Item 7

Consideration to Extend Term, Increase Funds and Change Rates – Antelope Valley Region Service Provider Contract (AS-4143)
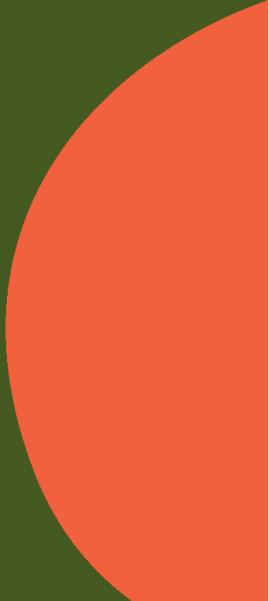
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Background

- Existing Contract:
  - Term – Five (5) years and six (6 months) plus four (4) one-year options
  - Base term expires April 30, 2027
  - Provides ADA complementary paratransit service
- Proposed Action:
  - Execute the first and second of four possible option terms
  - Increase contract value by $41,922,699

Proposed Rates

	Year 5 (5/1/26-4/30/27)	Year 6 (5/1/27-4/30/28)	Year 7 (5/1/28-4/30/29)
ADA Service - Fixed (Monthly)	$617,103	$638,085	$659,779
ADA Service, ATW, Eligibility Service, and Out-of-Area Service (Per Trip)	$54.01	$55.85	$57.75
Transfer Service (Per Trip)	$57.41	$59.36	$61.38
Emergency Service (Per Hour)	$75.61	$78.18	$80.84
Parents with Disabilities (Per Trip)	$56.09	$58.00	$59.97

2026

Financial Analysis

Service Providers: Fully Loaded Rates

Fiscal Year	Antelope Valley (FT)	West/ Central (CTI)	Southern (GPI)	Eastern (SGT)	Northern (MV)	Santa Clarita (SCT)
2026	$91.06	$61.50	$51.77	$57.63	$64.16	*$82.73*
2027	$87.23	$71.50	$53.28	$59.51	$66.45	$84.09
2028	$88.15	$72.67	$54.13	$60.51	TBD	$85.12

2026

Performance Report Card

| Key Performance Indicator	Standard	FY25	FY26*
On Time Performance	≥ 91%	94.7%	93.3%
Excessively Late Trips	≤ 0.10%	0.00%	0.00%
Excessively Long Trips	≤ 5%	1.5%	2.5%
Missed Trips	≤ 0.75%	0.21%	0.28%
Denials	0	0	0
Access to Work On Time Performance	≥ 94%	98.3%	95.7%
Average Hold Time in Seconds (Reservations)	≤ 120	38	30
Calls On Hold > 5 Min (Reservations)	≤ 5%	1.2%	0.5%
Calls On Hold > 5 Min (ETAs)	≤ 10%	1.3%	2.5%
Complaints Per 1,000 Trips	≤ 4.0	1.3	1.1
Preventable Incidents per 100,000 Miles	≤ 0.25	0.14	0.08
Preventable Collisions per 100,000 Miles	≤ 0.85	0.46	0.65
Mean Miles Between Major Mechanical Failures	≥ 50,000	n/a	244,321

*Data through January 2026

2026

Recommendation

Authorize an increase in the contract value of $41,922,699, a change in rates of compensation, and an extension in the period of performance for two (2) years, from May 1, 2027, through April 30, 2029, for Contract AS-4143 with First Transit, Inc. (First Transit).

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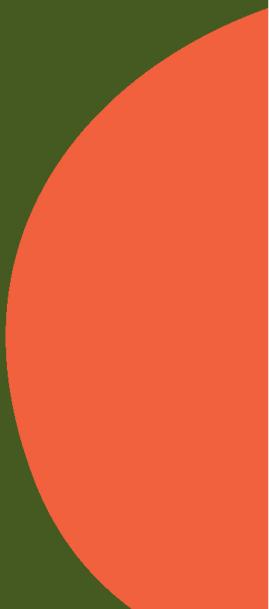
Item 8
Consideration to Approve Access Services Short Range Strategic Plan (FY 2026 – FY 2030)

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Purpose

- Establish a 5-Year Horizon

- Identify Anticipated Challenges

- Develop Multi-Year Projects

- Agency Focus and Transparency

Short Range Strategic Plan
2026-2030

access

20
26

Elements

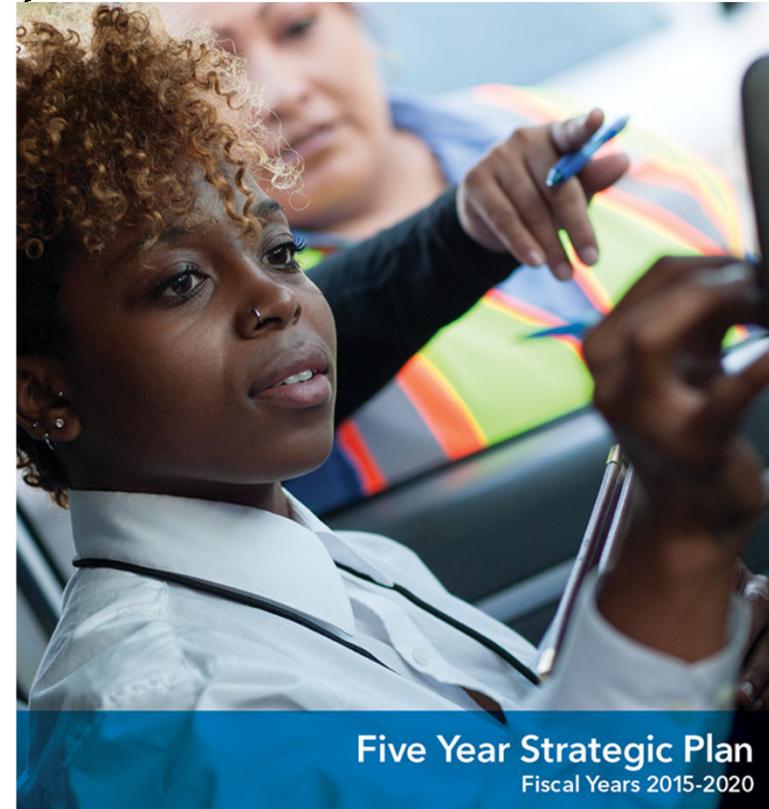- Plan Development and Agency Improvements

- Anticipated Challenges

- Proposed Projects (FY2026 - FY2030)

FY2022-26 Goals Achieved

- Access-owned facilities (Contractor facilities)

