists of five phases. It is a process to identify, evaluate, and communicate the potential impacts on equity – both positive and negative – of a policy, program or project. This report covers the first two phases. Phases three, four and five will be completed once a siting decision is made and the implementation of the project – design and construction – is begun.

This first phase stage initially predicts which determinants of equity might be impacted by the project - either positively or negatively - and the likely impact on those determinants. The second phase defines the affected area and population, so the effect of the impacts can be assessed at the proper scale. This includes determining the populations that are potentially affected by the project and how those communities will benefit or be further burdened by the proposal.

The last phases – three, four and five - will be completed in the next stage of the project. These phases will engage with the affected communities and will advance the “pro-equity” opportunities in the design and operation of the SCRTS. The analysis will include the approaches that best advance positive equity impacts and ensure negative impacts are avoided or mitigated if possible. Communication and evaluation are at the heart of the last phase of the impact review to ensure that community priorities and concerns are responded to.



Figure 1: King County Solid Waste System Map

## South County Recycling and Transfer Station Project Description

The existing Algona Transfer Station is located at 35315 West Valley Highway South on a 4.4-acre parcel. The station was designed and constructed in the mid-1960s and does not meet today's building and environmental standards nor standards for service and operational efficiency. Waste is transferred from self-haul vehicles and commercial waste collection trucks into trailers in an open-sided building. The station cannot provide recycling services to meet the County's environmental goals, nor can it cost-effectively compact waste that is necessary for efficient transport. In addition, because there is insufficient queuing space on-site, entering vehicles sometimes back up onto the highway. The adopted Transfer Plan recommended that the division replace this station because of its deficiencies.

In 2012, the division began a search for potential sites to locate a new SCRTS. The site search for this essential public facility was concentrated in and around the cities of Auburn, Algona, Pacific, and Federal Way, which is the service area for the existing transfer station.

The division followed guidelines included in the Solid Waste Facility Siting Plan, published as Appendix C of the Transfer Plan, to develop criteria for locating a site. Replacing the Algona Transfer Station with a new, modern facility on a larger property allows:

- An enclosed transfer building, which contains noise, odor, and dust
- Room to offer recycling services, such as yard waste, wood, appliances and scrap metal
- Room to install trash compactors to accurately and efficiently load the collected garbage, thereby reducing the number of trucks hauling garbage from the recycling and transfer station to the landfill by as much as 30 percent
- Adequate space for vehicles to line up on-site
- Space to store waste in the event of a major regional disaster
- Buffers between the active area of the station and neighboring uses to reduce impacts

A Siting Advisory Committee, recruited in August 2012, developed and ranked community criteria for evaluating potential sites. The division did an extensive recruiting effort to try to get representatives from the surrounding communities on the committee. The committee was comprised of city officials, agencies, businesses, school districts, organizations, and citizens. The Siting Advisory Committee met three times prior to a public meeting to understand the project, and review siting criteria. The Committee developed the Community Criteria that was used in the site screening process. The criteria considered factors that are important to the local communities such as traffic congestion on local roads or noise in residential areas.

The division launched a public website in August 2012 that contained background information and upcoming meeting and notification dates. On September 27, 2012, a public meeting was held in Auburn to introduce the SCRTS project to the public. At this meeting, the division addressed comments and concerns raised by the public.

In the siting process, the number of sites under consideration was refined and eventually narrowed down to two sites. The Final Environmental Impact Statement for the South County

Recycling and Transfer Station issued on September 20, 2016, analyzed two sites in addition to a No Action Alternative (keep the existing station). The sites evaluated were:

- 901 C Street SW, Auburn (Alternative 1)
- 35101 West Valley Highway South, Algona (Alternative 2)
- 35315 West Valley Highway South, Algona (No Action Alternative – existing station)

The two sites under consideration are located within a mile and a half of each other.

#### Alternative 1

Alternative 1 would construct and operate a recycling and transfer station on the property located at 901 C Street SW in Auburn. The City of Auburn has zoned this 18.7-acre site M-2 Heavy Industrial. Properties surrounding the site are zoned M-1 Light Industrial to the north, C-3 Heavy Commercial to the west and east, M-2 Heavy Industrial to the south, and P-1 Public Use District to the southeast.

The area adjacent to the site contains a mixture of land uses, including: a school bus depot, City of Auburn maintenance and operations facility, and a grocery warehouse to the south; the General Services Administration (GSA) Park to the southeast; industrial warehouses to the east and north; and a Western Plus Peppertree Inn, commercial and residential properties to the north. The Outlet Collection Seattle, Wal-Mart, and Regal Cinemas are to the west, and separated from the site by the active Union Pacific Railroad and the Interurban Trail.

