City of Grand Island

Tuesday, June 8, 2021

Council Session

Item C-2

Transfer Station Operations and Facility Improvement Presentation

Staff Contact: John Collins, P.E. - Public Works Director

Council Agenda Memo

From: Jeff Wattier, Solid Waste Superintendent

Meeting: June 8, 2021

Subject: Transfer Station Operations and Facility Improvement Presentation

Presenter(s): John Collins PE, Public Works Director
Patrick Brown, Finance Director
Jeff Wattier, Solid Waste Superintendent

Background

The Solid Waste Division of the Public Works Department is an enterprise fund with no property tax dollars used to support the division. The entire budget comes from rate paying customers through tipping fees. A cost of service based rate study looks at all costs for the operation and allocates those costs of service to the customer classes according to the costs of providing service. Rates are then designed to equitably cover those costs.

The current Solid Waste Transfer Station building, which is located at 5050 West Old Potash Highway, was constructed in 1983 and is no longer large enough to handle the current traffic and/or waste flows. A study has been completed to look at traffic patterns, investigate potential improvement/expansion ideas to enhance operations and allow for present business as well as projected future conditions.

Customer counts at the Transfer Station have increased by 173%, with a tonnage increase of 124% from FY 2000 to FY 2017.

- FY 2000 = 10,345 customers and 28,578 tons
- FY 2017 = 28,236 customers and 63,910 tons

On April 10, 2018, via Resolution No. 2018-94, City Council awarded an agreement to SCS Engineers of Omaha, Nebraska in the amount of $60,130.00 for engineering consulting services related to a Transfer Station Operations and Facility Improvement Study for the Solid Waste Division.

The current solid waste rates are based on Resolution No. 2020-170, which was approved by City Council on July 28, 2020.

An updated rate study was undertaken to ensure sufficient funding for planned projects.

Discussion

The revised Solid Waste Rate Study reflects anticipated cost of the planned construction program and operations, which are detailed in tonight's presentation.

With regards to rates, the Public Works Department's primary goal is to minimize the monthly rate paid by each customer. Staffing levels, training, scheduling of projects and various other activities are done with this goal in mind.

The final report includes average recommended transfer station rate increases for fiscal years 2022 through 2030.

October 1, 2022- 3.57%
October 1, 2023- 2.75%
October 1, 2024- 2.75%
October 1, 2025- 2.75%
October 1, 2026- 2.75%
October 1, 2027- 2.75%
October 1, 2028- 2.75%
October 1, 2029- 2.75%
October 1, 2030- 2.75%

Each year of rate adjustments will be considered by City Council through the Fee Schedule.

Conclusion

This item is presented to the City Council to allow for any questions to be answered and to create a greater understanding of the issue at hand.

Transfer Station Evaluation Study

June 8, 2021

SCS ENGINEERS

About Us

Project Team

- Ken Armentrout – Project Engineer
- Max Hartong – Financial Analyst
- Mike Kalish – Project Director
- Vita Quinn – Project Director
- Joel Stenberg - Project Engineer
- Spencer Wilkins – Data Analyst

