

# SOLID WASTE DEPARTMENT

*City Council Retreat*  
*Kody Petillo, Director*  
*April 6, 2023*



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# Outline

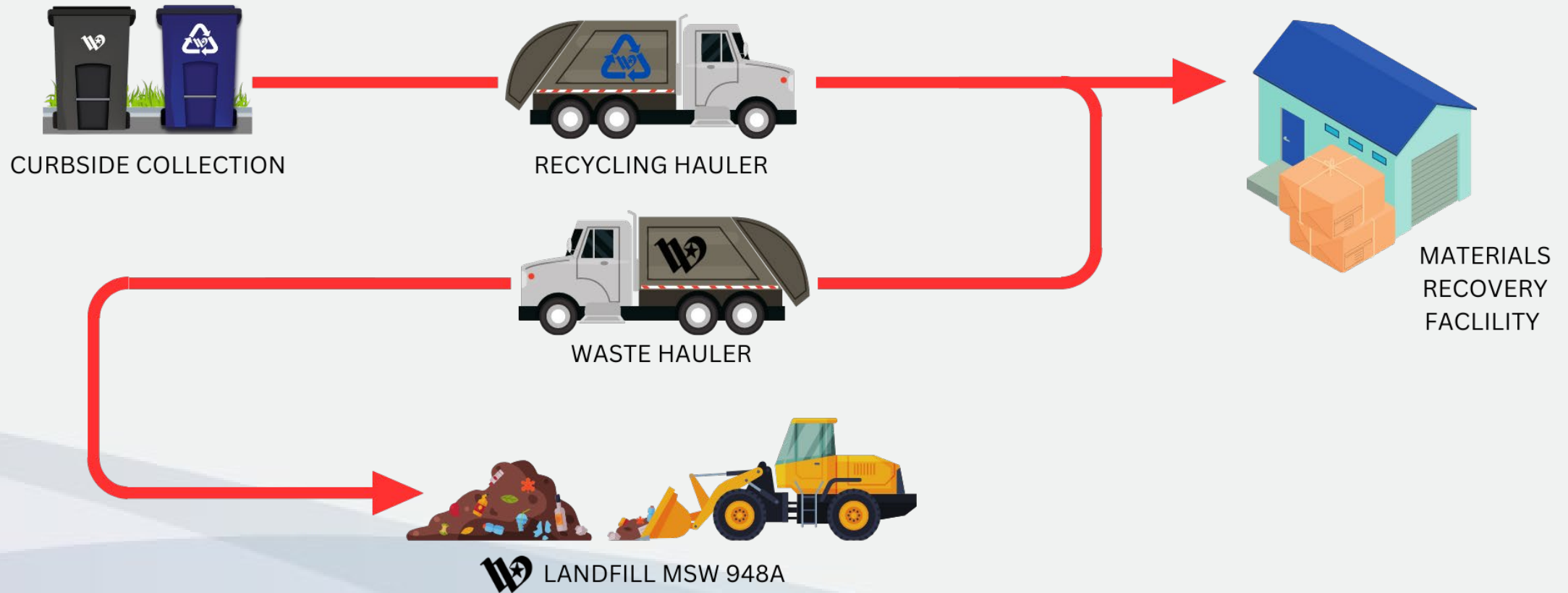
- Current Operations
  - Overview of Current Operations/Waste to Landfill
  - Current Landfill Status
    - Data on community usage at 948A including non-Wacoans
    - Estimate on remaining timeline and efforts to extend timeline
    - Capacity remaining at 948A
- Future Operations
  - How new landfill and transfer station would positively impact waste flow in our region
  - Timelines, budgets, and key milestones
  - Rate impacts

# Current Operations



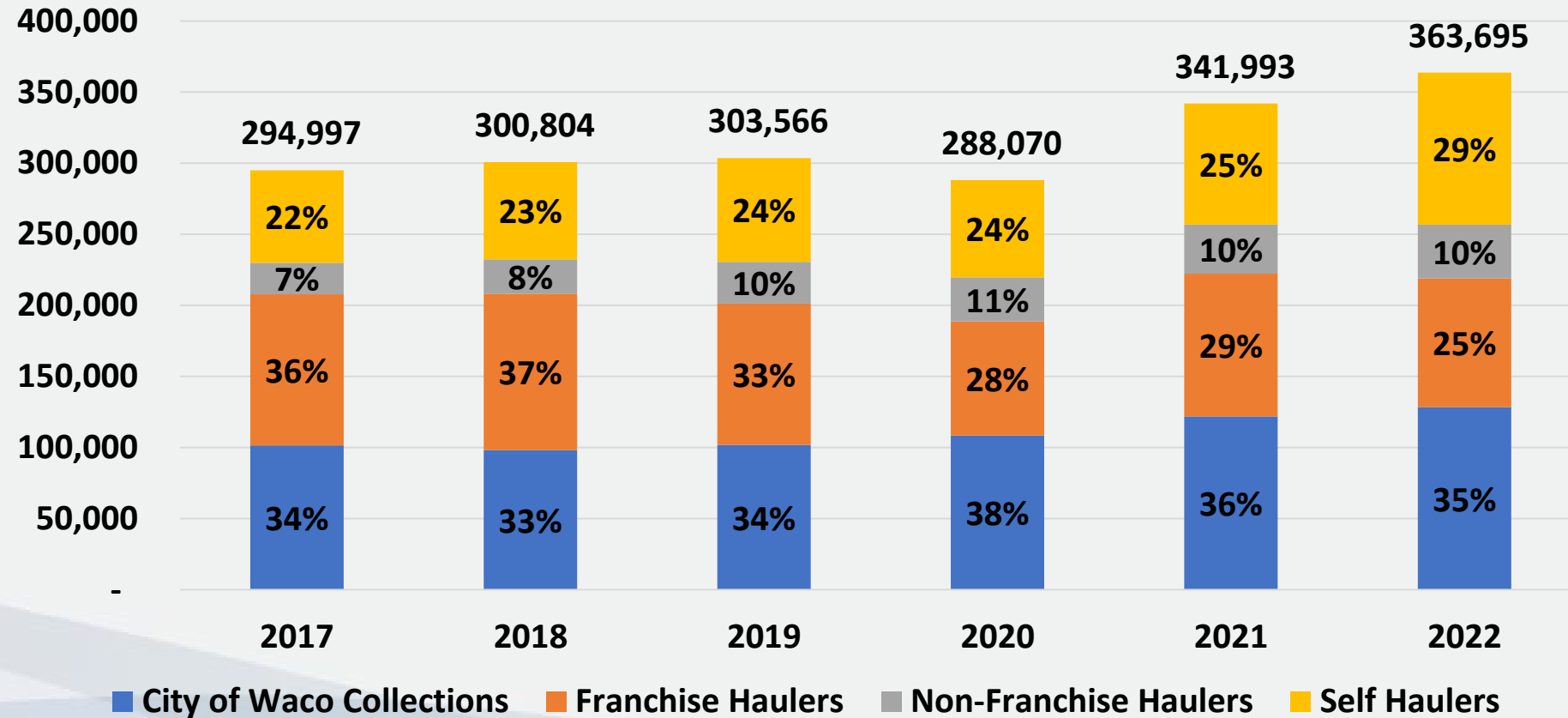
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# Current Solid Waste Operations



