

Metro South Assessment Project



The Metro South Assessment project was conducted to find out how we could reposition this strategic asset for the current and future needs of the regional solid waste system. The process we used focused on outreach to our stakeholders. Over 500 individuals were contacted to identify and prioritize their needs. We then identified modifications to the facility to accommodate their needs. Before leading you through this process, I would like to give you a brief history of the facility. and then

Metro South Comes Into Being- 1983



MSS opened in 1983. The plan for the facility originally envisioned that the site would contain energy recovery facility, however the residents of Oregon City voted to prohibit the burning of garbage within the city limits. The vote occurred near the end of construction of what is now Metro South. 'This facility then repurposed to transfer waste to St Johns when the landfill next door closed. The station uses pit in the middle of the facility to unload waste which was then top loaded into trailers at the loading tunnel in the lower portion of the photo for transport to the St. Johns Landfill. Customers enter the facility from Washington street on the right. This system is used until waste begins to be transported to the landfill in Gilliam County.

Section 56 of the Oregon City Charter was passed by the voters November 2, 1982.

No garbage burning plants shall be allowed in Oregon City.

Metro South Evolves- 1992



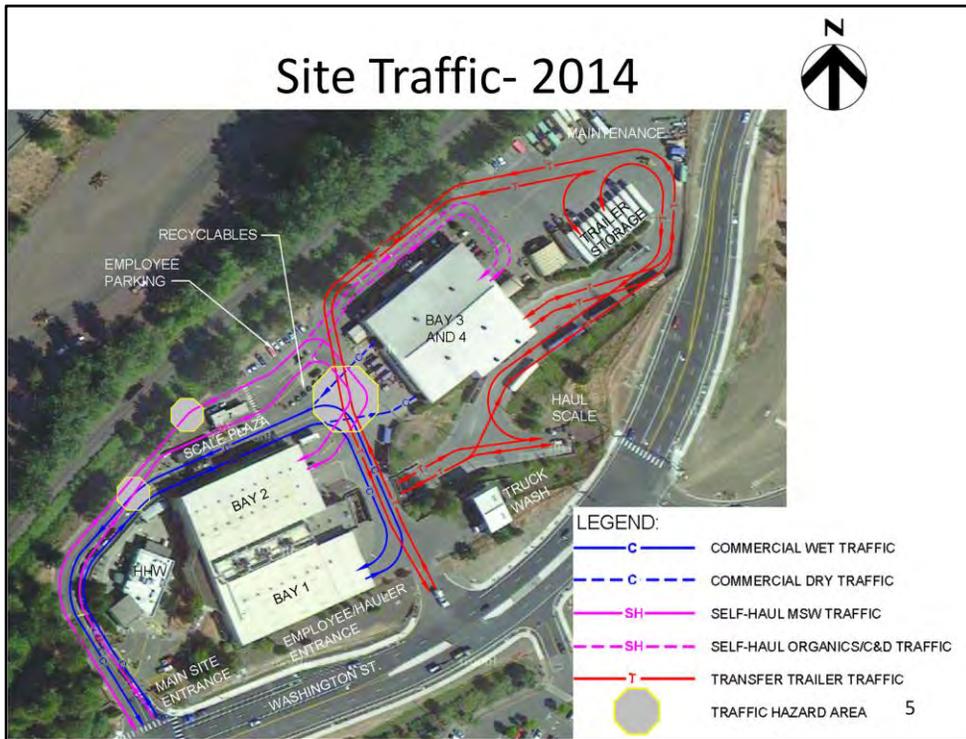
In 1992 modified facility to accommodate two compactors at the rear of the facility. Again to orient you, Washington Street is on the right where customers enter the facility. Compacting the waste increased payloads by about 30% dramatically reducing the number of truck trips through the Columbia River National Scenic area on their way to the landfill located in Gilliam County and the corresponding. Also at this time the HHW facility was constructed at the front of the facility to fulfill DEQ requirements to provide these services at solid waste facilities – legislation Metro supported.

Note the line of traffic queued on Washington street. This queue often stretched the off ramp on I-205 located to the left of the facility. Due to volume of self haul traffic causing congestion on the site and the need for additional recovery bays 3&4 were constructed in 2001.

View of Cut for Compactors



Here is a view of the back of the facility and the cut that was made to install compactors. Please keep this in mind as some of the options mentioned later impact this area.