#### Alternative 2

Alternative 2 would construct and operate a recycling and transfer station on the property located at 35101 West Valley Highway South in the City of Algona. This site, located north and adjacent to the existing transfer station, is 18.9 acres.

Most of the site is zoned by the City of Algona as C-3 Heavy Commercial. Approximately 9 acres of the 18.9-acre site are designated critical areas composed of steep slopes, which are undevelopable and typically require buffers and setbacks. The topography of the remaining area, approximately 10 acres, is gently sloping. The steep slopes on the west side of the property separate the site from R-1 Urban Residential zoned properties in unincorporated King County to the west and in the City of Auburn to the northwest. West Valley Highway South and SR 167 separate the site from single-family residences and limited commercial uses to the east, which the City of Algona has zoned C-1 Mixed Use Commercial and R-L Low Density Residential. C-3 Heavy Commercial property is adjacent to the site on the south (currently in use as the Algona Transfer Station) and to the north. North of the site is Terra Dynamics, a landscape construction contracting business, and the City of Auburn Vista Pointe Stormwater Facility. Farther north are commercial uses, including Allsports Cages & Netting, The Mustang Shop, Peltram Plumbing, Hinshaw's Motorcycle Store, Speedi Transmissions, JFC Racing, and Del's Farm Supply.

## Phase I: Project Scope

The Algona Transfer Station is one of the busiest transfer stations in the King County solid waste system. In 2015, the station handled 134,347 transactions from both commercial haulers and self-haulers. The South County service area includes the surrounding communities of Federal Way, Auburn, Algona and Pacific with a population of approximately 200,000 people. The cities in this service area have lower recycling rates than other areas of the county. The two sites under consideration are in relative proximity (1 ½ miles) to each other, so there is very little difference in terms of the impacts of the project to the area. For instance, many of the transportation routes that would be used by self-haul transfer station users would be the same for either site.

Building a new SCRTS is a pro-equity project since it will add new services at the transfer station that do not currently exist. Because the current station is on a constrained site, there is no capacity to provide recycling opportunities that are available at other stations in the solid waste system.

### Population groups impacted by the project:

Neighbors: The land uses that are closest to the two sites will likely see the greatest impact by a new SCRTS. At the Alternative 2 site, there are some single family residences at the top of a heavily wooded steep slope that buffers them from the site. As will be discussed below, the leading concerns voiced from the surrounding neighbors include impacts from traffic, noise and odor. Another leading concern is the potential decline in their property values, which is studied in a separate, economic report (Final South County Recycling and Transfer Station Socio-Economic Impact Assessment, November 2016).

Transfer Station users: Customers that use the transfer station will be impacted by changing the location. This will impact both commercial and self-haul customers. While the Alternative 2 site is located just north of the existing station, Alternative 1 is located just under a mile and a half northeast of the existing station. This distance, however, may not be great enough relative to the size of the south county service area, to be a significant impact.

Curbside customers: Curbside customers in the service area may see changes to their curbside collection fees if Alternative 1 is selected for the project. Some routing changes would likely need to be made to accommodate the change in location and costs attributed to that would be passed on to customers. Because the Alternative 2 site is just north of the existing transfer station, it is unlikely that significant routing changes would need to occur.

Priority Populations: Some of the people living in the areas surrounding the two sites may be of a minority population, low income, and/or speak languages other than English. To better understand these communities, an Equity and Social Justice Score (ESJ Score) was calculated using US Census Tracts. The source data layers for the ESJ Score were: People of Color (people who don't identify as white and/or are Hispanic or Latino); English Proficiency; and Median Household Income. The People of Color demographic came from the 2010 US Census data while English Proficiency and Median Household Income came from the 2006 – 2010 5-Year American Community Survey. Each demographic source is classified into quintiles (see Table 1).

A score is assigned to each Quintile class ranging from 1 - 5. Each demographic category carries an equal weight in determining the combined ESJ Score. The combined ESJ Score for each tract is 33.3% of the sum of the quintile score for each of the three source layers. A lower ESJ Score indicates less diversity, higher income, & higher English proficiency. A higher ESJ Score indicates more diversity, lower income, & lower English proficiency.