# Usage of MSW 948A

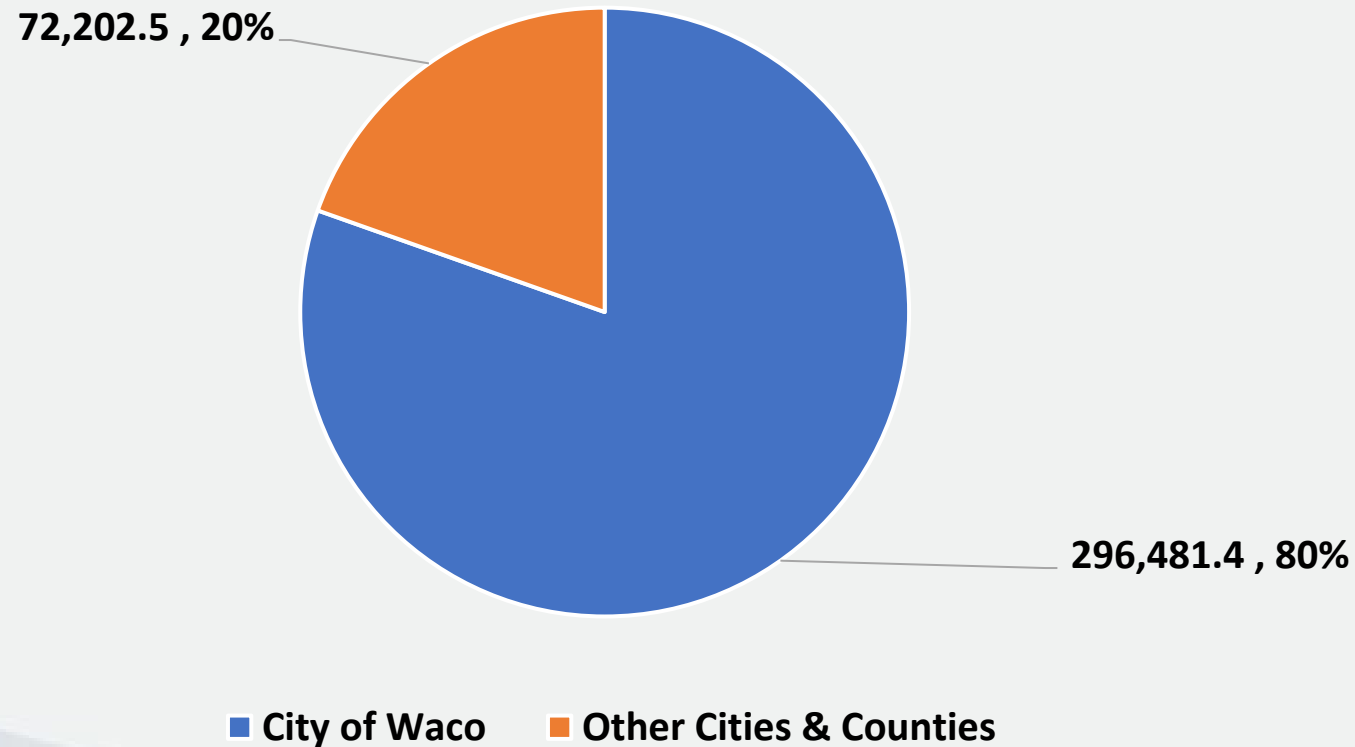
MSW 948A Tons by Hauler Type



The City of Waco does not have an exclusive franchise for commercial solid waste collections within the City of Waco.

# Self Reported Usage of MSW 948A

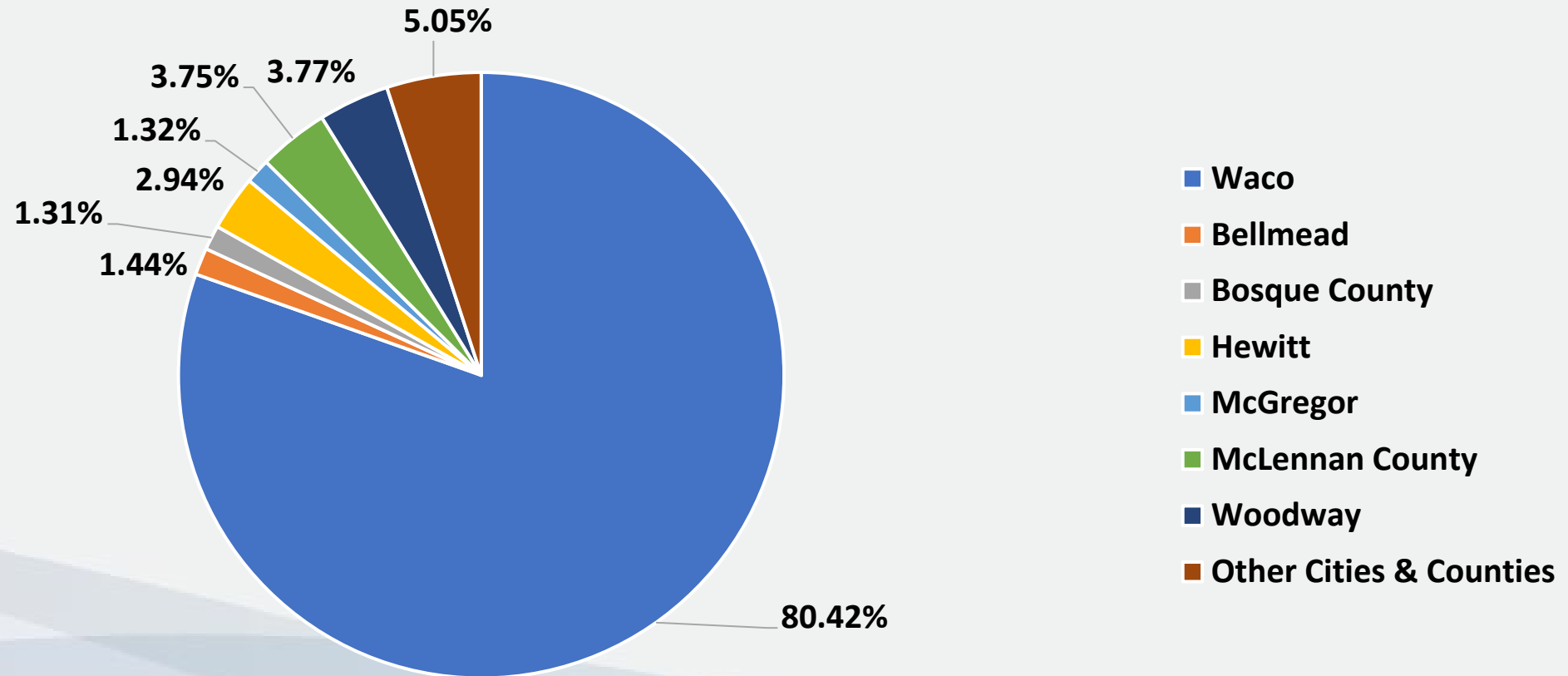
## Usage of MSW 948A by City/County



Note: Origin of waste is self-reported by haulers other than COW Solid Waste. Approximately 69% of waste not hauled by COW SW is *reportedly* from the City of Waco.