- Expand funding opportunities

- Technology improvements – Where's My Ride & On-Line Reservations

Five Year Strategic Plan
Fiscal Years 2015-2020

access

FY2026-30 Anticipated Challenges

- Increased paratransit demand & special events

- Challenges related to funding

- Challenges related to effectively communicating services that Access provides

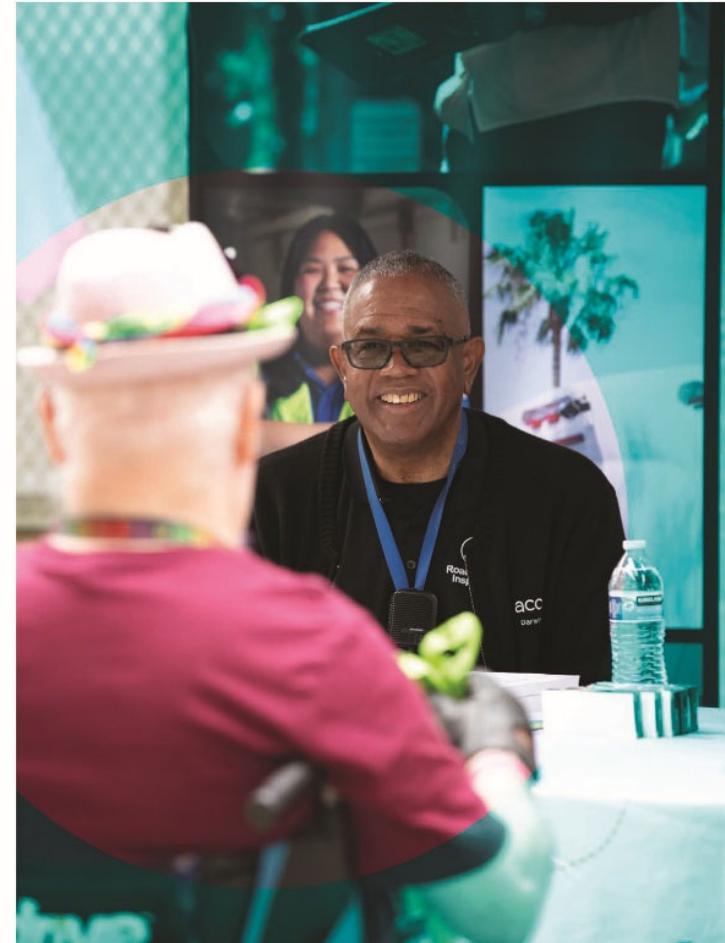2026

FY2026-30 Proposed Projects

- Improving agency effectiveness to respond to increased paratransit demand/special events

- Meeting challenges related to funding

- Improving the Access customer experience

Recommendation

Adopt the Short Range Strategic Plan (FY 2026-2030).

Welcome

- Demand Forecasting
  - Scheduled Trips

Key Points

- Global pandemic disrupted trends

- National trends exhibit increasing demand for paratransit trips

- The scheduled trip model for FY2025 projections performed well

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Agenda

- Purpose

- Los Angeles County Characteristics

- Scheduled Trip Demand

  - Initial Analysis: Historical Analysis, Peer Review, Explanatory Variables

  - Forecasting Model Performance and Selection

 - Assumptions, Error Analysis, Conclusions

- Q & A

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Purpose

access

- Access Services provides Americans with Disabilities Act (ADA) mandated paratransit service for eligible persons in Los Angeles County

- Independent ridership estimates are necessary to fully fund the expected ADA paratransit demand

- <u>Objective</u>: Forecast scheduled trip demand

  - Need for a more robust, dynamic forecasting approach has emerged

  - Forecasting models that utilize machine learning and advanced time series models better position Access Services to meet the demand
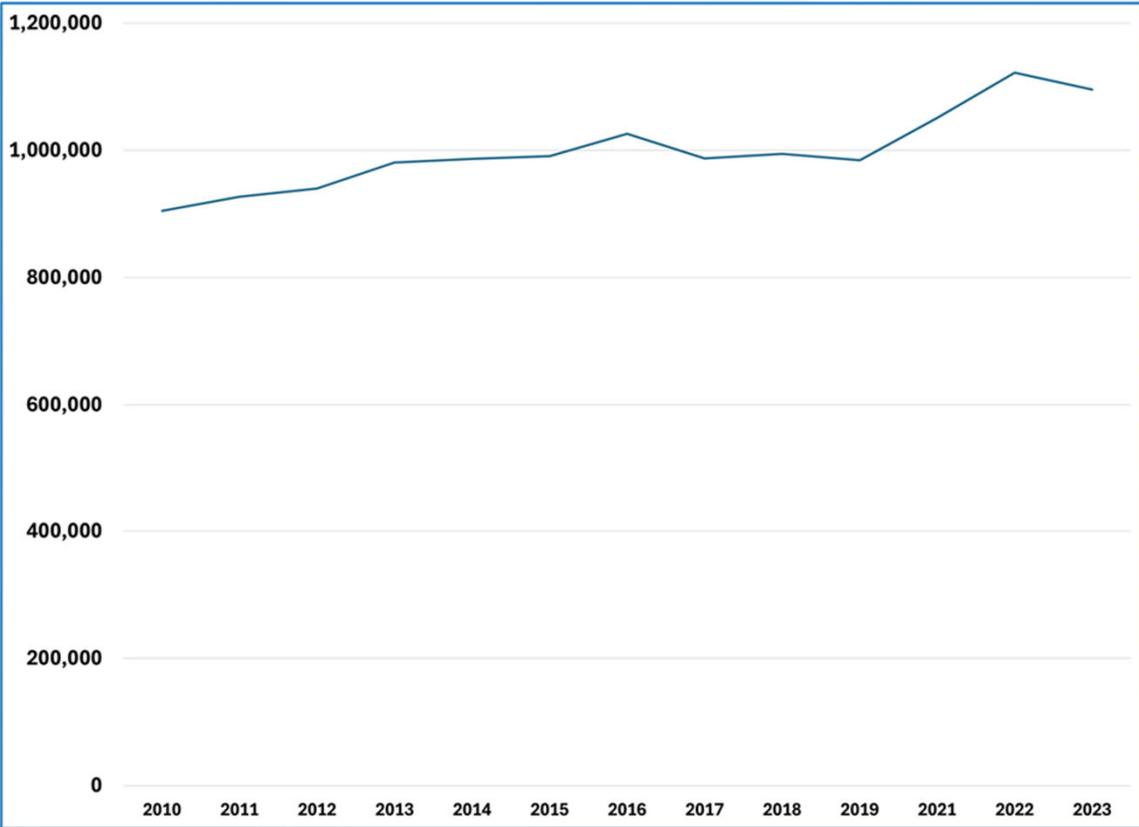
Characteristics: LA County population
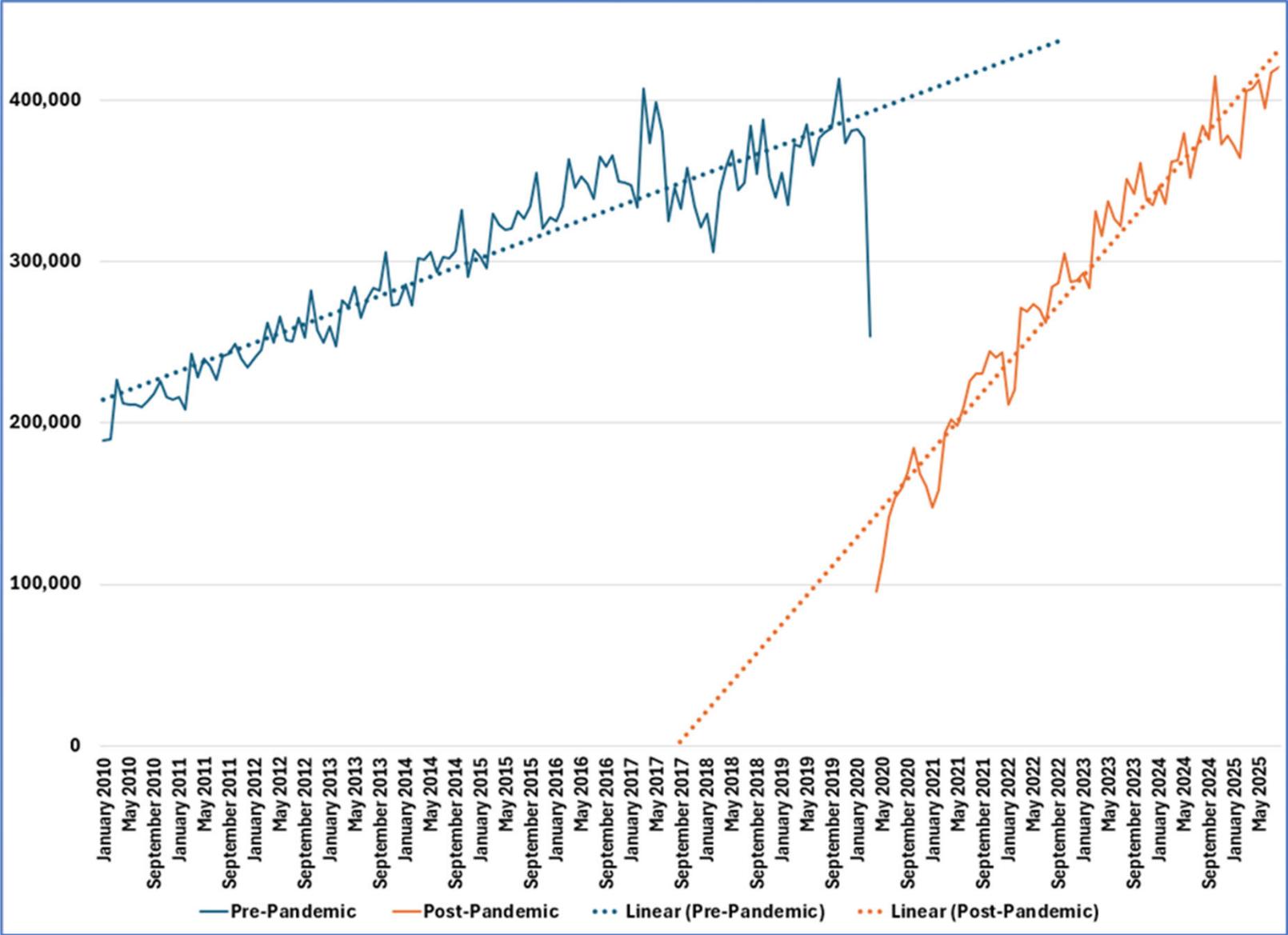

