



Zero Waste Diversion Priority Cost & GHG Impacts

SWAC Meeting
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Cost Assumptions

- Planning level cost estimates
- Costs are cumulative over the 20-year planning period
- Costs in 2022 dollars
- Costs are estimated for the County only
 - Costs to private entities (businesses) not included
- Four (4) new staff positions



GHG Assumptions

- Based on U.S. EPA WARM
- Emissions are estimated annually
- Includes emissions from transportation
- Emissions reductions based on highest estimated impact
- Emission impacts from select materials not calculated
 - Compostable paper
 - Clothing/textiles



Expand Education and Outreach

Diversion Rate Impact	13.7 – 16.0%
Estimated Costs <ul style="list-style-type: none">• Two Education Specialists• Media Services	\$4.9 – 7.3 M
Estimated GHG Impacts (MTCO ² E)	(67,900)
GHG Equivalent Impacts Equated to Passenger Vehicles	(14,400)

Comprehensive Organics Management (includes ban)

Diversion Rate Impact	11.9 – 12.7%
Estimated Costs <ul style="list-style-type: none">• Inspector (compliance support)• Media Services• Increase cost to MF/CM sectors	\$1.3 – 2.0 M
Estimated GHG Impacts (MTCO ² E): <ul style="list-style-type: none">- Waste-to-energy- Landfill	1,900 (10,900)
Passenger Vehicle GHG Equivalencies <ul style="list-style-type: none">- Waste-to-energy- Landfill	410 (2,300)

Organics Diversion from CM/MF Sectors (no ban, voluntary)

Diversion Rate Impact	3.7 – 5.0%
Estimated Costs <ul style="list-style-type: none">• Media Services• No additional staff• Increase cost to MF/CM sectors	\$425 – 595 k
Estimated GHG Impacts (MTCO ² E): <ul style="list-style-type: none">- Waste-to-energy- Landfill	780 (4,500)
Passenger Vehicle GHG Equivalencies <ul style="list-style-type: none">- Waste-to-energy- Landfill	165 (970)

Organics Diversion at Farmers Markets

Diversion Rate Impact	0.1 – 0.2%
Estimated Costs <ul style="list-style-type: none">• Support Services	\$108 - 132 k
Estimated GHG Impacts MTCO ² E): <ul style="list-style-type: none">- Waste-to-energy- Landfill	30 (160)
Passenger Vehicle GHG Equivalencies <ul style="list-style-type: none">- Waste-to-energy- Landfill	10 (35)

Waste Reduction Education Campaign

Diversion Rate Impact	2.6 – 3.2%
Estimated Costs <ul style="list-style-type: none">• Media Services	\$ 425 – 595 k
Estimated GHG Impacts (MTCO ₂ E)	(32,300)
GHG Equivalent Impacts Equated to Passenger Vehicles	(6,900)

Develop CHaRM

Diversion Rate Impact	1.8 – 2.5%
Estimated Costs <ul style="list-style-type: none">• Facility Updates• One Operator• Material Management	\$2.1 – 3.2 M
Estimated GHG Impacts (MTCO ² E)	(4,900)
GHG Equivalent Impacts Equated to Passenger Vehicles	(1,000)

Additional Trash Cart Charges

Diversion Rate Impact	1.4 – 1.4%
Estimated Costs <ul style="list-style-type: none">• Additional Carts• Increase Revenue	\$27 – 30 k
Estimated GHG Impacts (MTCO ² E)	(7,100)
GHG Equivalent Impacts Equated to Passenger Vehicles	(1,500)

Additional Glass Collection Services

Diversion Rate Impact	1.0 – 1.3%
Estimated Costs <ul style="list-style-type: none">• Collection Bins	\$54 – 75 k
Estimated GHG Impacts (MTCO ₂ E)	(750)
GHG Equivalent Impacts Equated to Passenger Vehicles	(160)