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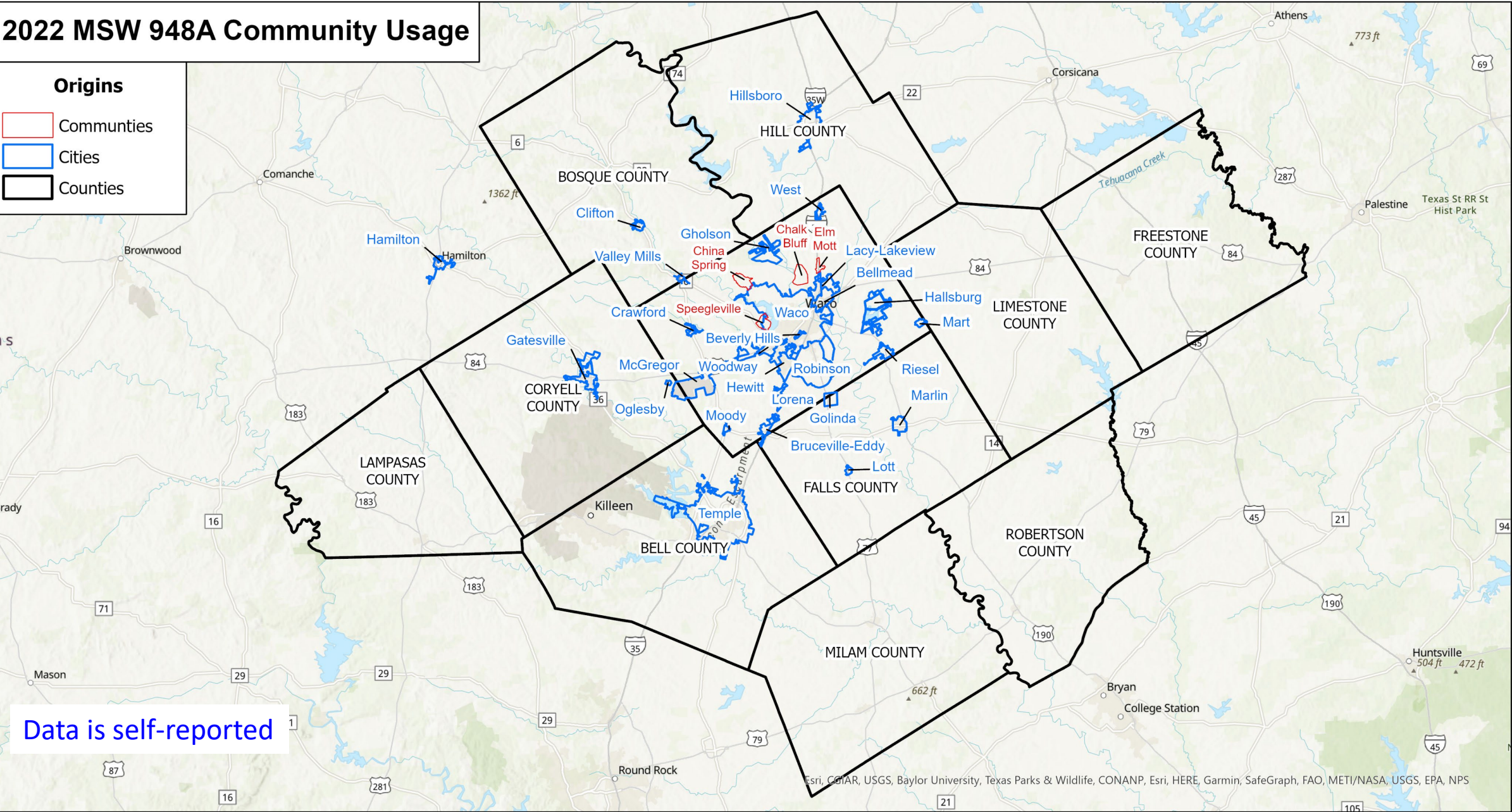
# 2022 MSW 948A Community Usage