Los Angeles County Population Ages 55+
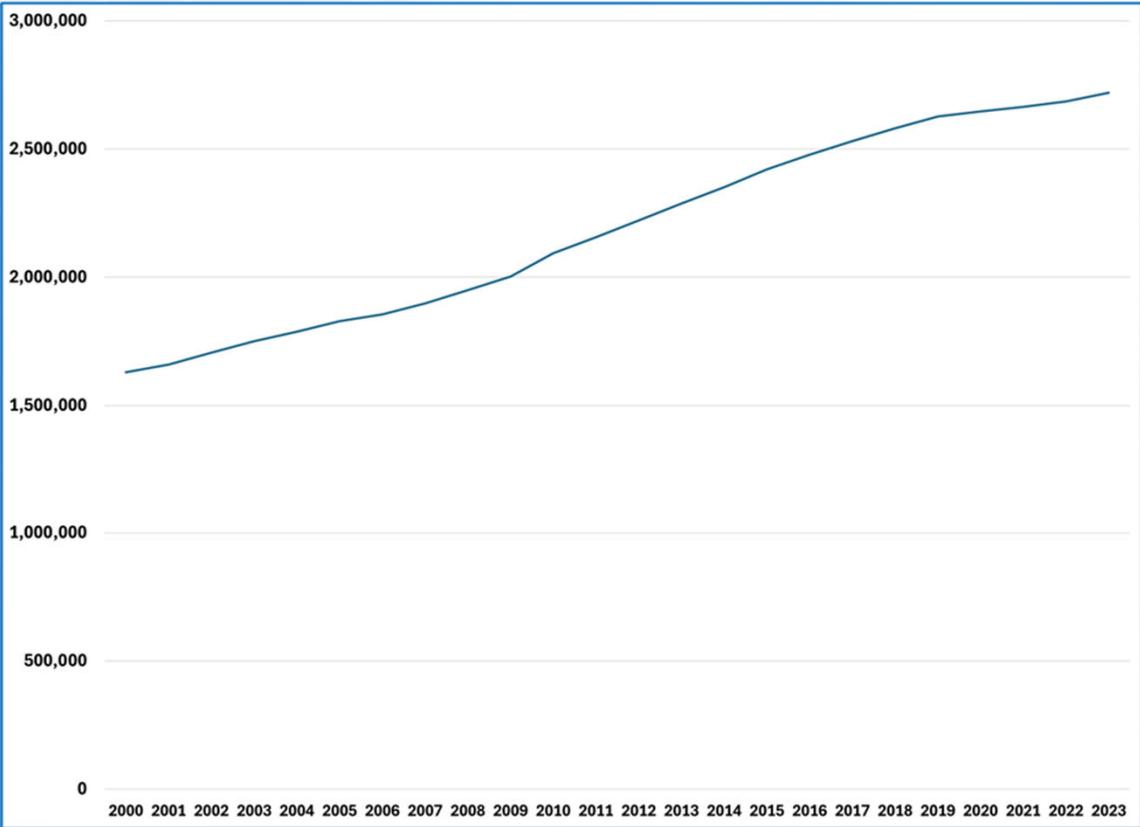
67% Increase in 23 years

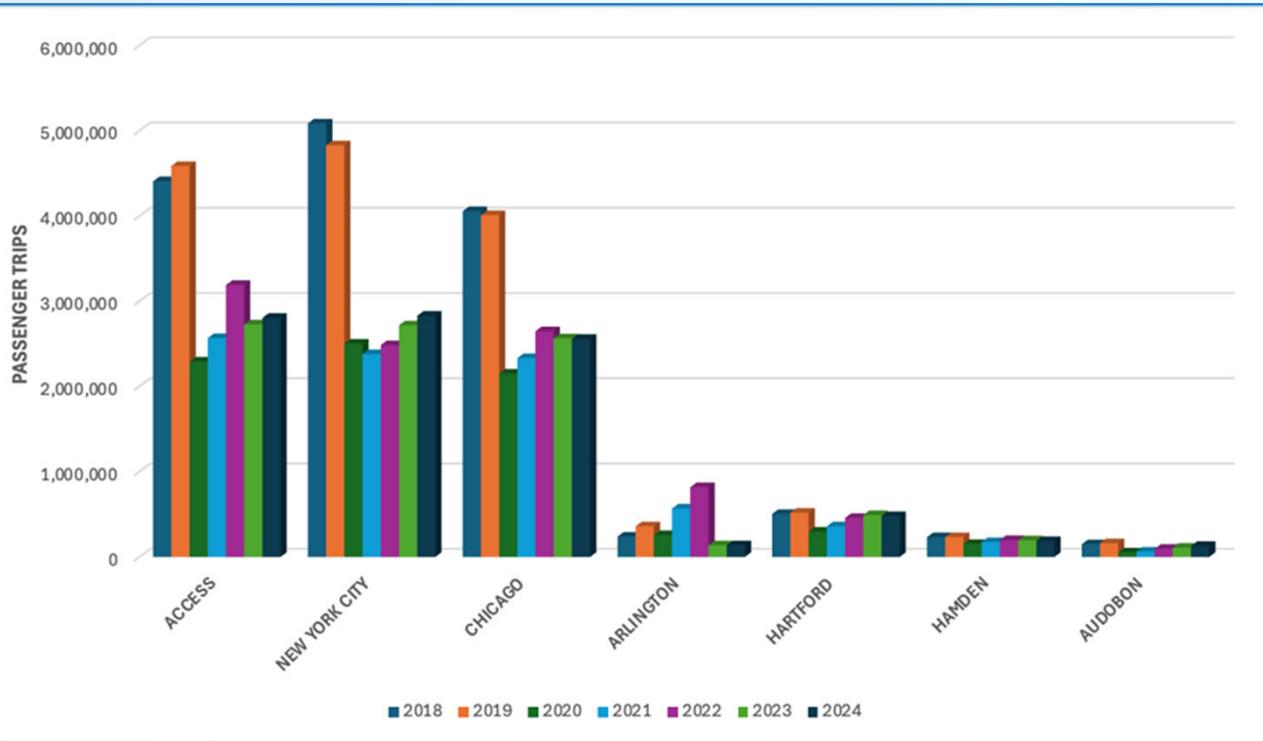Individuals Reporting a Disability in Los Angeles County