People of Color	Score	Median Household Income	Score	Lack English Proficiency	Score
6.3% - 18.0%	1	\$92,917.01 - \$184,375.00	1	0.0% - 3.3%	1
18.1% - 27.1%	2	\$77,708.01 - \$92,917.00	2	3.4% - 6.7%	2
27.2% - 36.4%	3	\$64,199.01 - \$77,708.00	3	6.8% - 11.0%	3
36.5% - 51.1%	4	\$49,764.01 - \$64,199.00	4	11.1% - 17.1%	4
51.2% - 91.2%	5	\$5,000.00 - \$49,764.00	5	17.2% - 58.8%	5

**Table 1: Equity and Social Justice Score**

Example: Census Tract “xyzabc” has a population which is 40% People of Color (score =4), a Median Household Income of \$70,000 (score =3), and Lack of English Proficiency of 12% (score = 4). The total score is 4 + 3 + 4 = 11. The ESJ score is 11 x 33.3% = 3.67.

The maps on the following pages show the consolidated ESJ Scores of the census tracts in the service areas for the SCRTS. Potential impacts to the surrounding communities from traffic, noise and odor associated with the construction and operation of the SCRTS are superimposed on the census tracts with ESJ Scores to indicate the areas where the priority populations - those with an ESJ Score higher than 4 - reside.

### What are Project Benefits and Burdens?

#### Benefits

The south county service area will benefit from the siting and operation of a new SCRTS in several ways. Among the positive long-term impacts is that the new facility will be fully enclosed and use sealed waste transfer trailers, which will help to control noise and odors. A larger site will also accommodate recycling and yard waste services, responding to customer requests for these services at the station. Any existing off-site traffic impacts due to long queues will be diminished because there will be adequate space for vehicles to line up on-site. Using compactors to compact the garbage increases the efficiency of loads transported off-site and reduces the number of transfer truck/trailers required to haul the garbage to the landfill by about a third. Other short-term benefits related to construction of the station include:

- Construction jobs
- Training/apprenticeships
- Consultant jobs
- Use of local area services
  - Restaurants
  - Gas stations
  - Convenience stores

- Building supply stores
- Permitting fees to local jurisdiction
- Traffic mitigation fees agreed to by the County and the host city
- Construction sales tax

Total sales tax from construction of the new RTS is anticipated to be approximately \$5,000,000. The host city will receive approximately a half million dollars. Sales tax helps to fund programs which may benefit priority populations, such as local transit, regional transit, and mental health programs.

Long term benefits from the facility include:

- Facility design process that includes community participation
- Mitigation or improvements to the community
- Public art

### Burdens

The project burdens may include some local traffic impacts, noise and odors. Some of these inconveniences would be short-term, occurring during construction. These impacts may include noise from heavy construction trucks accessing the site as well as other noises associated with construction, as well as traffic associated with the construction.

### Transportation Impacts

The project's traffic impacts were analyzed and mapped in two ways. Figure 2 shows the impacts to drive times in the service area. In particular, it shows how the census tracts with the most diverse, lowest income, and lowest English proficiency populations are impacted. Overall, drive times to either Alternative 1 or 2 are not impacted much, since Alternative 2 is located next to the existing station and Alternative 1 is about a mile and a half north. As indicated in Figure 2, the drive times all meet the level of service standard of under 30 minutes to a facility for 90 percent of the service area included in the 2007 Transfer and Waste Management Plan.

Figure 3 shows the intersections in the area surrounding both sites that were modeled for anticipated impacts in both 2020 and 2040. Conditions for existing traffic volumes and for traffic if the project is built were modeled. Results indicate that both Alternative 1 and 2 will have minor impacts to some of the study intersections in 2020 and 2040. For more detailed information on specific intersection impacts, see the Final Environmental Impact Statement, South County Recycling and Transfer Station Project, pages 3.12-28 – 32 and 3.12-41 – 45.