This is a view of the current facility. Bays 1&2 are the original facility (again, Washington street is where customers enter the facility on the left of this photo). Bays 3&4 have been constructed to alleviate queuing problems and to enhance material recovery.

As part of our initial technical assessment of the site, we examined the flow of customers onsite (as well as what happens inside) to examine safety and congestion issues. As you can see from the different colored lines representing different customer types, the different types cross all cross at the octagon between the two main structures including large transfer vehicles entering and leaving the site to transport waste to the Columbia Ridge Landfill in Gilliam County. This is not an ideal situation and requires onsite personnel to direct traffic and supervise unloading. This is one of the site challenges we attempted to address with this project.

Stakeholder Needs Assessment Process

- Commercial Solid Waste firms
- Self-haul Customers
- Onsite operations staff (both Metro and operations contractor)
- Local Government Partners
- Internal Metro Stakeholders
- Formed internal and external working groups

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Needs assessment process was modeled on an approach developed by the World Bank for development projects. The first step in the process was to contact stakeholders with an interest in this regional facility. To that end we contacted:

•Commercial solid waste firms using the site, both large national vertically integrated firms as well as independent haulers through interviews, surveys and industry association meetings. These firms deliver the majority of the waste handled.

•Self haul customers, both residential customers bringing waste (and recyclables) from home cleanups as well as business self haul customers such as small remodeling firms bringing us construction debris through onsite surveys conducted by DHM research during the Spring of 2013. These customers generate approximately 80% of the trips onsite but only about 20% of the waste by weight.

•Onsite operations staff were interviewed during two onsite meetings. These included both the staff from the onsite operations contractor (Republic Services) as well as Metro staff that operate the scalehouses and HHW facility.

•Local Government Partners- Representatives of Oregon City, Clackamas County, the City of Portland and Washington County were interviewed as to their views of the role the facility plays in the regional solid waste system and what its future role should be.

•Internal Metro Stakeholders from PES, Sustainability, Communications, Office of Metro Attorney and Finance were interviewed regarding the role of the facility as well.

•Two Workgroups were formed from the stakeholders contacted. The workgroups were used help condense the information collected into a list of needs that were prioritized based on the six roadmap values.

What We Learned

- Self Haul Customers love this place!
 - 85% of self haul customers were very satisfied
- Commercial customers satisfied as well
- Onsite staff want more space for their activities
- Local governments would like expanded services as would internal Metro staff

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- 85% of the self haul were “very satisfied” with services at the facility.
 - In particular they liked the convenient location (most have been using the facility so long they can’t remember how they first heard about it),
 - The level of customer service they receive and one stop feature where they can drop off recyclables, waste and HHW
 - Expressed a desire for additional space so they can sort the materials being delivered to increase reuse and recycling, and to be able to drop off source separated recyclables before being weighed.
- Commercial customers also expressed a high degree of satisfaction with the site based on:
 - the short onsite times available through automated scaling and separate tipping area from self-haul
 - They like convenient location just off the freeway
 - Main need expressed was less interaction with self haul and the faster the better
- Onsite staff feel they have reached the limits of what the site can offer, and would like to increase the services offered such as more recovery, improved HHW operations and better onsite circulation. Frankly feel some frustration with the current lack of space.
- Local govt partners want to add source separation services such as those offered in the COP, in particular commercial organics. Oregon City representatives indicated they have received few complaints regarding the facility.

RANK	PRIORITIZED LIST OF FACILITY NEEDS
1	Household Hazardous Waste Services are essential
2	Commercial Organics should be accommodated
3	Residential Organics and Yard Debris areas need expansion
4	Self-haul Waste services should be continued and expanded
5	More space is needed for Recovering & Sorting Recyclables
6	Separate Commercial Waste Deliveries from self haul
7	Provide Customer Education while onsite
8	Minimize Queue Times and Provide Wayfinding
9	Receive Source Separated Recyclables before scales

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The long list of identified needs were ranked by the internal and external stakeholder groups and consolidated into nine categories, using the Roadmap public benefits. This list of needs were then given to Olivia’s engineering team to develop design solutions. There was a consensus that continuing and improving HHW activities was a vital service offered at the facility. Expanding services to include commercial organics handling and transfer were seen as key to regional waste reduction efforts as was the expansion of residential organics capacity as other jurisdictions enact this program. Enhancing self haul services and recovery from commercial waste were identified as requiring more room. And as mentioned before, further separation of commercial and self haul customers were desired.