21% Increase in 13 years

Data Source: US Census Bureau

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Consulting

Scheduled Trip Demand - Trends

Scheduled Trip Demand - Peer Review

| MEASURES	EFFICIENCY Passenger Trip	EFFECTIVENESS Revenue Hour
ACCESS	$59.72	1.69
NYC	$96.01	1.22
CHICAGO	$72.76	1.56
ARLINGTON	$32.11	3.73
HARTFORD	$48.93	1.86
HAMDEN	$69.13	1.48
AUDOBON	$44.32	1.90

DATA and SOURCES

Mode of Service: Demand Response

Passenger Trips: National Transit Database (NTD)

Peer Identification, Efficiency, Effectiveness: Florida Transit Information System (FTIS)

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National Quarterly Ridership - Demand Response
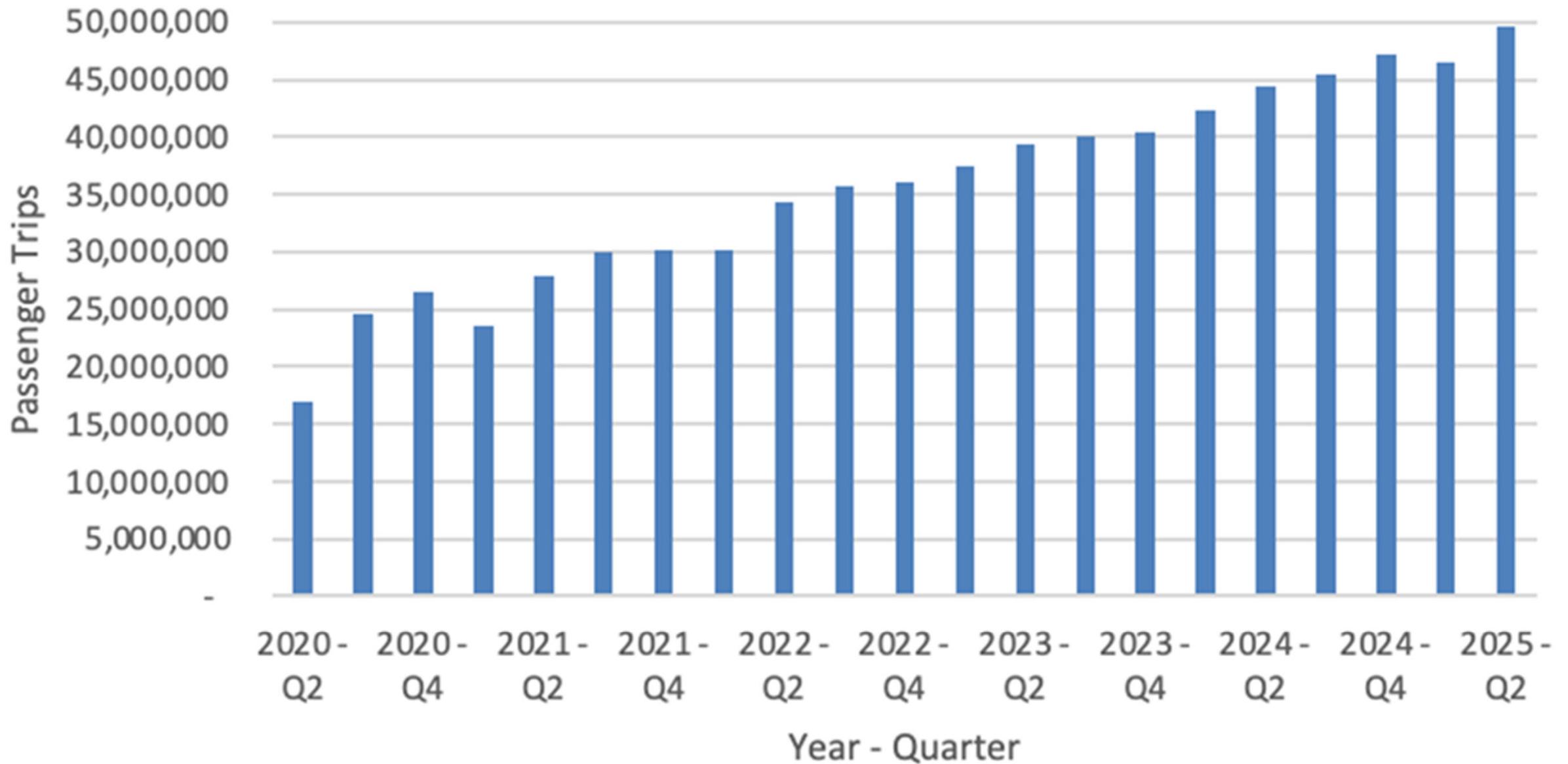
Model Performance – FY 2025

FY 2025	ACTUAL	PROJECTIONS
Scheduled Trips	4,656,747	4,713,014
Error		56,267
Percent Error		1.21%
Variation per Month		4,689