**Origins**

Communities

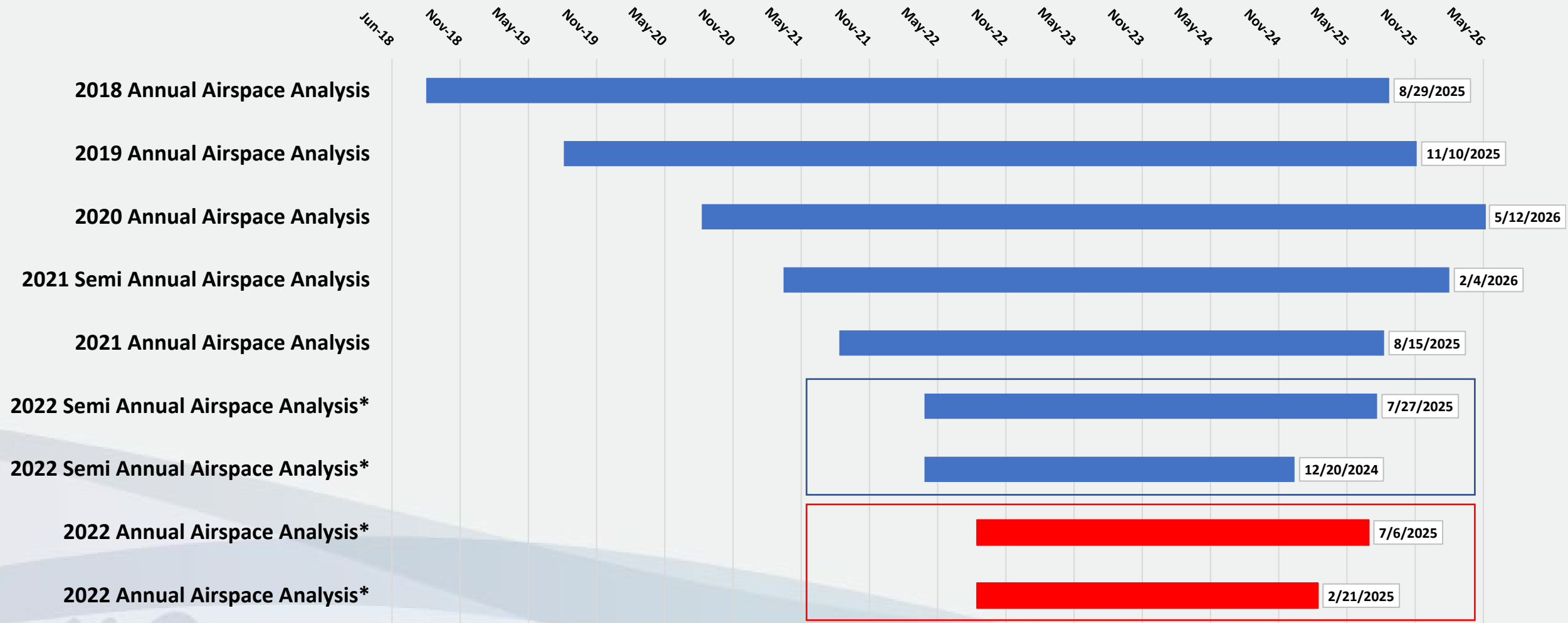
Cities

Counties





# MSW 948A AIRSPACE CAPACITY



\* 2 SCENARIOS BASED ON DIFFERENT COMPACTION RATES

# MSW 948A EFFORTS TO EXTEND LIFE

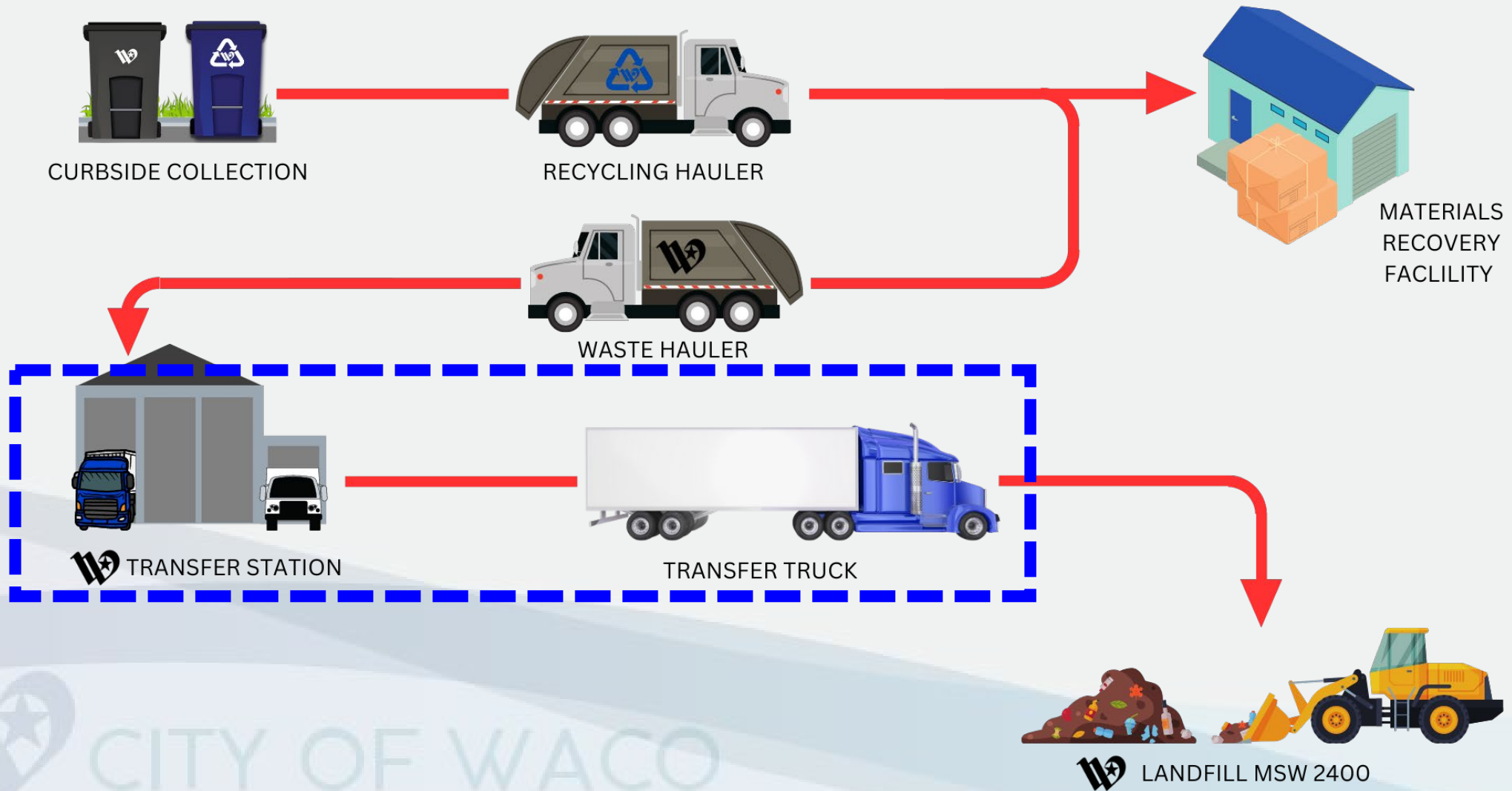
- Purchased large compactor in 2018 to improve compaction rate
- Replaced back-up compactor with larger compactor in 2022
- Increase in diversion
- Addition of mobile glass recycling and accepting styrofoam at Cobbs
- Increased fees to discourage construction and demolition material

# Future Operations



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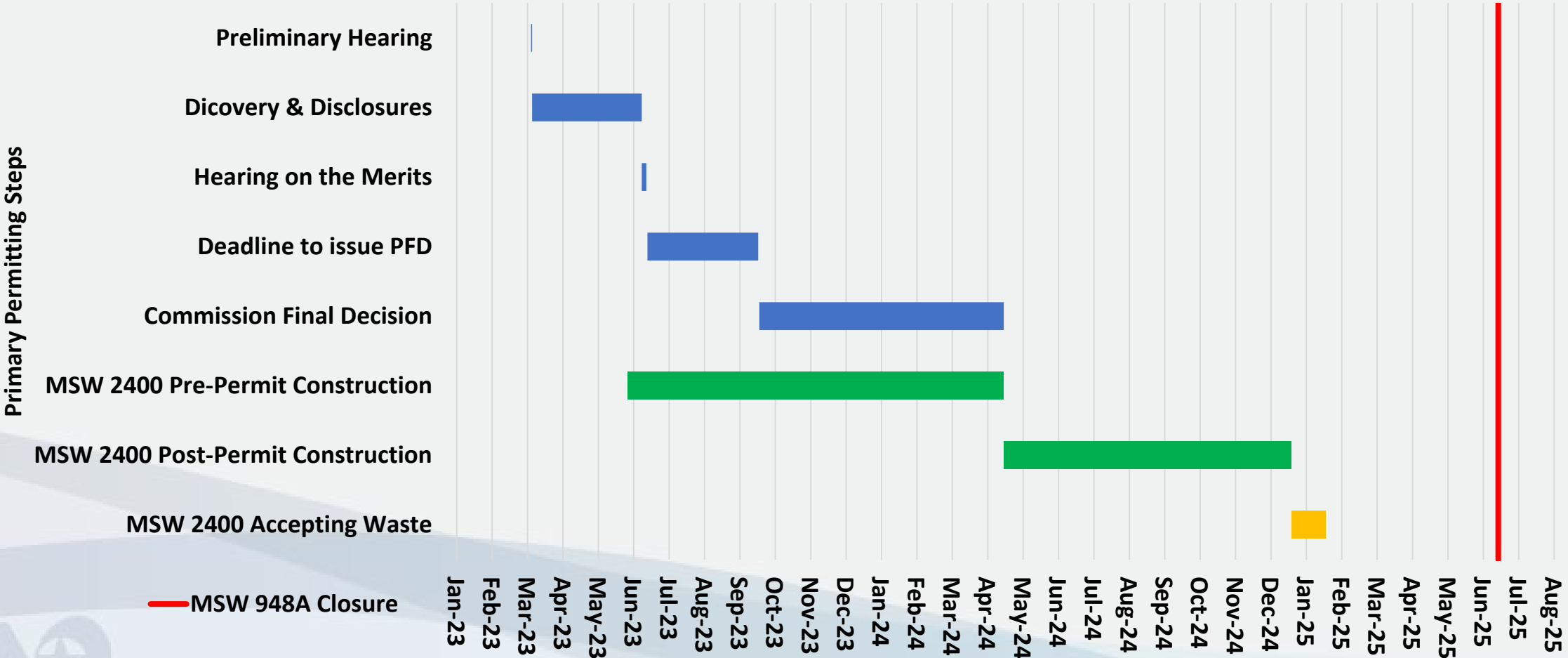
# Future Solid Waste Operations



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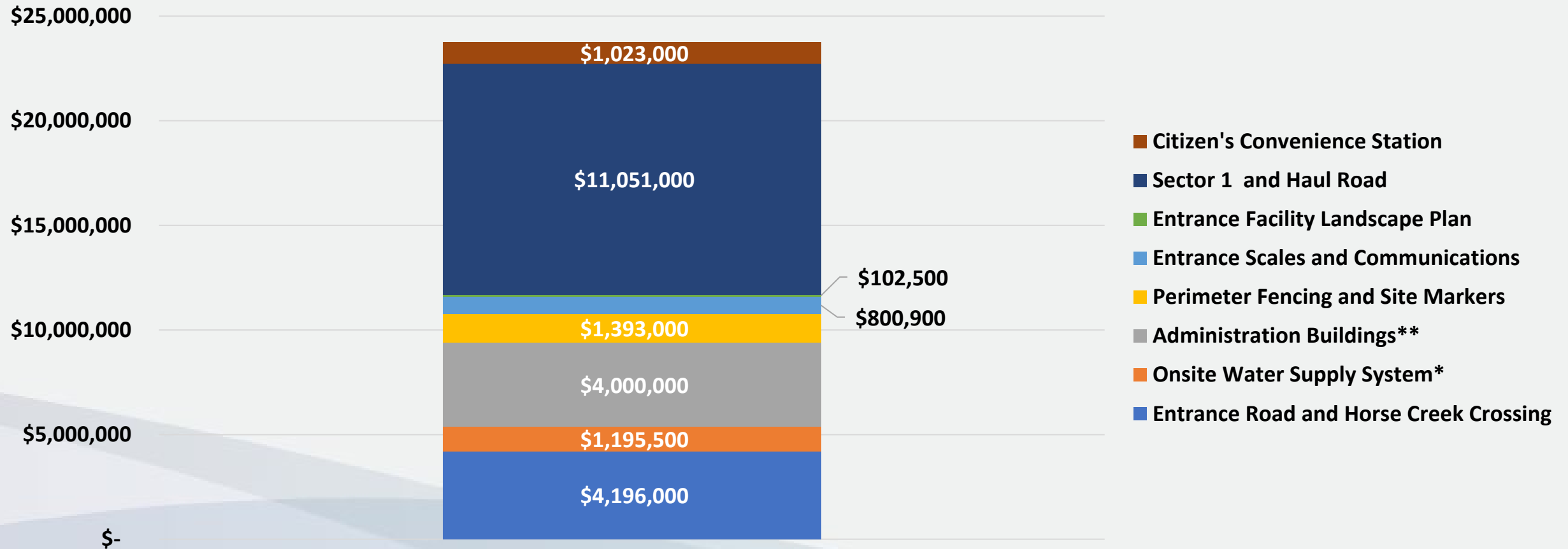
# MSW 2400 Timeline & Key Milestones