Providing customer education while onsite was identified as a current missed opportunity, improved site circulation and the ability to drop off SS recyclables before the scales rounded out the list.

Development of Facility Options

- First consider operation changes or minor site improvements
- Consider major site improvements to accommodate needs
- Consider onsite and offsite improvements

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The approach taken was to first see if onsite operational improvements would be able to accommodate the identified needs – it was found that staff had maximized operations with the existing space and that operational improvements alone could not address the identified needs. If not, then onsite improvements would be examined. The third step would be consider both onsite and offsite improvements.

A number of improvement scenarios were developed for presentation to the internal and external work groups for consideration to address the identified. The groups rejected a number of scenarios as inadequate and finally settled on three options for further refinements. I will first present to you a couple of the scenarios which were rejected for further refinement and then take you through the three recommended options.

Minimum Expansion to Accommodate Commercial Organics



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Let me orient this picture for you. At the top is Washington St., Bays 1&2 constituting the original footprint is to the right.

This scenario attempt to accommodate the most pressing material on the horizon—the handling of commercial organics (a service currently offered at MCS) through minimal onsite modifications, adding a small addition to bays 3&4. It was rejected by the work groups because it did not address the other identified needs and negatively impacted existing recovery operations and traffic patterns.

Full Buildout Option



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This was the Mega-option in which the most of the site is reconfigured and the entire site brought to grade (it required filling the area excavated for the compactors as shown previously to you).

It was rejected by the work groups primarily because it would shut down the site for an extended period of time leaving the region underserved for transfer services, particularly for self haul customers.

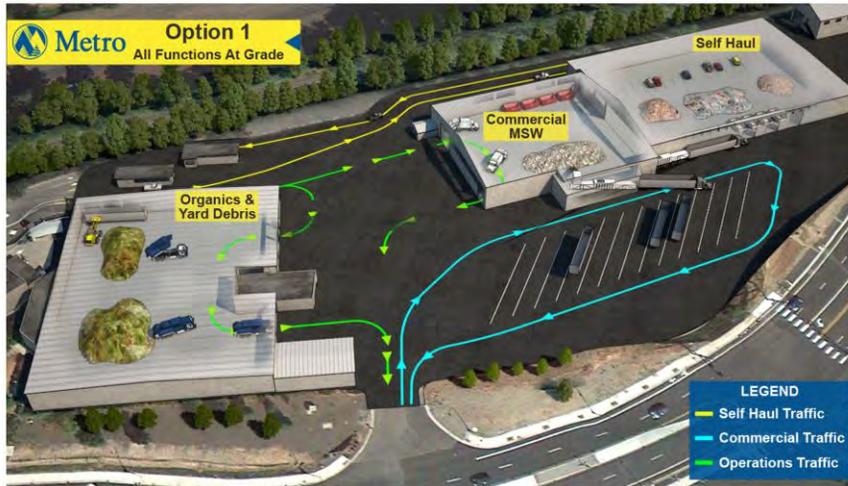
Option 1- Fill to Grade



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Option 1 still under consideration would more than double the Bay 3&4 building while bringing the entire site up to grade, relocating the compactors to the expanded building and filling in the existing pit. The design allows for the acceptance of new materials such as commercial organics and increased recovery of dry waste through the addition of a sort line. It also provides some separation of traffic.

Option 1- Graphic



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This is an enhanced graphic of the option showing where different activities would occur. To orient you, the bottom of the slide is Washington street, the original bays 1&2 with the pit now filled in is on the left and the area is dedicated to organics. The Bay3-4 building would be more than doubled in size. The compactors are relocated to here. Selfhaul and commercial customers are separated and a elevated sorting line is installed to enhance materials recovery.