Project Objectives

Review Existing Transfer Station and Operations

- Meet Current Needs
- Potential Growth
- Improvements

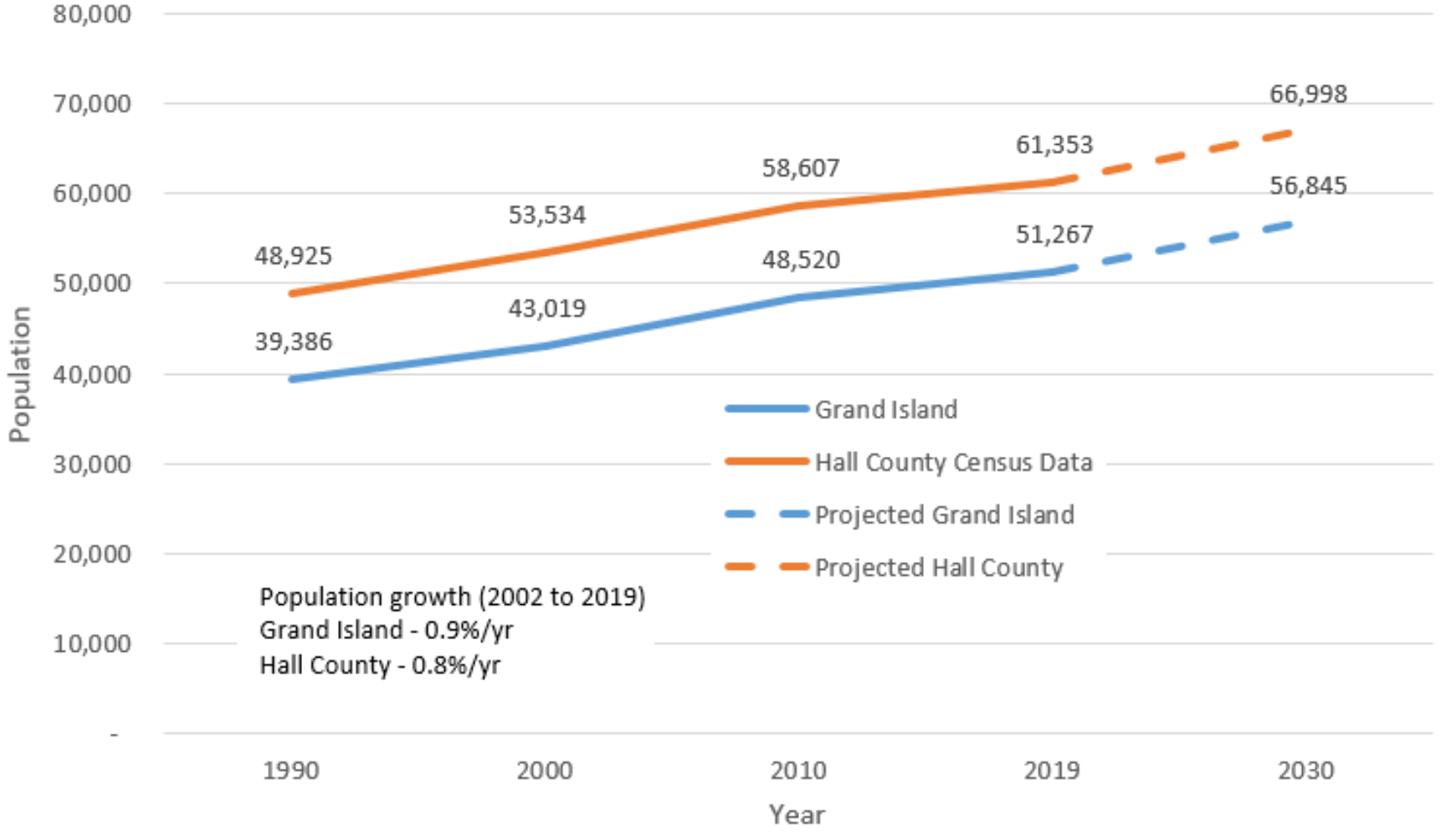
Possible Infrastructure and Operational Improvements