Support Bottle Bill Legislation

Diversion Rate Impact	3.1 – 3.5%
Estimated Costs • Media Services *Existing staff support; no new staff	\$70 – 90 k*
Estimated GHG Impacts (MTCO ² E)	(12,000)
GHG Equivalent Impacts Equated to Passenger Vehicles	(2,600)

Support EPR Legislation

Diversion Rate Impact	0.7 – 0.9%
Estimated Costs *Existing staff support; no new staff	\$0*
Estimated GHG Impacts (MTCO ² E)	(9,100)
GHG Equivalent Impacts Equated to Passenger Vehicles	(1,900)

Host Reuse/Repair Fairs

Diversion Rate Impact	0.3 – 0.5%
Estimated Costs <ul style="list-style-type: none">• Fix/Repair Vendors * Supported by Education Specialist Staff	\$162 – 198 k *
Estimated GHG Impacts (MTCO ² E)	(500)
GHG Equivalent Impacts Equated to Passenger Vehicles	(100)

Encourage Material Donation/Reuse

Diversion Rate Impact	0.3 – 0.4%
Estimated Costs *Supported by Education Specialist Staff and Waste Reduction Media Services	\$0*
Estimated GHG Impacts (MTCO ² E)	(1,600)
GHG Equivalent Impacts Equated to Passenger Vehicles	(340)

Support State-Level Circular Economy Initiatives

Diversion Rate Impact	0.1 – 0.3%
Estimated Costs *Existing staff support; no new staff	\$0*
Estimated GHG Impacts (MTCO ² E)	(2,700)
GHG Equivalent Impacts Equated to Passenger Vehicles	(600)

Require Zero Waste Special Events

Diversion Rate Impact	0.1 – 0.2%
Estimated Costs <ul style="list-style-type: none">• Recycling Containers and Supplies (i.e. bags) *Supported by Education Specialist Staff	\$42 – 53 k*
Estimated GHG Impacts (MTCO ² E)	(500)
GHG Equivalent Impacts Equated to Passenger Vehicles	(100)

Online Dashboard for Tracking Zero Waste Progress

Diversion Rate Impact	0.0 – 0.1%
Estimated Costs <ul style="list-style-type: none">• Software/application*IT staff to maintain/update	\$18 – 22 k*
Estimated GHG Impacts (MTCO ₂ E)	(2,000)
GHG Equivalent Impacts for Passenger Vehicles	(400)

Establish Shared Equipment Program

Diversion Rate Impact	0.0 – 0.0%
Estimated Costs <ul style="list-style-type: none">• Site Improvements• Equipment Costs (drills, lawn equipment)	\$72 – 88 k*
Estimated GHG Impacts (MTCO ² E)	(300)
GHG Equivalent Impacts Equated to Passenger Vehicles	(100)

Implement County EP4 Policy

Diversion Rate Impact	0.0 – 0.0%
Estimated Costs *Existing staff support; no new staff	\$0*
Estimated GHG Impacts (MTCO ² E)	(3,400)
GHG Equivalent Impacts Equated to Passenger Vehicles	(700)

Support Major Waste Diversion Legislative Initiatives

Diversion Rate Impact	0.0 – 0.0%
Estimated Costs *Existing staff support; no new staff	\$0*
Estimated GHG Impacts (MTCO ² E)	(200)
GHG Equivalent Impacts Equated to Passenger Vehicles	(50)

Encourage Reusable Packaging at Restaurants

Diversion Rate Impact	0.0 – 0.0%
Estimated Costs <ul style="list-style-type: none">• Grant Opportunities - \$5-10 k	\$90 – 180 k
Estimated GHG Impacts (MTCO ² E)	(200)
GHG Equivalent Impacts Equated to Passenger Vehicles	(50)

Reusable Dishware at APS

Diversion Rate Impact	0.0 – 0.0%
Estimated Costs <ul style="list-style-type: none">School dish rooms and supplies	> \$10 M
Estimated GHG Impacts (MTCO ² E)	(300)
GHG Equivalent Impacts for Passenger Vehicles	(70)

Questions/Discussion