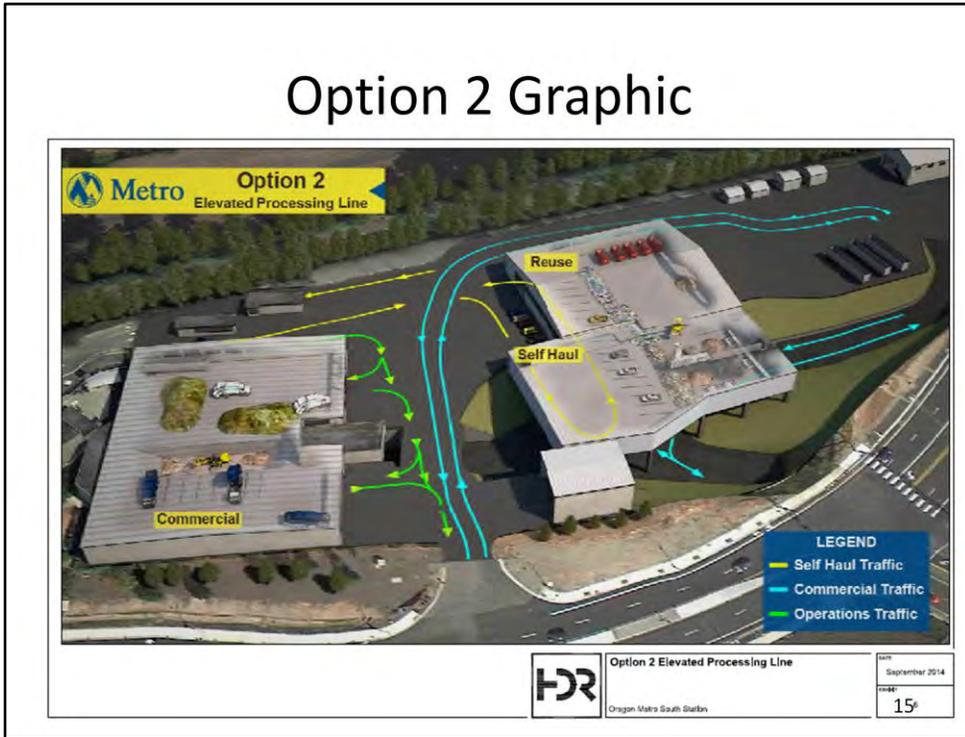
Option 2- Columns



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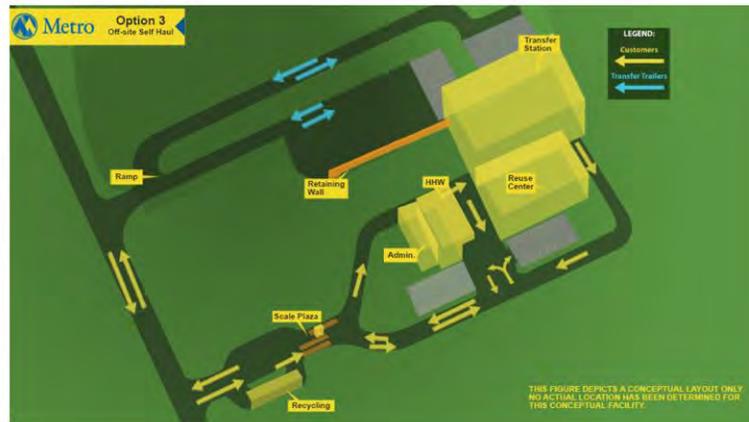
This is a more modest expansion of the Bay 3-4 building. The expansion would be on columns under which the transfer trucks would back to reach the existing compactors. The pit is still utilized for commercial wet waste while commercial and other organics are received. A sort line is added to increase recovery (but less than option #1), some traffic separation is accomplished.

Option 2 Graphic



This is the graphic for the option. In this option, the pit remains in bays 1-2 since waste from commercial haulers continues to be unloaded in its current location, and dumped into the pit. Bay 2 is repurposed to handle organics. Bays 3-4 on the right are expanded and a sort line in two pieces (less efficient than the straight line in Option 1) is installed. It improves the separation of customer types, but not to the extent of Option 1.