- Existing MSW Transfer Station with Improvements
- New MSW Transfer Station

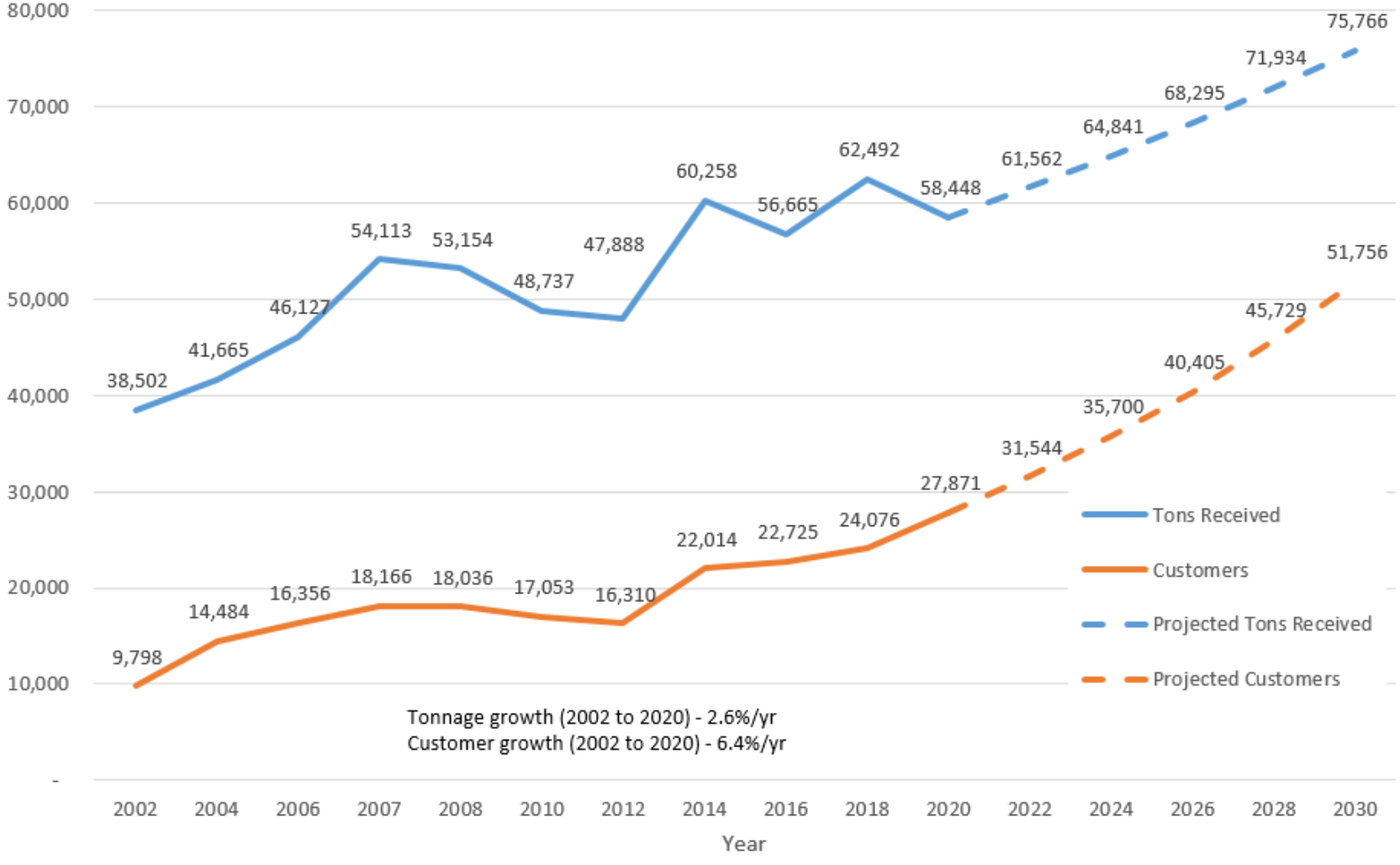
Key Issues - Technical

- Market and Operational Growth
- Operations
- Existing Infrastructure
- Safety
- Customer Experience
- Cost