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# MSW 2400 Cost Estimates

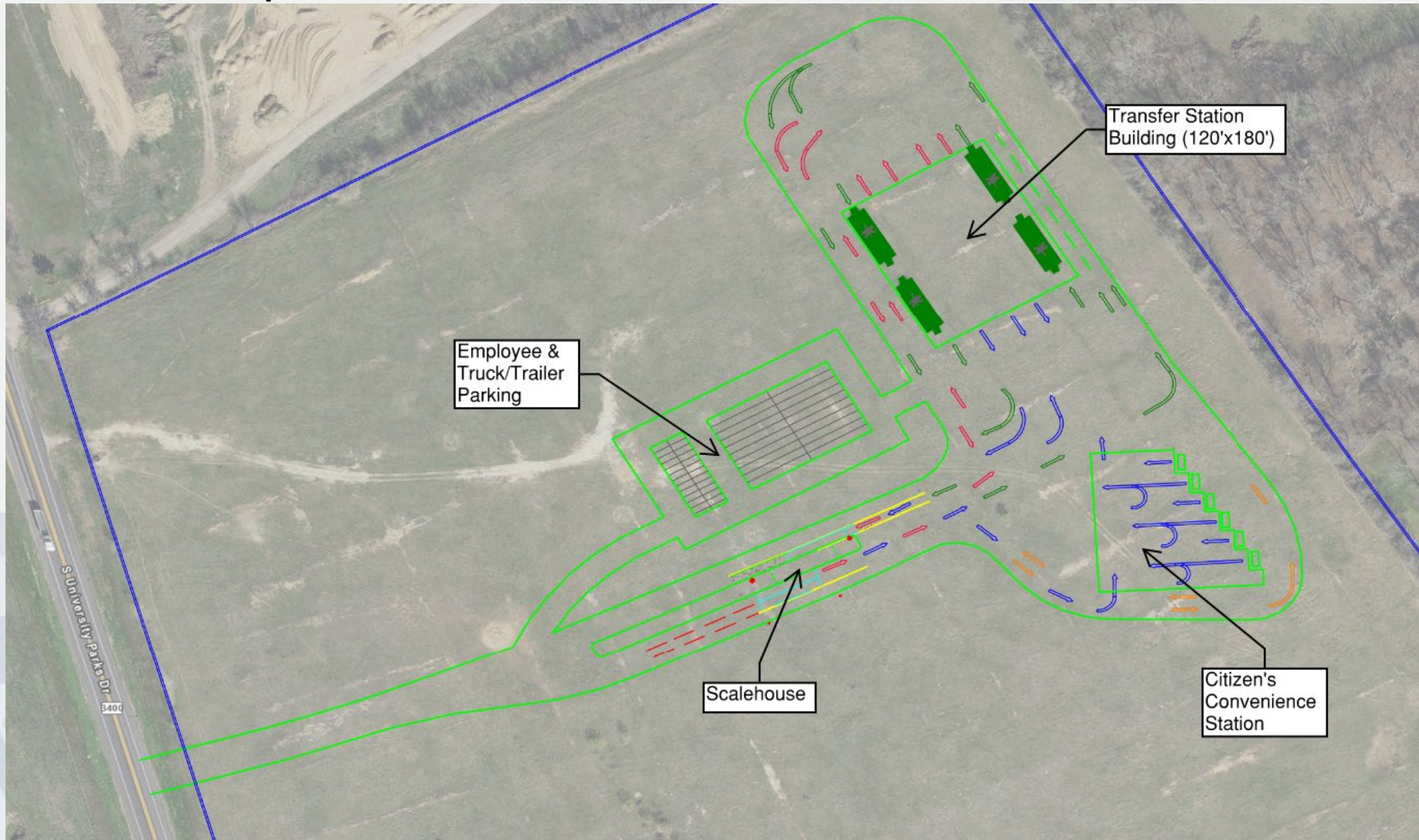


**Total Construction Cost: \$23,761,900**

\*Current cost estimates are higher than anticipated. Evaluating alternative options.

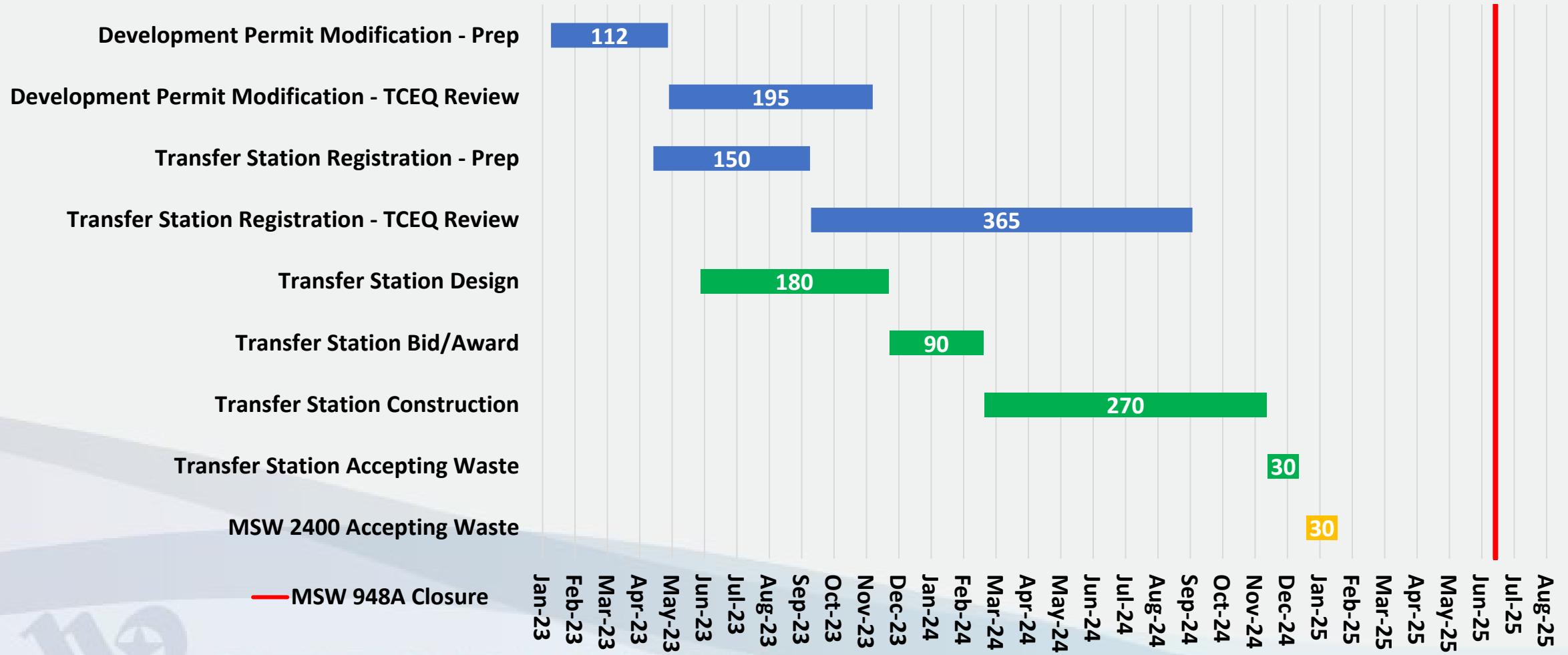
\*\*Evaluating alternative options to reduce the cost of the administration building.