Time Series Plot of Scheduled Trips and Projections: Fiscal Year 2025

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Completed Trip Ratio

80.01%

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Consulting
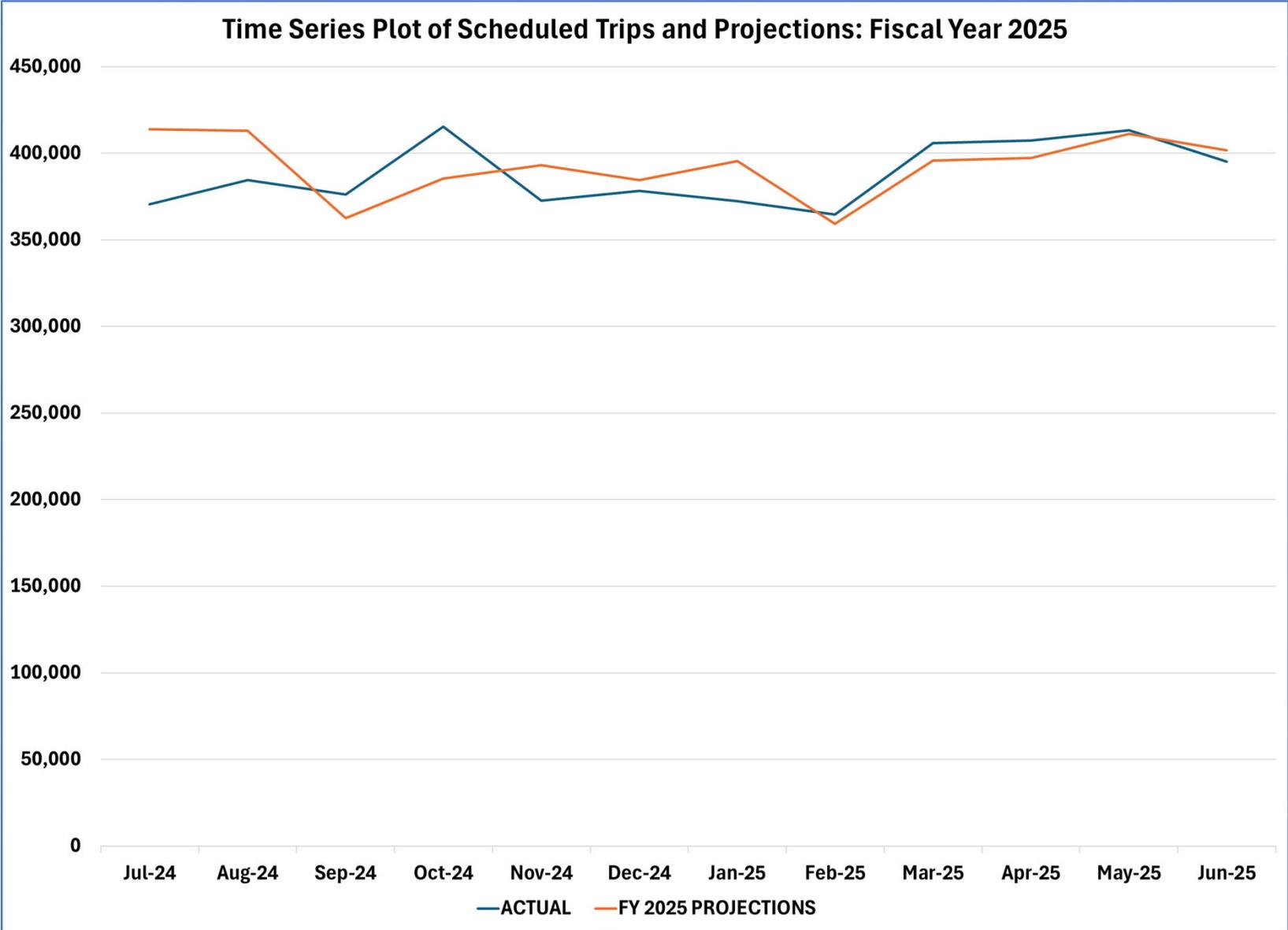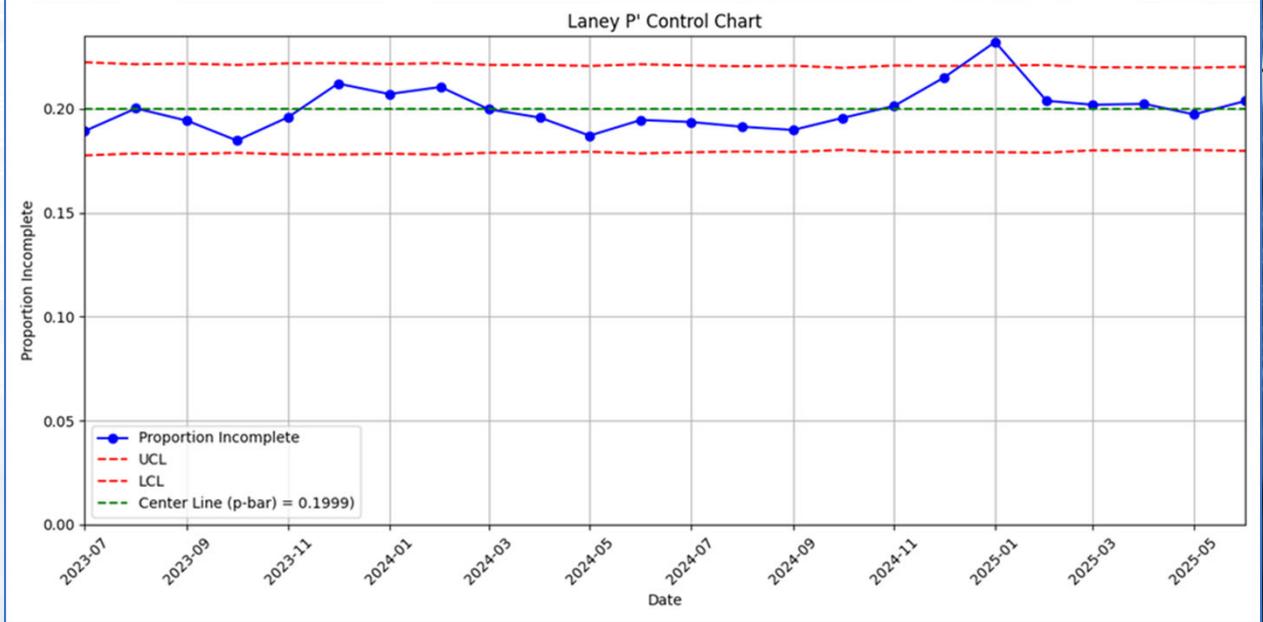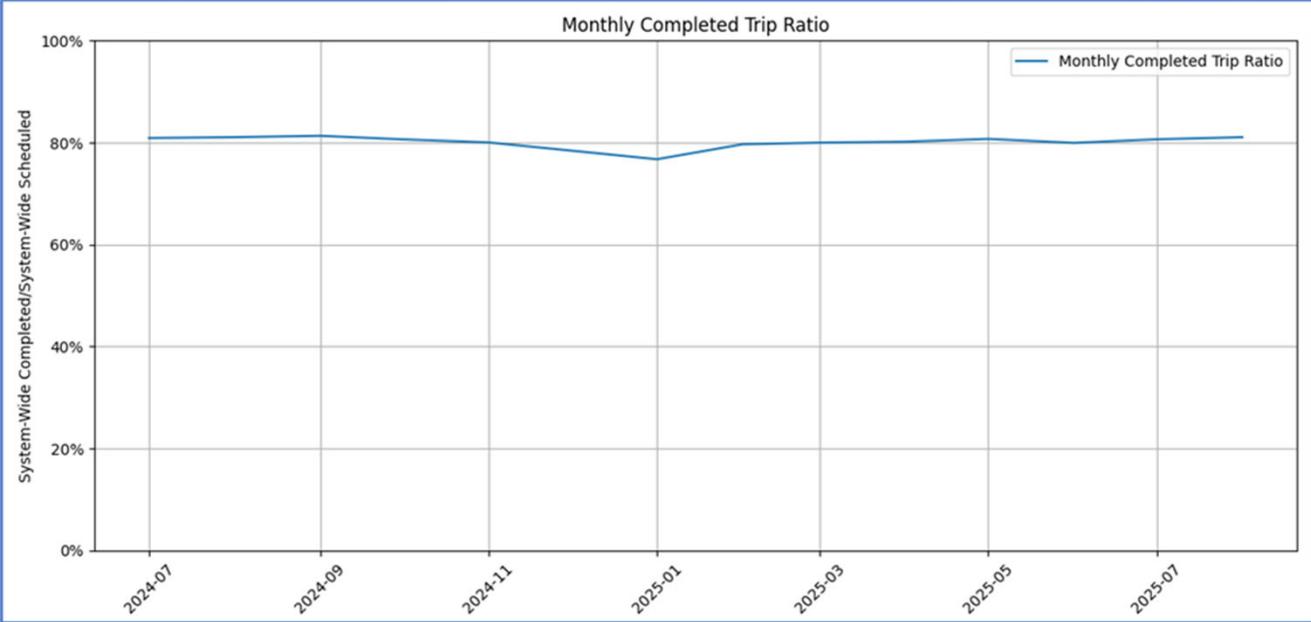
Potential Explanatory Variables