Market Growth

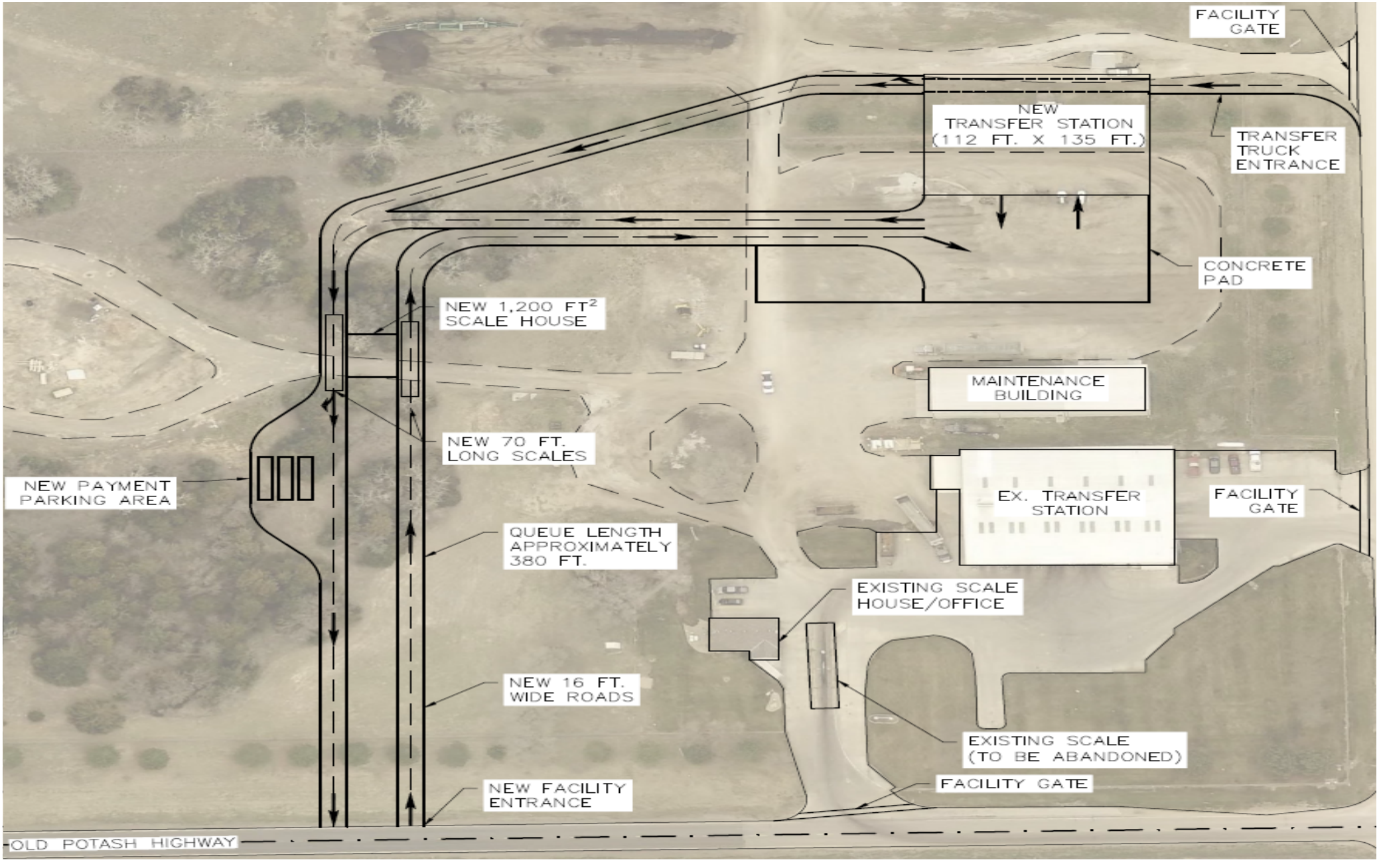


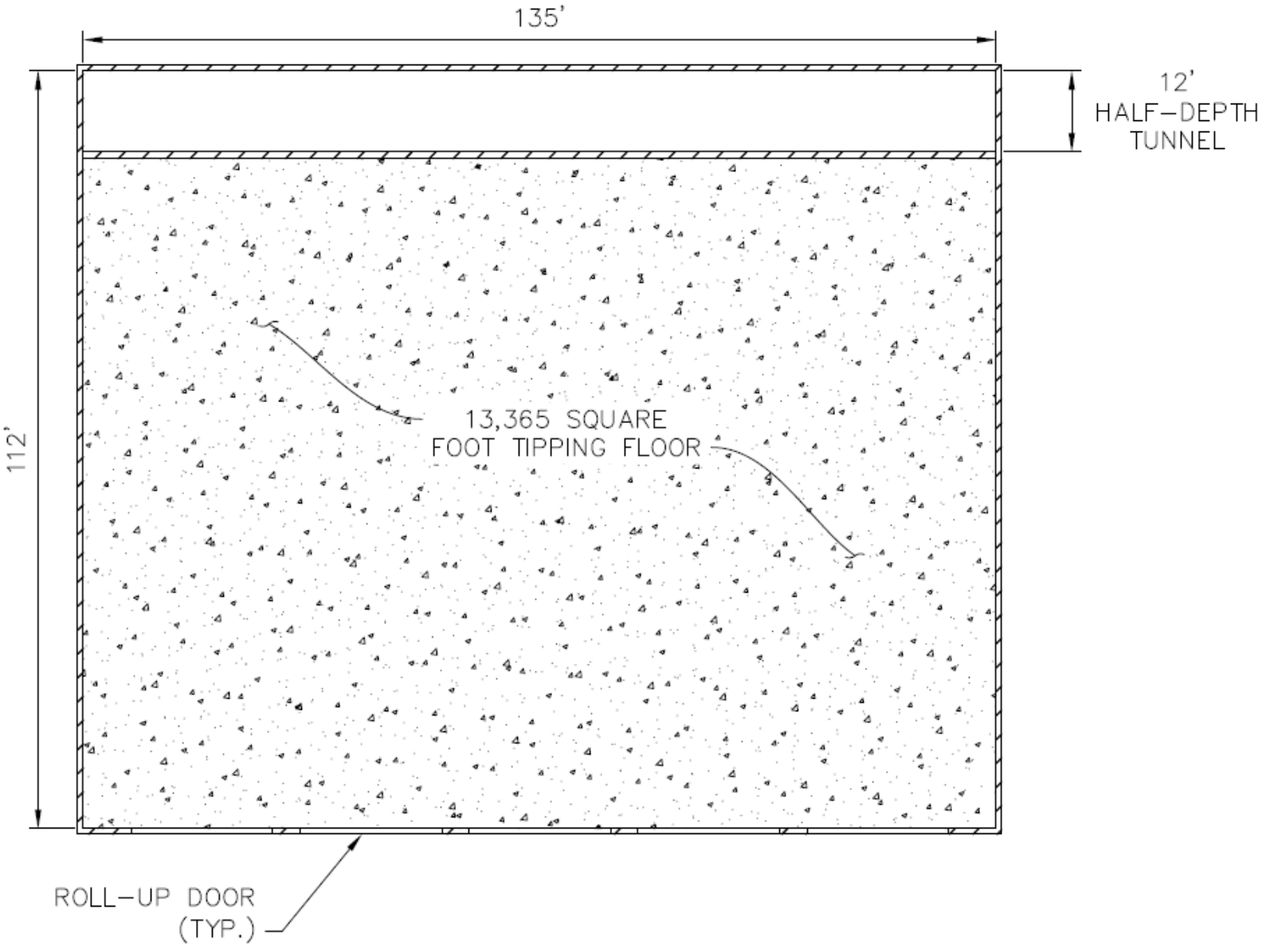
Operational Growth



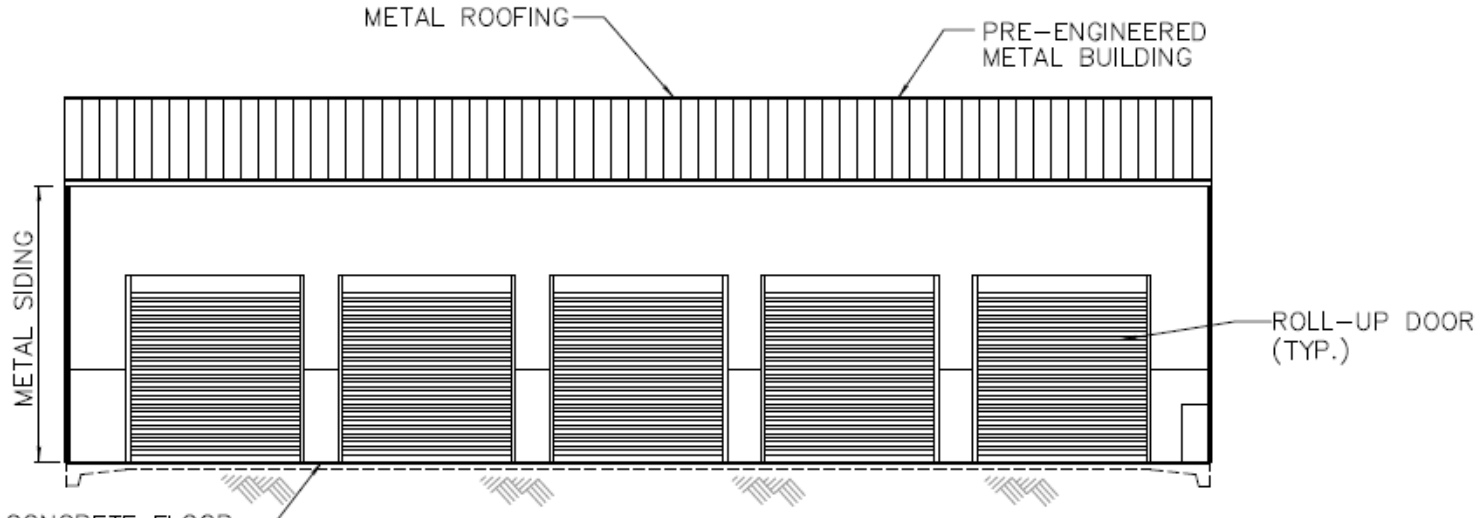
New MSW Transfer Station

- Advantages
  - Better traffic flow
  - Safety improvements (taller ceilings, more ambient light)
  - New transfer station building to extend useful life
  - New 13,365 SF tipping floor with 5 functional bays
  - Enough que length for all customer types in average condition and each individual customer traffic type at peak condition
  - New scale house and inbound/outbound scales
- Disadvantages
  - Higher capital cost – $4.2 million

