Transit Demand Forecasting

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Datasets

DATA PREVIEW

_id	Timestamp	Redemption Count	Sales Count
1	2025-03-18T15:45:00	20	0
2	2025-03-18T15:30:00	49	54
3	2025-03-18T15:15:00	13	31

DATA FEATURES

Column	Description
_id	Unique row identifier for Open Data database
Timestamp	The 15 minute interval (end time) that the data represents
Redemption Count	The ticket redemption count between the previous and current timestamp
Sales Count	The ticket sales count between the previous and current timestamp

DATA QUALITY

Last refreshed	Overall score ⓘ	Grade ⓘ
📅 2025-03-18	⏲ 100%	🏆 Gold

Daily Data Report for March 2025

TORONTO INTL A

ONTARIO

Current Station Operator: NAVCAN

Latitude:	43°40'36.000" N	Longitude:	79°37'50.000" W	Elevation:	173.40 m
Climate ID:	6158731	WMO ID:	71624	TC ID:	YYZ

Related Data	**Additional Search Options**	**Download Data**
No related data is available for this station	Nearby Stations with Data	Daily Data (2025)
	Historical Data Search	⦿ CSV ○ XML ○ Metadata(txt)
		Download Data
		Get More Data

Sources:

- https://open.toronto.ca/dataset/toronto-island-ferry-ticket-counts/
- https://climate.weather.gc.ca/climate_data/daily_data_e.html

Additional Details

- Forecast transit usage demand from time series data
- Join historical transit usage data, weather data, holiday indicator
- Facebook Prophet is easy to use, but does not allow multiple features
- XGBoost is more complex and tunable
- Apply lag features and perform cross validations