REAL 2023 MEDIAN HOUSEHOLD INCOME
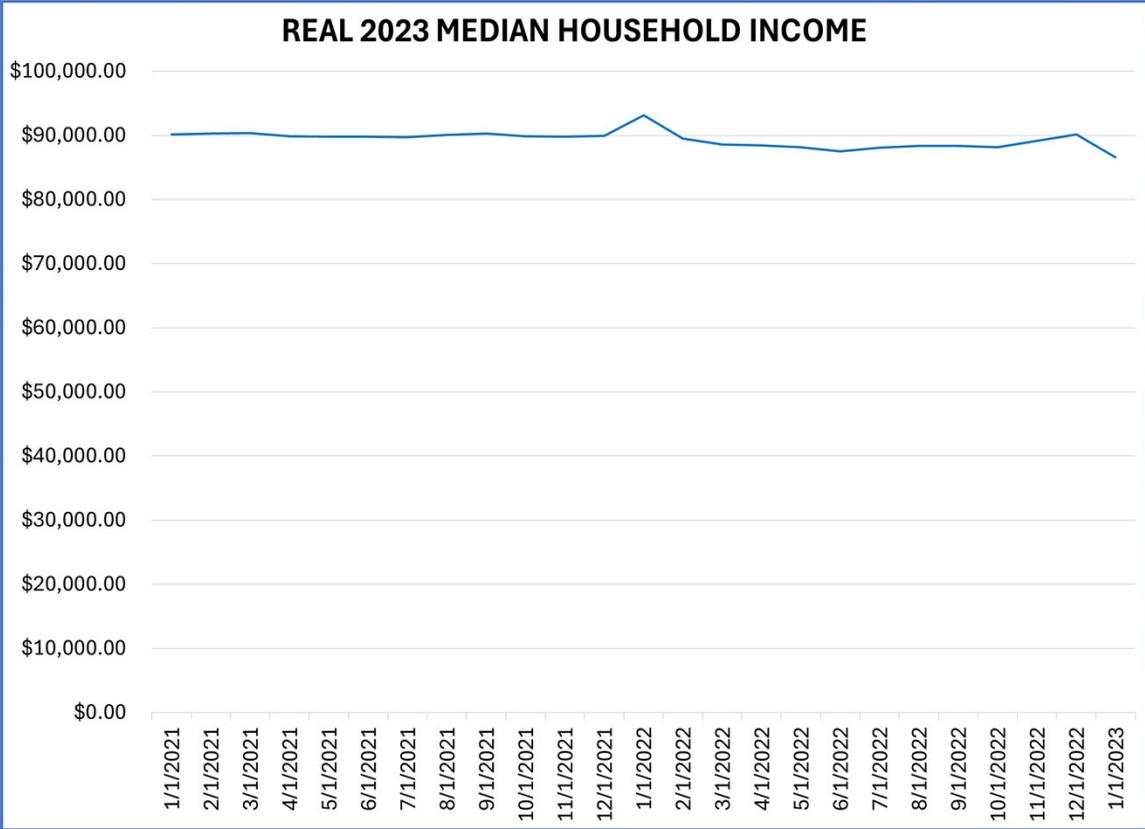
Limited association with scheduled trips
Data Source: US Census Bureau

Real June 2024 LA Regular Gasoline Price
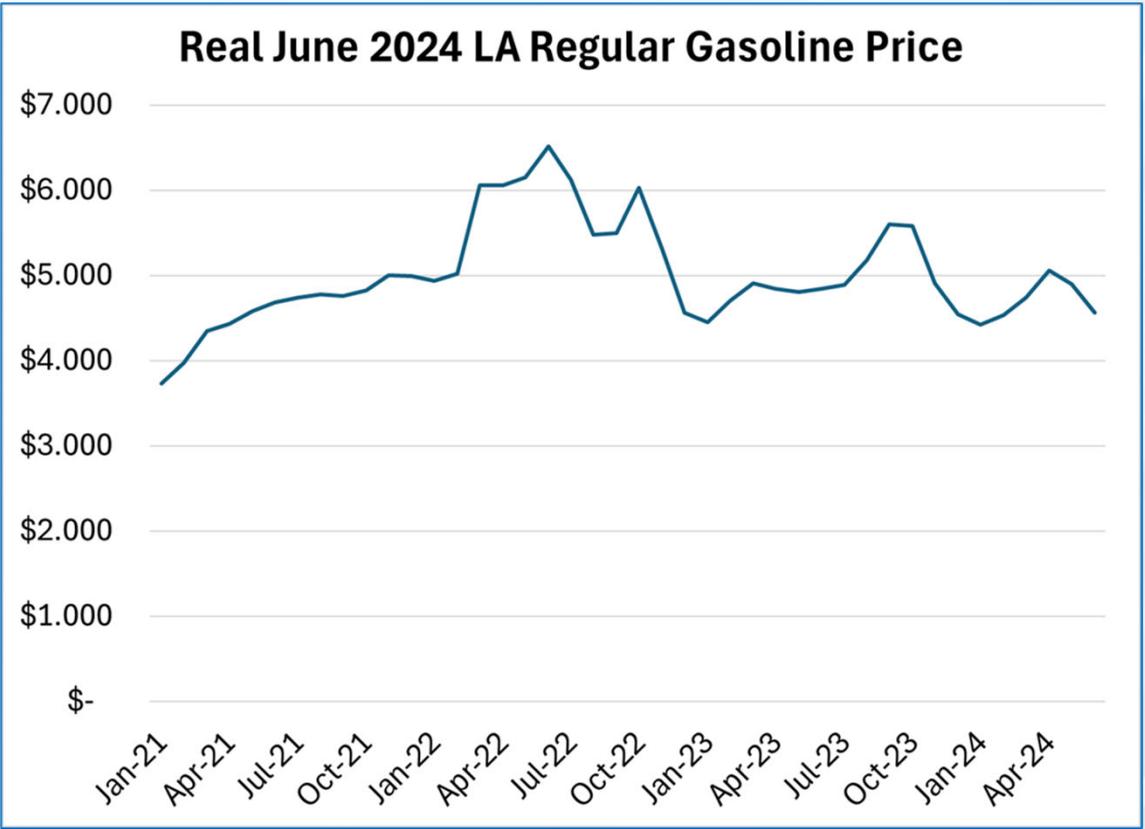
No statistically significant association with scheduled trips
Data Source: US Energy Information Administration

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Long Short-Term Memory (LSTM) Model

- Deep (recurrent) neural network model
- Captures both long term trends and short-term variations
- Parameters
  - Type of model (linear, quadratic, cubic)
  - Activation function (tanh, ReLU, sigmoid)
  - Number of lags
  - Number of layers
  - Number of epochs
- Unable to predict further than the number of historical data points consumed