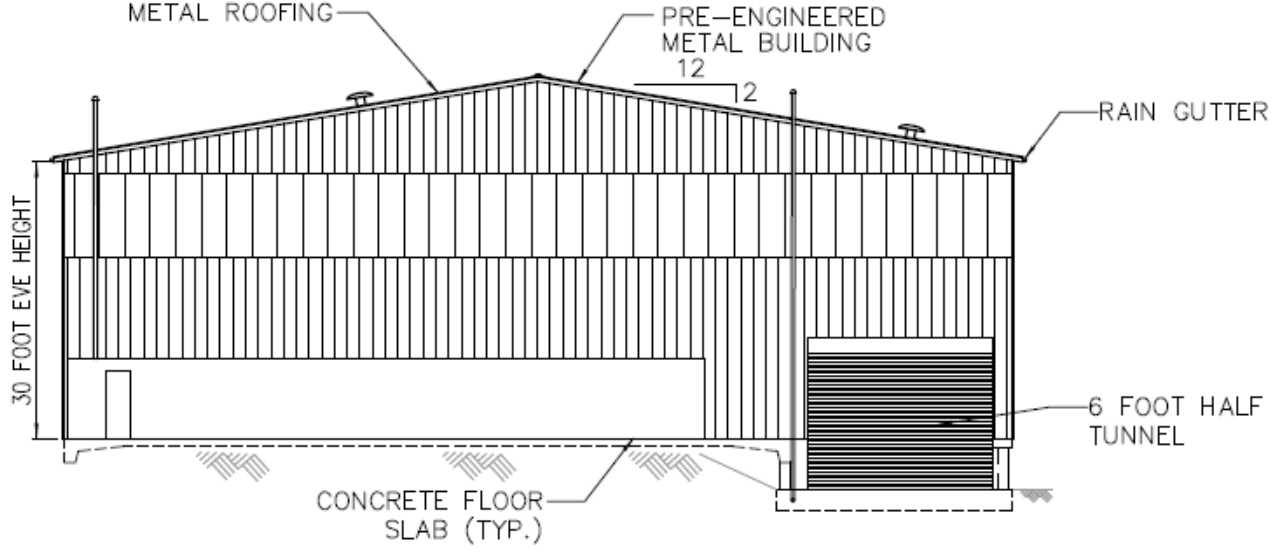

FACILITY GATE
NEW TRANSFER STATION (112 FT. X 135 FT.)
TRANSFER TRUCK ENTRANCE
CONCRETE PAD
NEW 1,200 FT² SCALE HOUSE
MAINTENANCE BUILDING
NEW 70 FT. LONG SCALES
NEW PAYMENT PARKING AREA
EX. TRANSFER STATION
FACILITY GATE
QUEUE LENGTH APPROXIMATELY 380 FT.
EXISTING SCALE HOUSE/OFFICE
NEW 16 FT. WIDE ROADS
EXISTING SCALE (TO BE ABANDONED)
NEW FACILITY ENTRANCE
FACILITY GATE
OLD POTASH HIGHWAY



CONCEPT FLOOR PLAN



NORTH ELEVATION



EAST ELEVATION

Key Issues - Financing

- Large capital investment in transfer station improvements
- Desire for operations to be financially sustainable and to minimize rate increases

These all put pressure on tipping fees

Data

- FY 2020 Budgets
- Historical tonnage data
- Beginning Fund Balances
- Capital Improvement Program
- Fleet and Personnel Data

This data was then brought into our revenue sufficiency model

Determining Revenue Sufficiency

Cash Flow Model
If…

Cash in > Cash Out

- Cash Flow Surplus
- Fund Balance Increases

Sustainable

Cash in < Cash Out

- Cash Flow Deficit
- Fund Balance Decreases

Not Sustainable

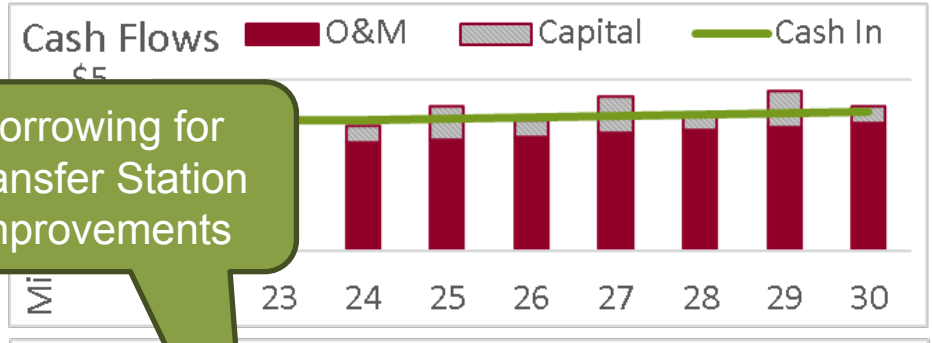
Debt Funded Improvements - New Transfer Station