# Proposed Transfer Station Site Plan



# Proposed Transfer Station Schedule

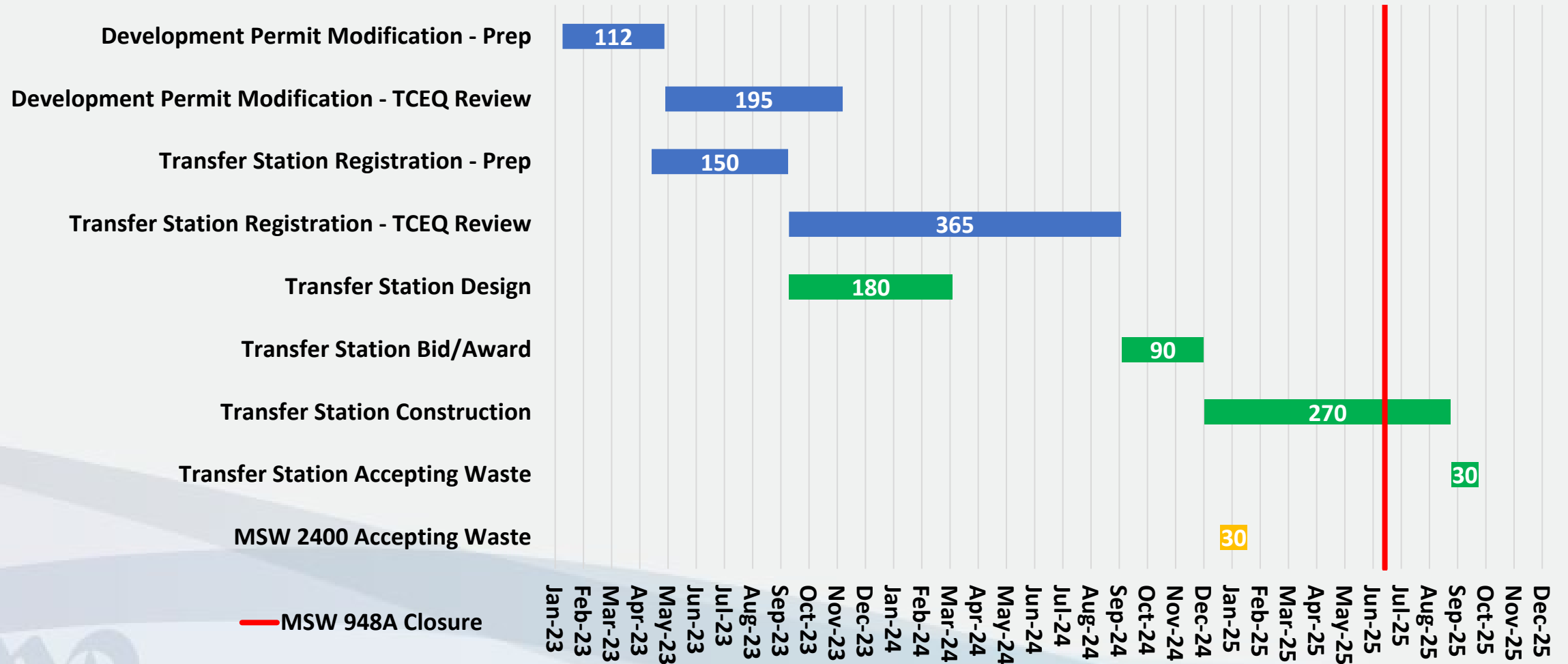
## Pre-Registration Approval Construction



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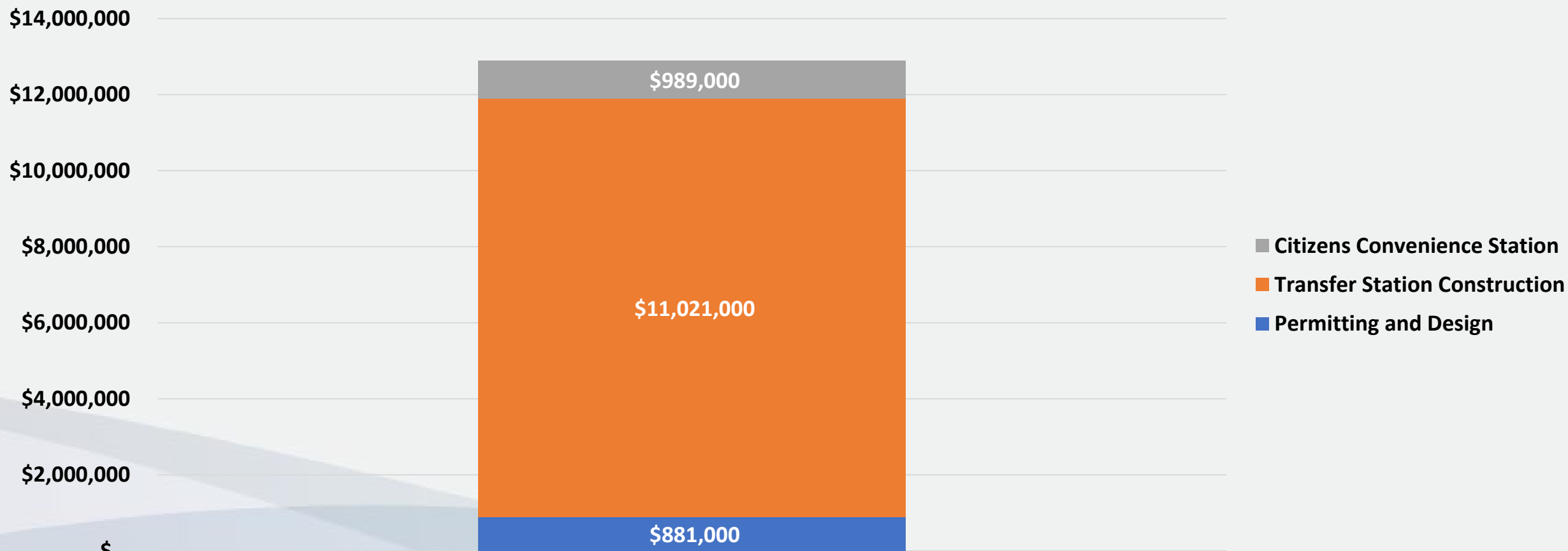
# Proposed Transfer Station Schedule

## Post-Registration Approval Construction



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# Proposed Transfer Station Cost Estimate