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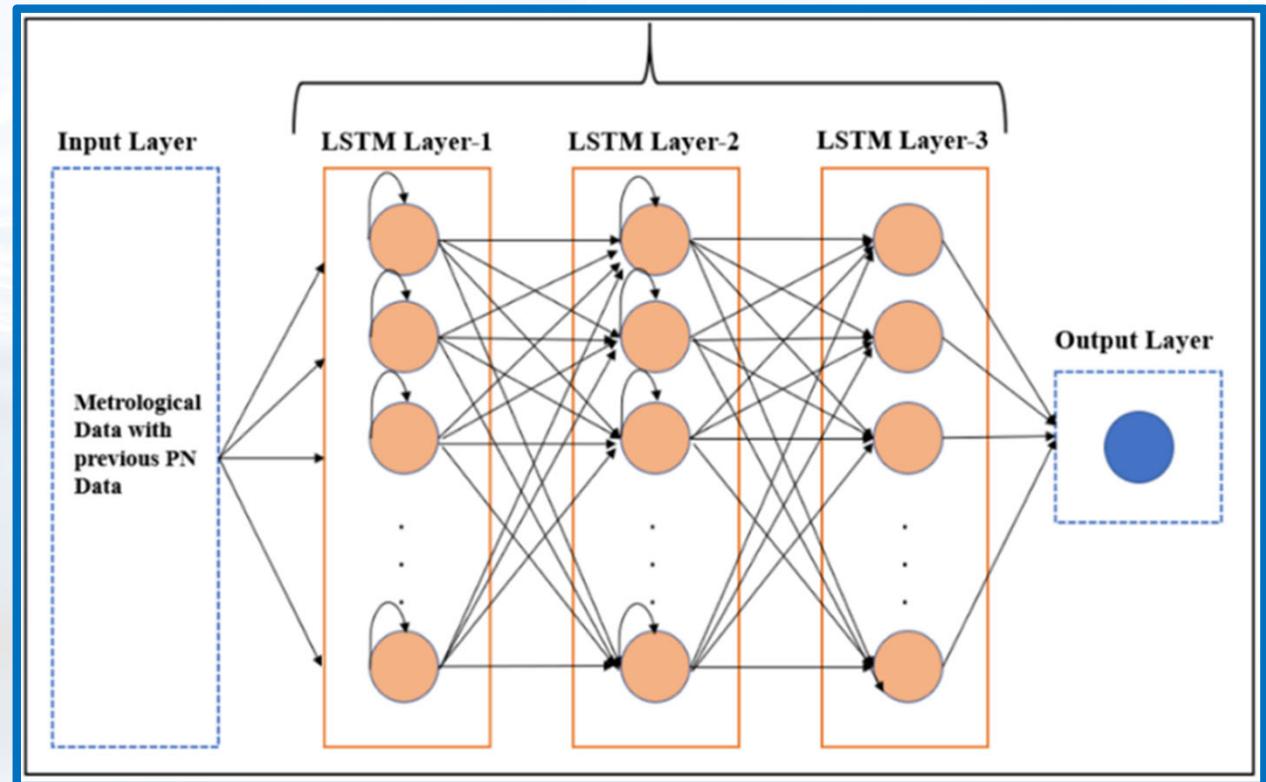
LSTM Granularity

- Initially created projections both monthly and daily scheduled trip demand
- Selected daily scheduled trip demand (Due to weekly cycle)
- Aggregated daily scheduled trip demand into months and years
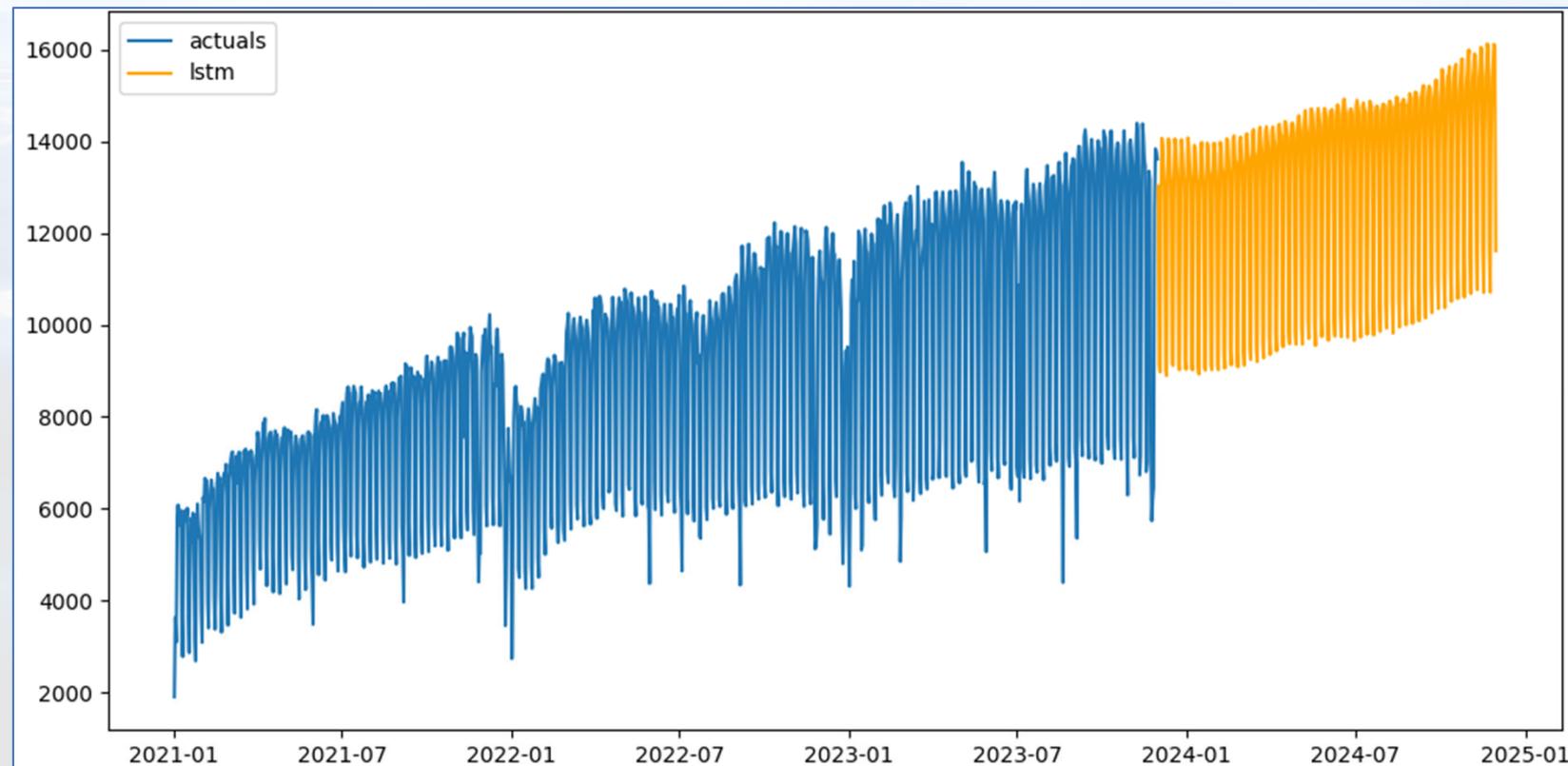
MOST RECENT SCHEDULED TRIPS & LSTM TOP 5 MODEL PARAMETERS
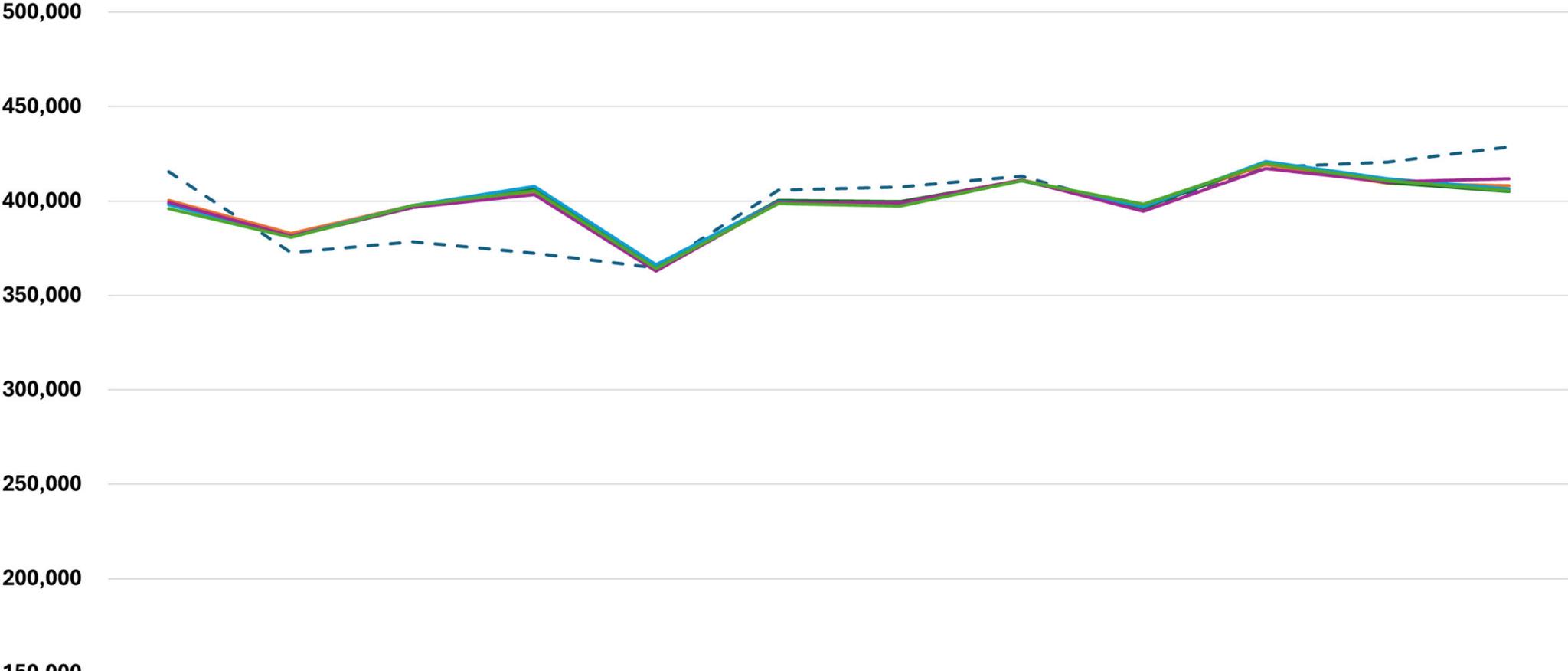
Parameters	RMSE	R^2	MAPE Daily	Annual Difference	MAPE Annual
poly2-tanh-L3U60E200	2383.977864	0.768008802	15.367%	214	0.004%
poly2-sigmoid-L3U55E100	2385.776205	0.778852143	15.378%	927	0.019%
poly2-relu-L3U55E100	2372.13981	0.764466117	15.290%	3,957	0.083%
poly2-tanh-L3U36E200	2409.29493	0.785099826	15.530%	5,097	0.106%
poly2-sigmoid-L3U36E100	2400.833313	0.766539272	15.475%	6,516	0.136%