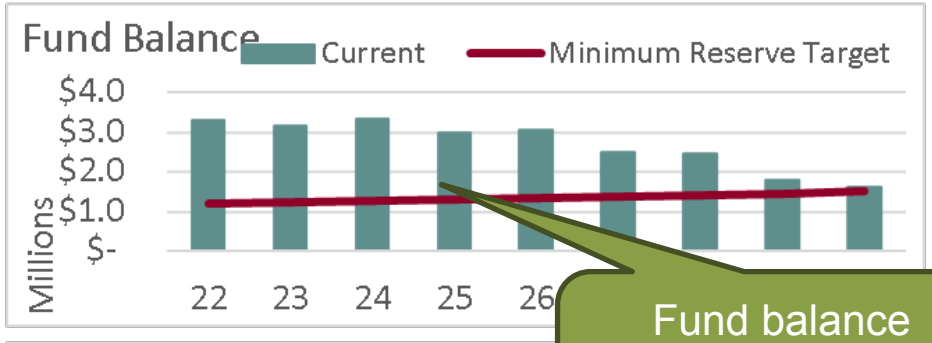
Grand Island, NE

Scenario D - Debt Funded Transfer Station Improve

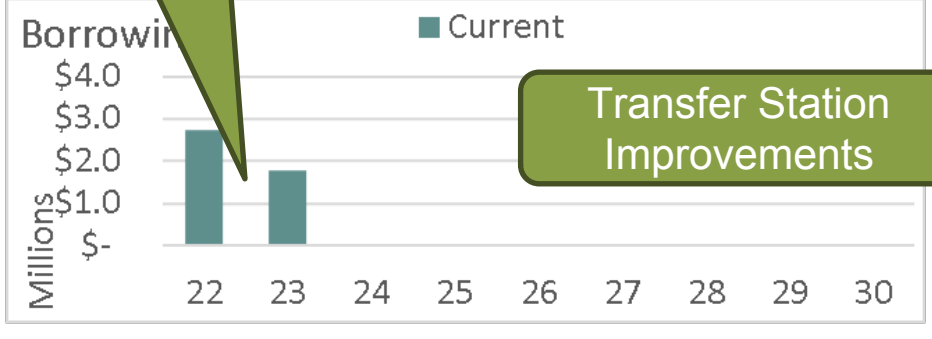
	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Revenue Adjustment $M	$0.05	$0.04	$0.04	$0.04	$0.04	$0.05	$0.05	$0.05	$0.05
Revenue Adjustment %	3.57%	2.75%	2.75%	2.75%	2.75%	2.75%	2.75%	2.75%	2.75%
Cash Funded Capital	$3.14	$2.70	$0.47	$0.97	$0.46	$1.08	$0.50	$1.05	$0.51
Transfer Station Compacted Rate	$38.34	$39.40	$40.48	$41.59	$42.74	$43.91	$45.12	$46.36	$47.63