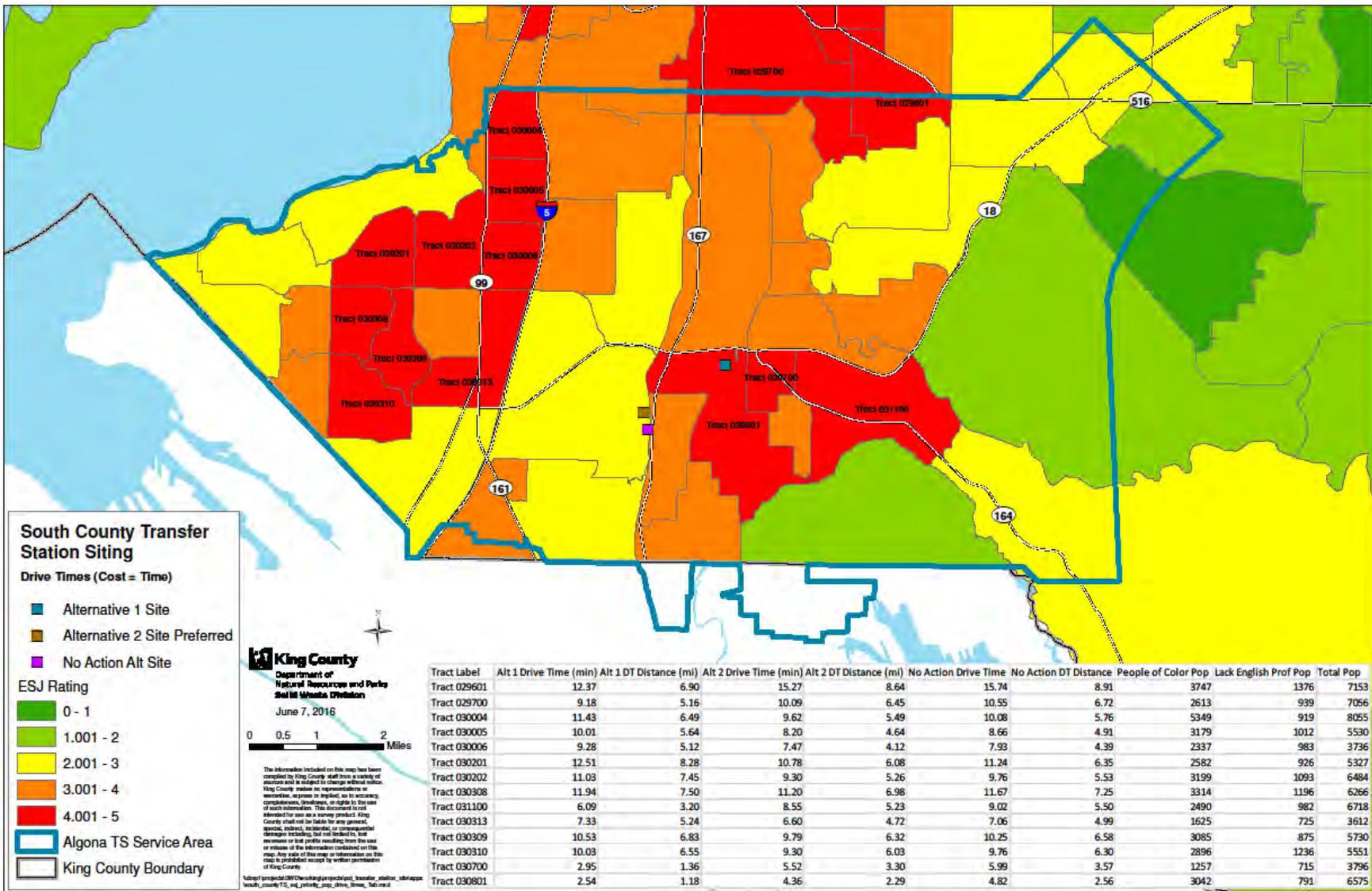


Figure 2



### Noise and Odor Impacts

Residents surrounding the two sites under consideration are concerned about potential noise and odor from construction and operation of a new transfer station. Along with the existing Algona Transfer Station, the division operates five other urban transfer stations and two rural stations. Many of these stations have neighbors in close proximity, but the division does not receive many complaints about noise and odor from these neighbors. The proposed SCRTS will be an enclosed facility that will include odor mitigation including interior misting systems to reduce odors and dust and will use sealed waste transfer trailers, unlike the open waste hauling trailers that are currently used at the Algona Transfer Station.

Although a model-based odor evaluation was not conducted for this analysis, the division did look at wind rose data depicting local topographic conditions and the wind direction throughout the year<sup>[1]</sup>. This information indicates that the local prevailing winds blow from the south in the fall/winter/spring and the north in the summer at both sites. As indicated in the following figures (see Figures 4, 5, and 6), given the location of nearby residences relative to the sites, it is not anticipated that odors would have an impact.