**Total Construction Cost: \$12,891,000**

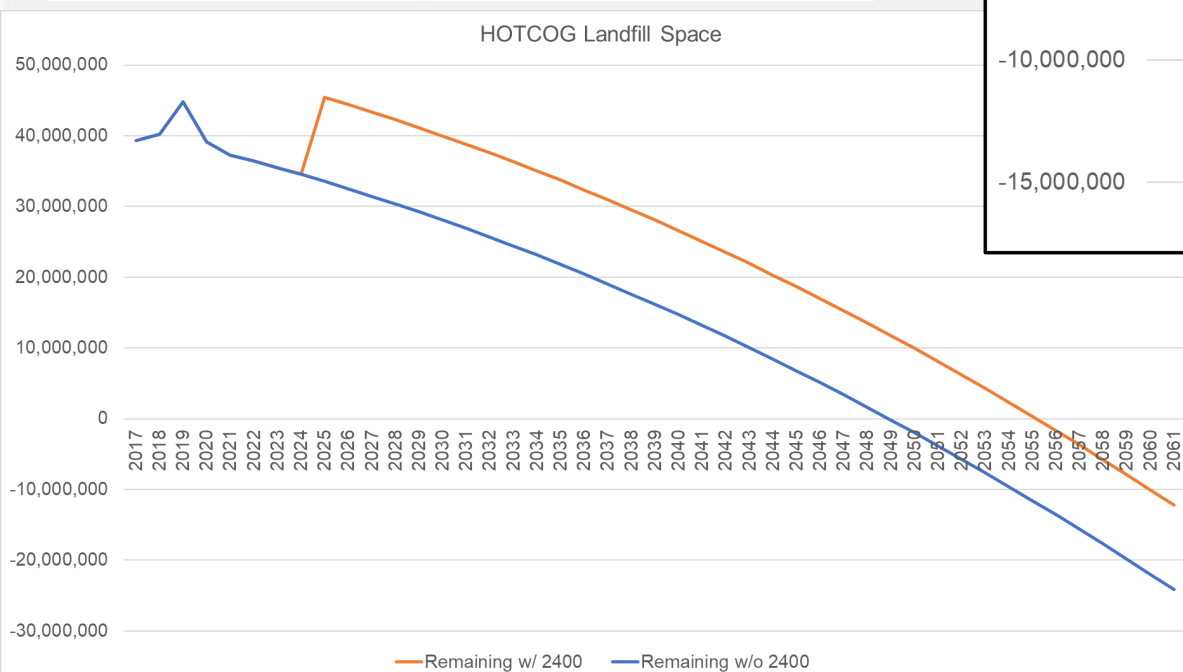
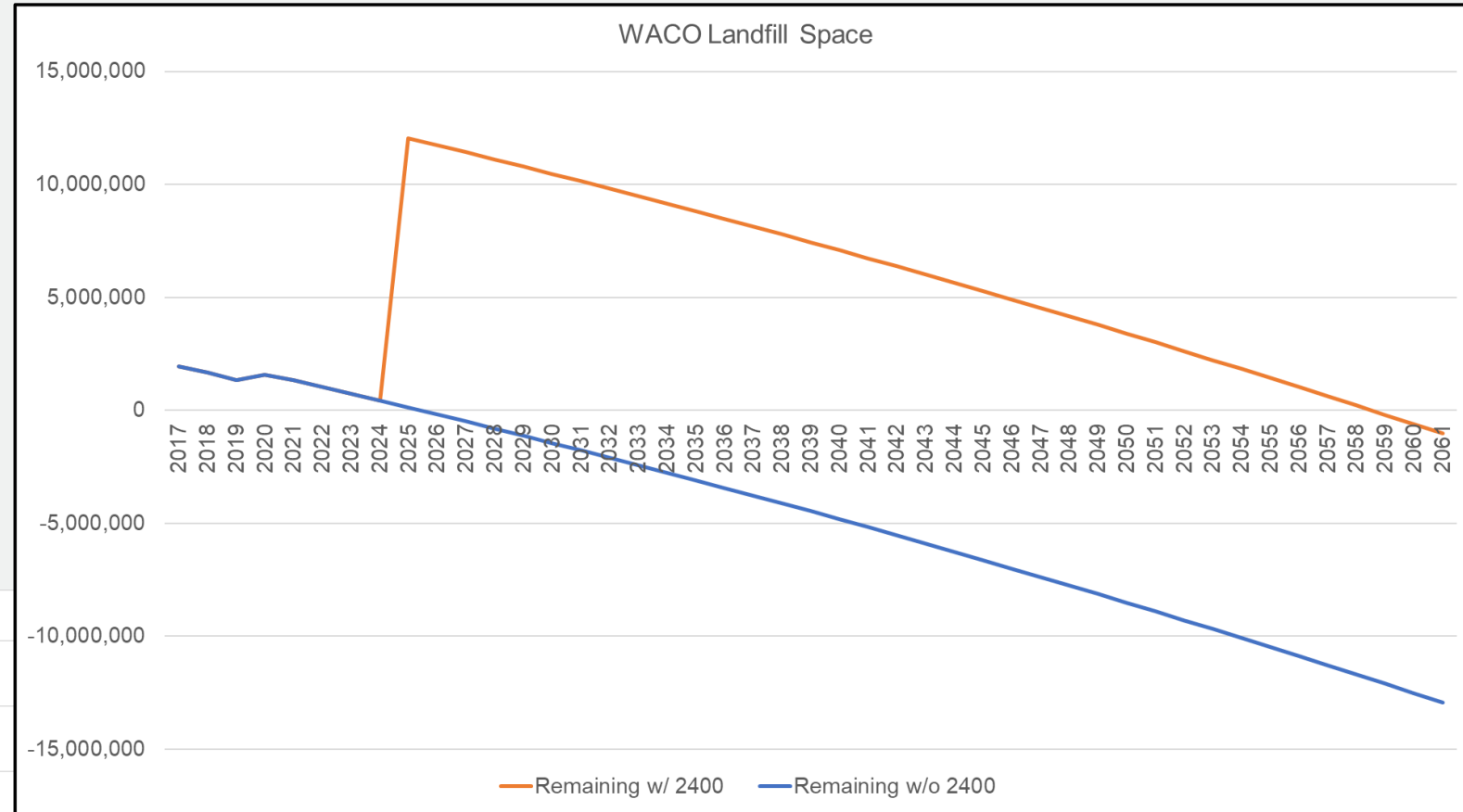
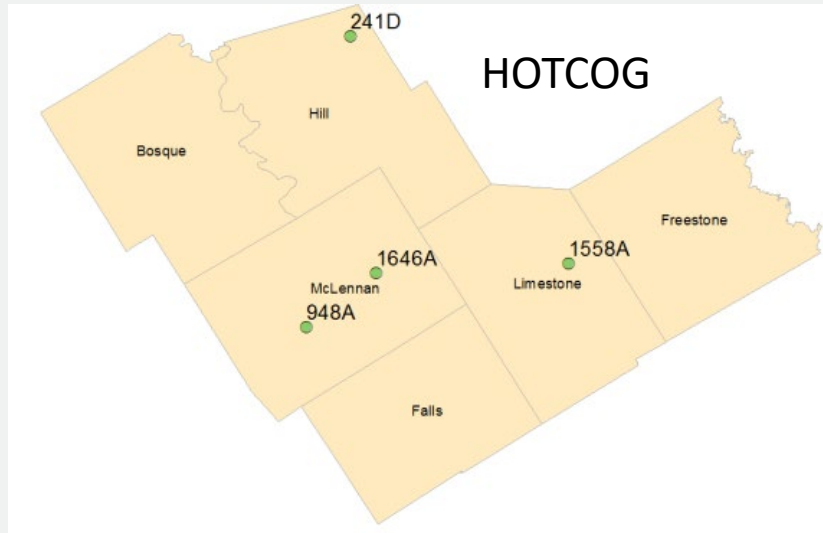
\*Includes 15% contingency



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# Landfill Space (Projected)



- 80%+ of HOTCOG landfill space in Itasca (+/- 22% municipal waste) per HOTCOG RSWMP
- Years 2017-2020 actual annual data from TCEQ's annual report *Municipal Solid Waste in Texas: A year in Review*
- Years 2021-2061 Trended based on 2017-2020 actual tonnage