3.57% increase in FY 2022 and 2.75% annual adjustments thereafter

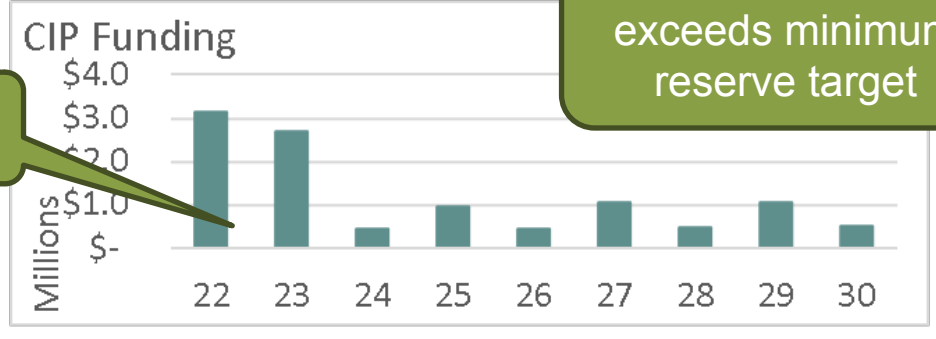




Borrowing for Transfer Station Improvements

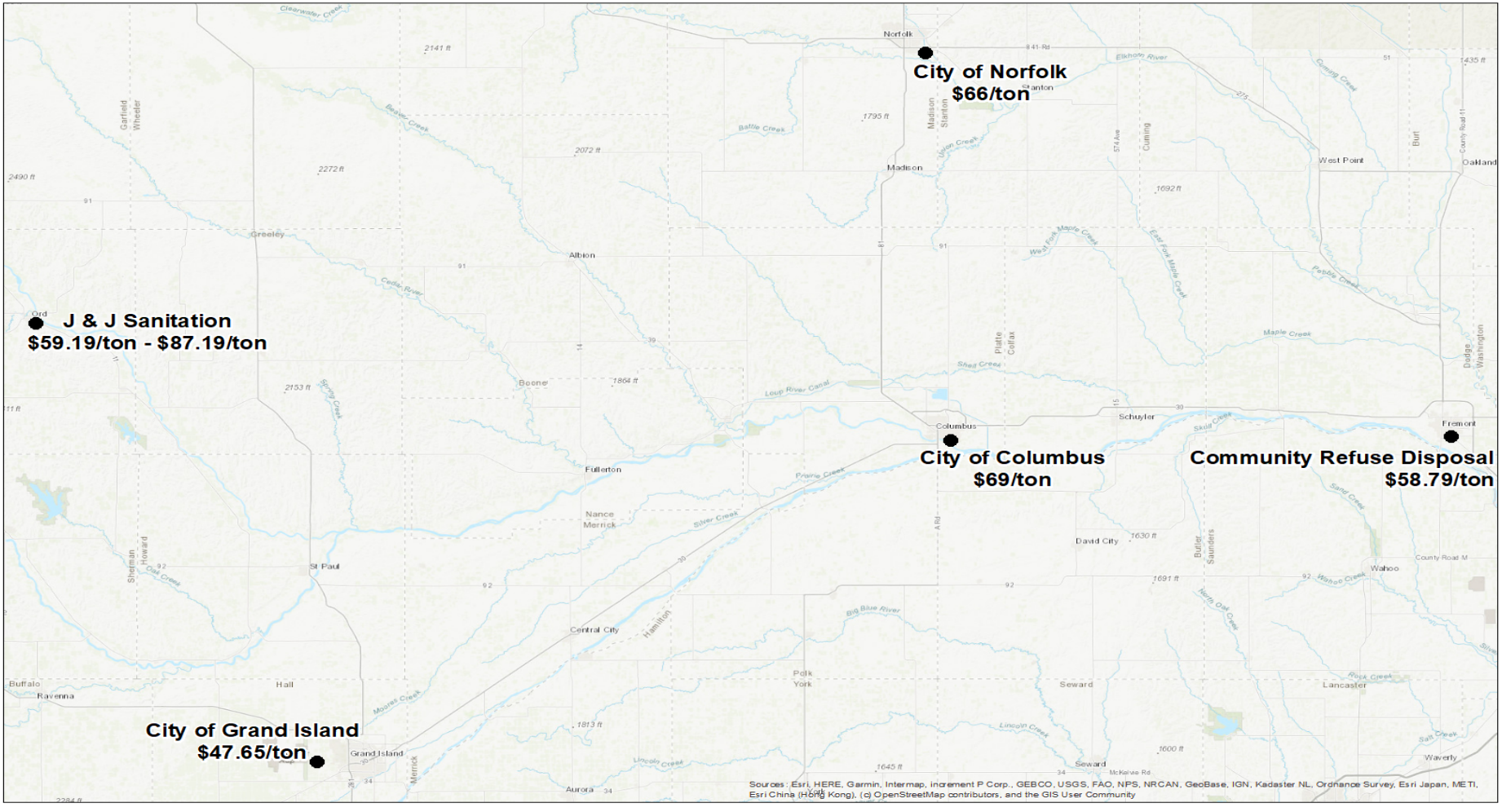


Transfer Station Improvements



Fund balance exceeds minimum reserve target

Transfer Station Fee Comparison



Tipping rates shown are for unlicensed haulers.

Questions?

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