A noise study was conducted for the Environmental Impact Statement that was completed for this project. The noise analysis used a computer noise model of the proposed project using acoustic modeling software (Cadna/A). The noise model included generic site layouts, topography, property boundaries, zoning, streets, facility equipment, and trip generation estimates. Where increases to local traffic are anticipated, traffic on public roadways was also modeled. Based on the results of the noise study, noise generated during operations hours would slightly increase sound levels at both potential sites and on portions of immediately adjacent properties. However, peak operational noise levels would not exceed the maximum permissible daytime sound levels allowed under the King County Noise Ordinance at the property line of the adjacent industrial, commercial, or residential properties. For more information on the noise analysis, see the South County Recycling and Transfer Station Final Environmental Impact Statement, pages 3.7-1 – 18 and Appendix C.

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<sup>[1]</sup> Source: Western Regional Climate Center

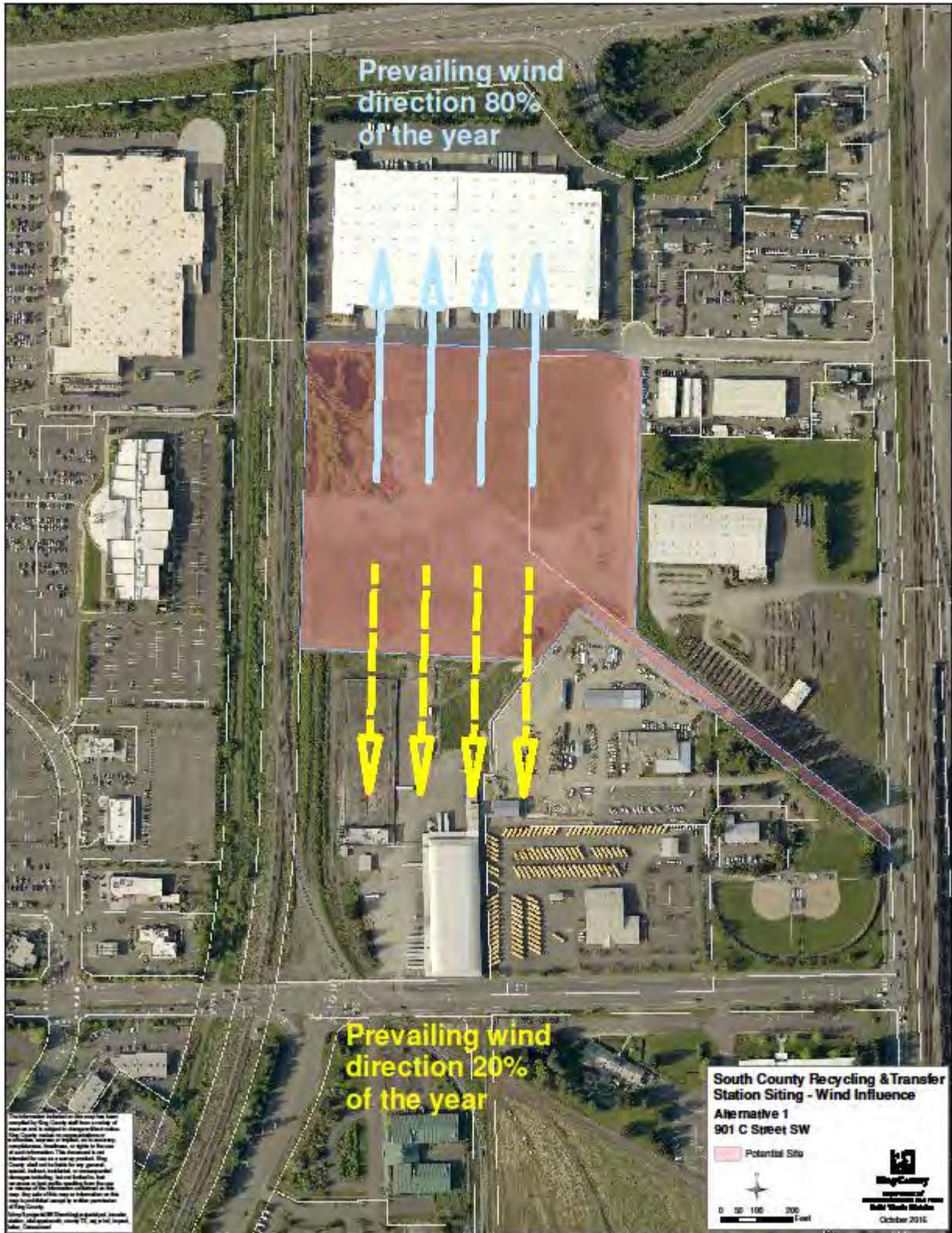


Figure 4

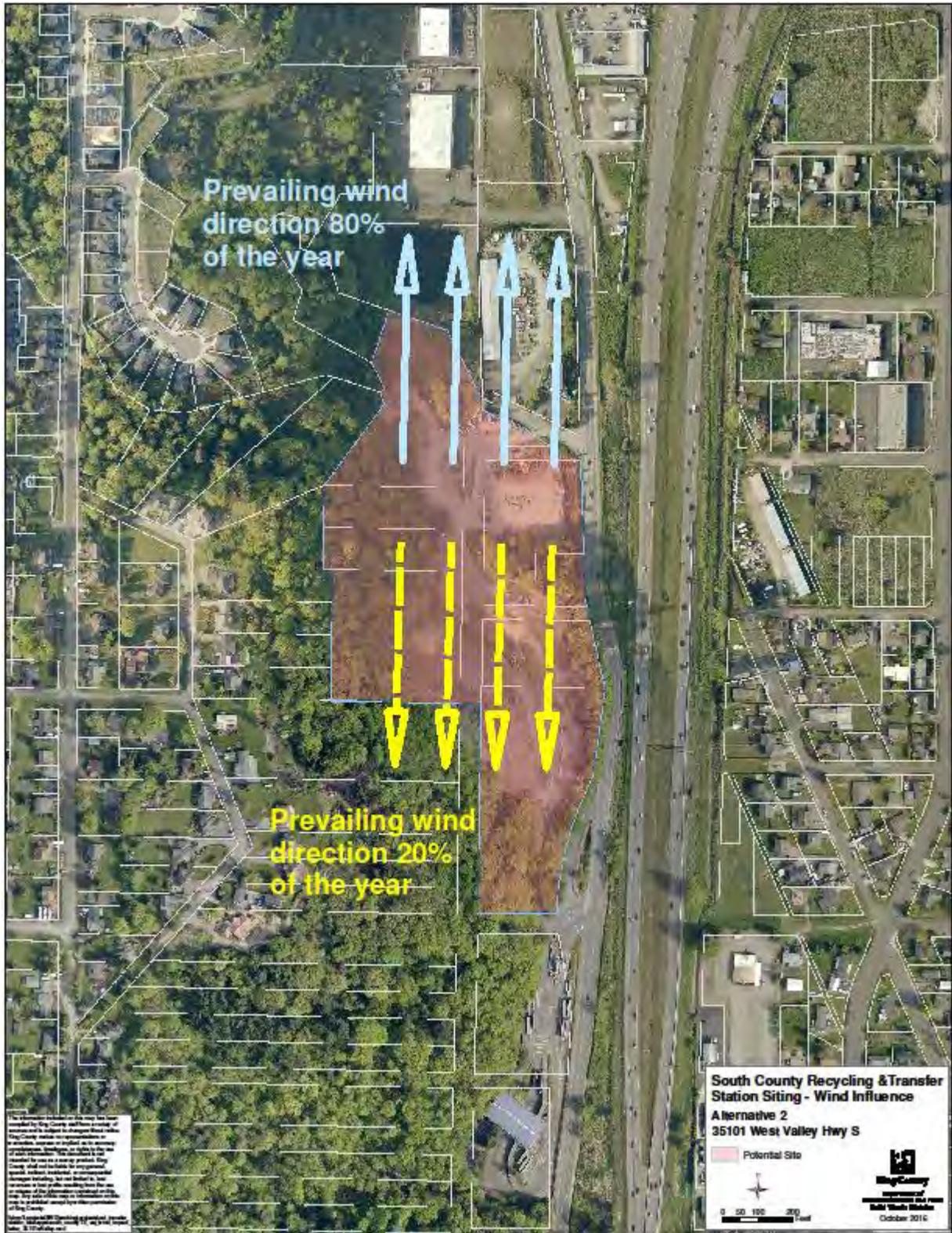


Figure 5

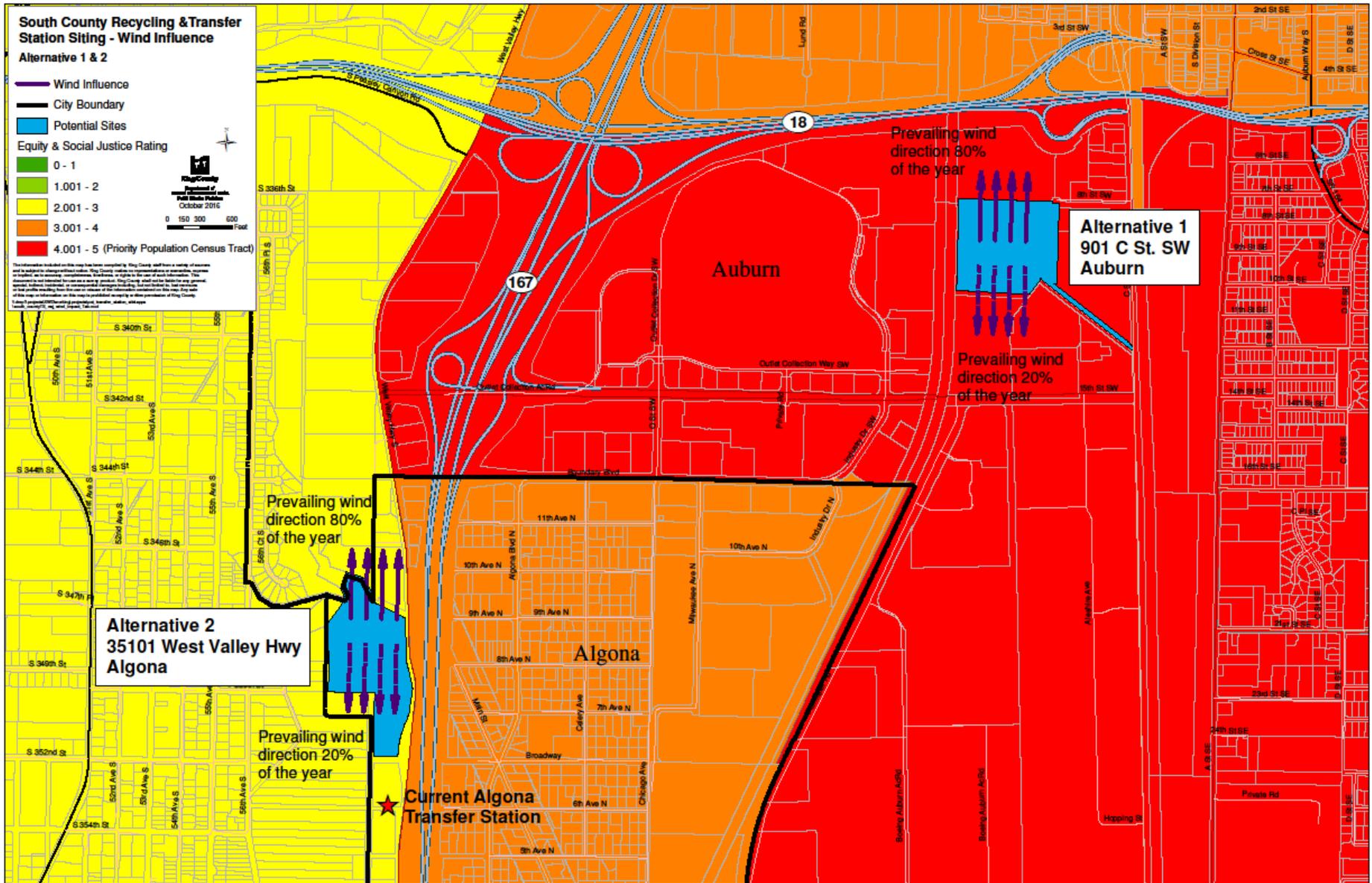


Figure 6

## PHASE 2: Assess Equity and Community Context

### Potential to Affect Determinants of Equity

Table 2 shows the anticipated effects that siting the SCRTS would have on any of the determinants of equity included in the Equity and Social Justice Ordinance (Ordinance 16948). As defined in the ordinance, “determinants of equity” means the social, economic, geographic, political and physical environment conditions in which people in our county are born, grow, live, work and age that lead to the creation of a fair and just society. Access to the determinants of equity is necessary to have equity for all people regardless of race, class, gender or language spoken. Inequities are created when barriers exist that prevent individuals and communities from accessing these conditions and reaching their full potential.

Siting the SCRTS is anticipated to have a direct or indirect effect on just two determinants: healthy built and natural environments, and jobs and job training.