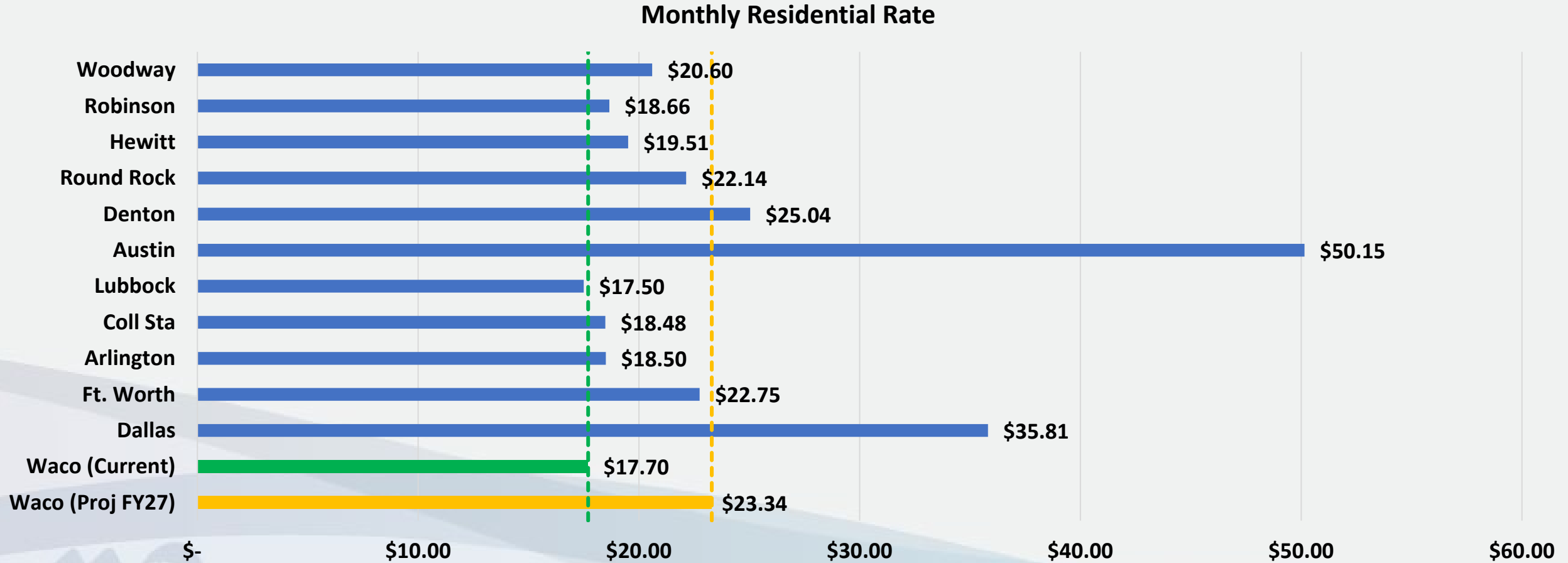


# Solid Waste Cost of Service Study

Line No.		Year 1 FY 2023	Year 2 FY 2024	Year 3 FY 2025	Year 4 FY 2026	Year 5 FY 2027
91	<b>Indirect Costs</b>					
92	HHW Collection	\$ 0.08	\$ 0.08	\$ 0.08	\$ 0.08	\$ 0.09
93	Alley Maintenance	\$ 0.45	\$ 0.46	\$ 0.47	\$ 0.49	\$ 0.51
94	Cobbs Center	\$ 0.97	\$ 1.35	\$ 1.40	\$ 1.52	\$ 1.58
95	Community Cleanups	\$ 0.12	\$ 0.12	\$ 0.13	\$ 0.13	\$ 0.14
96	Tire Collection Events	\$ 0.06	\$ 0.07	\$ 0.07	\$ 0.07	\$ 0.07
97	Container Maintenance	\$ 0.17	\$ 0.18	\$ 0.18	\$ 0.19	\$ 0.19
98	Admin - Automated Refuse	\$ 2.14	\$ 2.13	\$ 2.11	\$ 2.06	\$ 1.97
99	Admin - Automated Recycling	\$ 0.99	\$ 0.97	\$ 0.93	\$ 0.93	\$ 0.91
100	Admin - Semi-Auto Green Waste	\$ 0.93	\$ 0.91	\$ 0.87	\$ 0.88	\$ 0.86
101	Admin - Brush and Bulky	\$ 0.39	\$ 0.40	\$ 0.42	\$ 0.41	\$ 0.36
102	<b>Total - Indirect Cost</b>	<b>\$ 6.30</b>	<b>\$ 6.66</b>	<b>\$ 6.66</b>	<b>\$ 6.76</b>	<b>\$ 6.68</b>
103	<b>Disposal Cost</b>					
104	Monthly Capacity	20,366,294	20,722,684	21,033,532	21,296,453	21,509,421
105	\$/Gallon per Month	\$ 0.008	\$ 0.009	\$ 0.010	\$ 0.011	\$ 0.014
106	Monthly Disposal Cost					
107	90 gallon ( 1 cart, 1x week)	\$ 3.03	\$ 3.47	\$ 3.92	\$ 4.34	\$ 5.58
108	180 gallon (1 cart, 2x week)	\$ 6.06	\$ 6.94	\$ 7.84	\$ 8.68	\$ 11.16
109	180 gallon (2 carts, 1x week)	\$ 6.06	\$ 6.94	\$ 7.84	\$ 8.68	\$ 11.16
110	270 gallon ( 3 carts, 1x week)	\$ 9.09	\$ 10.41	\$ 11.76	\$ 13.03	\$ 16.75
111	360 gallon (2 carts, 2x week)	\$ 12.13	\$ 13.87	\$ 15.68	\$ 17.37	\$ 22.33
112	360 gallon (4 carts, 1x week)	\$ 12.13	\$ 13.87	\$ 15.68	\$ 17.37	\$ 22.33
113	450 gallon ( 5 carts, 1xweek)	\$ 15.16	\$ 17.34	\$ 19.60	\$ 21.71	\$ 27.91
114	540 gallon (3 carts, 2x week)	\$ 18.19	\$ 20.81	\$ 23.53	\$ 26.05	\$ 33.49
115	540 gallon (6 carts, 1x week)	\$ 18.19	\$ 20.81	\$ 23.53	\$ 26.05	\$ 33.49
116	720 gallon ( 4 carts, 2x week)	\$ 24.25	\$ 27.75	\$ 31.37	\$ 34.74	\$ 44.66
117	900 gallon ( 5 carts, 2x week)	\$ 30.32	\$ 34.69	\$ 39.21	\$ 43.42	\$ 55.82
118	1040 gallon (6 carts, 2x week)	\$ 35.03	\$ 40.08	\$ 45.31	\$ 50.18	\$ 64.50
119	<b>Residential (Garbage + Recycling)</b>					
120	Total Residential Cost (1st cart)	\$ 19.16	\$ 20.66	\$ 21.65	\$ 22.62	\$ 25.22
121	Total Residential (Additional Cart)	\$ 7.34	\$ 8.09	\$ 8.82	\$ 9.36	\$ 11.19

Annual average increase of 7.15% through FY2027 (\$1.41/month/year approximately). Actual rate lower due to landfill and commercial revenues (e.g. \$17.70 in FY23 and projected \$23.34 in FY27).

# Residential Solid Waste Rate Comparison (FY23)



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# Summary

- Current Operations
  - Annual Tonnage at 948a is increasing
    - Self-Haulers
    - COW
  - Life of 948a ends Jan 2025; efforts to extend offset by tonnage increases
- Future Operations
  - New landfill extends landfill capacity
    - Region: 6 years (skewed by high capacity but low MSW waste at Itasca)
    - Waco: 34 years
  - Transfer station to be complete by Jan. 2025 or Nov. 2025 depending on start of construction activities.
    - Reduces operational cost
    - Provides landfill flexibility
  - Residential rates will increase 7.15% each year until 2027 (\$1.41/month/year)
    - Monthly: \$17.70 (current) to \$23.34 by 2027