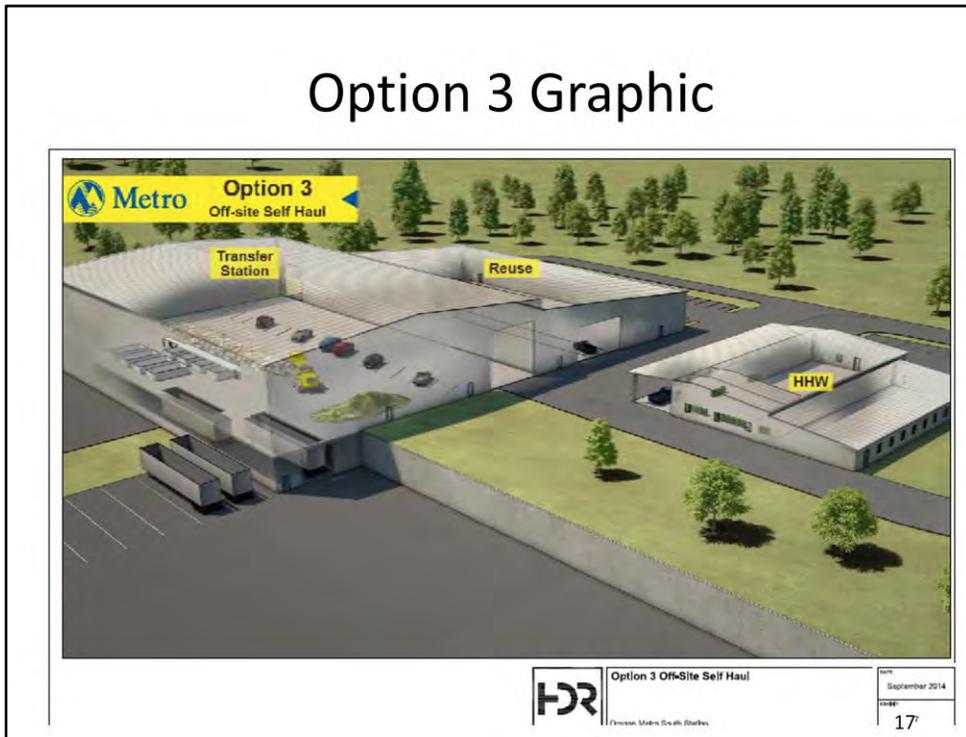
Option 3- Move Self Haul Off Site



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Option 3 creates a new facility for self haul customers (location not specified), with a sort line, a retail reuse store, HHW facility and source separated recyclable drop off prior to the scales. Improvements such as a sort line are made at the existing facility which would receive only commercial loads, including commercial organics. It improves recovery the most.

Option 3 Graphic



To your left of this graphic is the new transfer area for self haul unloading and sorting. Attached to it is the reuse/resale area. A HHW facility, scalehouse and recyclables drop off area would be located towards the entrance of the facility. I want to reiterate that we have not explored a location for this facility.

Cost Estimates and Diversion Potential

	Option 1- Fill to grade	Option 2- Columns	Option 3- Off Site Self haul
Total Capital Cost	\$25,250,000	\$18,440,000	\$27,746,320
Square feet >	45,300	26,855	70,550
Annual Operating Cost Increase	\$1,324,000	\$1,244,000	\$1,806,000
Diversion Potential	39%	36%	43%

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These are the cost estimates, increase in square footage and recovery potential for each option. Option 1 where the entire site is brought to grade is estimated to cost about \$25 million and recovery about 40% of the incoming materials. The facility currently recovers only about 10%. Option 2 where the facility expansion is on columns, costs about \$18 million, and has slightly lower recovery than Option 1, while a new self haul facility, combined with some modifications to the existing station to increase recovery is the most expensive and should yield the most recovery.

Final Ranking by Workgroups and SWAC Input

- Internal Metro Workgroup favored Option 1 (Fill to grade/fill in pit)
- External Workgroup favored Option 3 (Move self haul facility)
- SWAAC favored Option 3

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The three options were then presented for a final time to the workgroups to find their preferred option. The internal Metro work group preferred Option 1 where the site is filled to grade over Option 3 (their next choice) because they recognized the difficulty of siting a new solid waste facility. The external workgroup composed of commercial haulers, government representatives and the reuse community preferred Option 3 since it separated completely self haul and commercial while providing the best opportunity for recovery. The Solid Waste Alternatives Advisory Committee (the Council's advisory committee on solid waste matters) preferred Option 3 not only for its recovery potential but also because it offers the best opportunity to educate the public on solid waste matters.

Staff Recommendation

- Narrow the options to two
 - Fill to Grade (1) and Move Self Haul (3)
- Refine designs to facilitate other roadmap projects as the evolve
- Refine cost estimates and conceptual designs
- Return to Council with recommendations in 12 to 18 months depending on outcome of other projects

Questions

- Are there any more questions about this presentation?
- Do you accept staff's recommendation to move forward with additional investigations on the Fill to Grade (1) and Move Self Haul (3) options?