**Table 2:** Potential to Affect King County Environmental and Social Justice Determinants of Equity

Determinant	Potential to Affect Determinant
<b>Community economic development</b> that supports local ownership of assets, including homes and businesses, and assures fair access for all to business development and business retention opportunities	No direct or indirect effects
<b>Community and public safety</b> that includes services such as fire, police, emergency medical services and code enforcement that are responsive to all residents so that everyone feels safe to live, work and play in any neighborhood in King County	A new facility in South King County will provide greater capacity to stockpile solid waste should there be a disruption due to an earthquake or other debris-generating disaster.
A <b>law and justice system</b> that provides equitable access and fair treatment for all	No direct or indirect effects
<b>Early childhood development</b> that supports nurturing relationships, high-quality affordable child care and early learning opportunities that promote optimal early childhood development and school readiness for all children	No direct or indirect effects
<b>Education</b> that is high quality and culturally appropriate and allows each student to reach his or her full learning and career potential	No direct or indirect effects

Determinant	Potential to Affect Determinant
<b>Equity in county practices</b> that eliminates all forms of discrimination in county activities in order to provide fair treatment for all employees, contractors, clients, community partners, residents and others who interact with King County	No direct effects and any indirect impacts are difficult to predict
<b>Food systems</b> that support local food production and provide access to affordable, healthy, and culturally appropriate foods for all people	No direct or indirect effects
<b>Health and human services</b> that are high quality, affordable and culturally appropriate and support the optimal well-being of all people	No direct or indirect effects
<b>Healthy built and natural environments</b> for all people that include mixes of land uses that support: jobs, housing, amenities and services; trees and forest canopy; and clean air, water, soil and sediment	Temporary impacts to the environment may occur during construction. Long term effects may be the improvement of air and water quality on the Alt 2 site. Amenities and services at the transfer station will also be improved at either site
<b>Housing</b> for all people that is safe, affordable, high quality and healthy	No direct or indirect effects
<b>Job training and jobs</b> that provide all residents with the knowledge and skills to compete in a diverse workforce and with the ability to make sufficient income for the purchase of basic necessities to support them and their families	A small number of temporary local jobs may be created during construction of the project. Indirect effects may be jobs created by surrounding businesses as a result of the SCRTS
<b>Neighborhoods</b> that support all communities and individuals through strong social networks, trust among neighbors and the ability to work together to achieve common goals that improve the quality of life for everyone in the neighborhood	No direct or indirect effects
<b>Parks and natural resources</b> that provide access for all people to safe, clean and quality outdoor spaces, facilities and activities that appeal to the interests of all communities	No direct or indirect effects
<b>Transportation</b> that provides everyone with safe, efficient, affordable, convenient and reliable mobility options including public transit, walking, carpooling and biking	No direct or indirect effects

## Anticipated Mitigation

Although transfer station design on this project will not begin until site selection is finalized, the King County Solid Waste Division has extensive recent experience constructing and operating modern solid waste recycling and transfer stations. King County has completed three such facilities during the last decade including Shoreline, Bow Lake and Factoria. These facilities will serve as models for improving facility operation and reducing impacts on surrounding communities by potentially including the following mitigation:

- Potential for a facility meeting space to be used by the community
- Street, sidewalk and walking path improvements
- Stream and wetland restoration & enhancements
- Enhanced aesthetics – building and grounds including 1% for Art located in the community
- Public trails
- Removal of invasive plant species

Additionally, once a site is selected, the Solid Waste Division will likely convene a citizen's advisory committee to advise the division on the facility design. Communication about the facility would be sent out in several languages (Spanish, Korean and Russian have been identified as the top foreign languages spoken in the area) to better reach all residents of the area. As the division did when selecting sites, an extensive outreach effort would be made to get representation from all affected communities.

## Conclusion

Siting a new transfer station in South King County will be an overall benefit to the region. The SCRTS will replace a transfer station that has no capacity to expand services due to its constrained site and cannot accommodate any recycling. The project is pro-equity because it is bringing services to the south county service area that are currently provided at other recycling and transfer stations in the King County solid waste system. By providing recycling services at a new station, the overall rate of recycling in the area would improve since residents would have more opportunities to recycle a variety of materials. The Final Environmental Impact Statement analysis showed that although there may be some temporary impacts during construction, the benefits to the service area of providing a full-service recycling and transfer station outweigh those short-term burdens in the long term.

In addition to the analysis conducted in the Final Environmental Impact Statement, the Equity and Social Justice Impact Review looks at the site-based benefits and burdens to the surrounding communities at the two sites under consideration. Using an ESJ score that consolidated the demographic information for people of color, English proficiency, and median household income by census tract, the analysis shows that the Alternative 1 site is located in a census tract that includes more diversity, lower income, and lower English proficiency population than the Alternative 2 site. Alternative 2 places a reduced burden on priority populations and therefore is more aligned with the county's equity policy intent. This information, along with the information from the Economic Report and the Final Environmental Impact Statement will be used to make the final site determination.