| Oct 2024 | Nov 2024 | Dec 2024 | Jan 2025 | Feb 2025 | Mar 2025 | Apr 2025 | May 2025 | Jun 2025 | Jul 2025 | Aug 2025 | Sep 2025 |

- - ACTUAL — poly2-tanh-L3U60E200 — poly2-sigmoid-L3U55E100 — poly2-relu-L3U55E100 — poly2-tanh-L3U36E200 — poly2-sigmoid-L3U36E100

LSTM Model: Quadratic Form
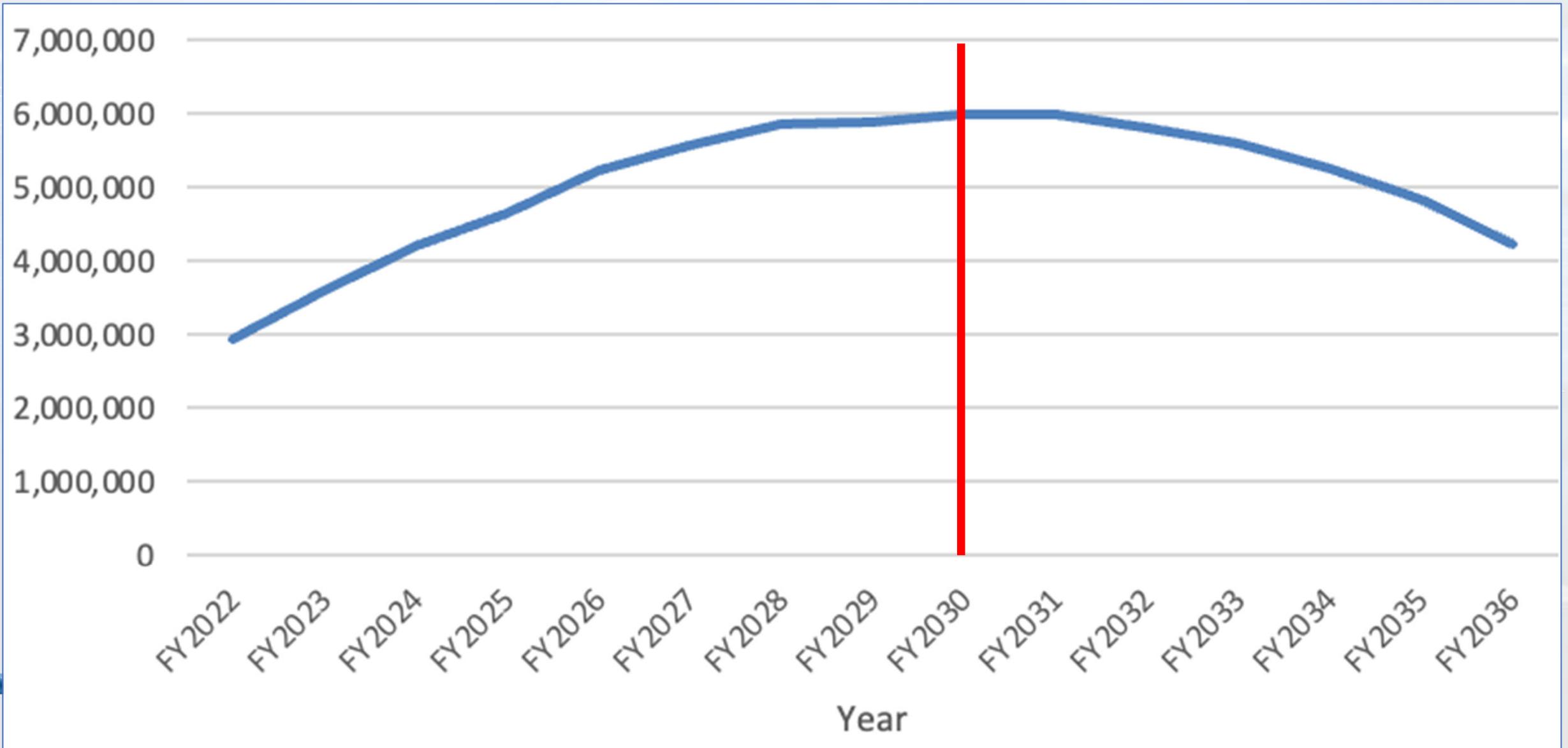
Prophet

- META tool for prediction of time series data
- Three components:
  - Trend
  - Seasonality (monthly, weekly, daily)
  - Residuals (error or deviation from the implied model)
- Meta parameters can be adjusted to provide better predictions
- Prophet growth models
  - Linear
  - Logistic
  - Flat
- Predicts far into the future

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Prophet Example: Scheduled Trips
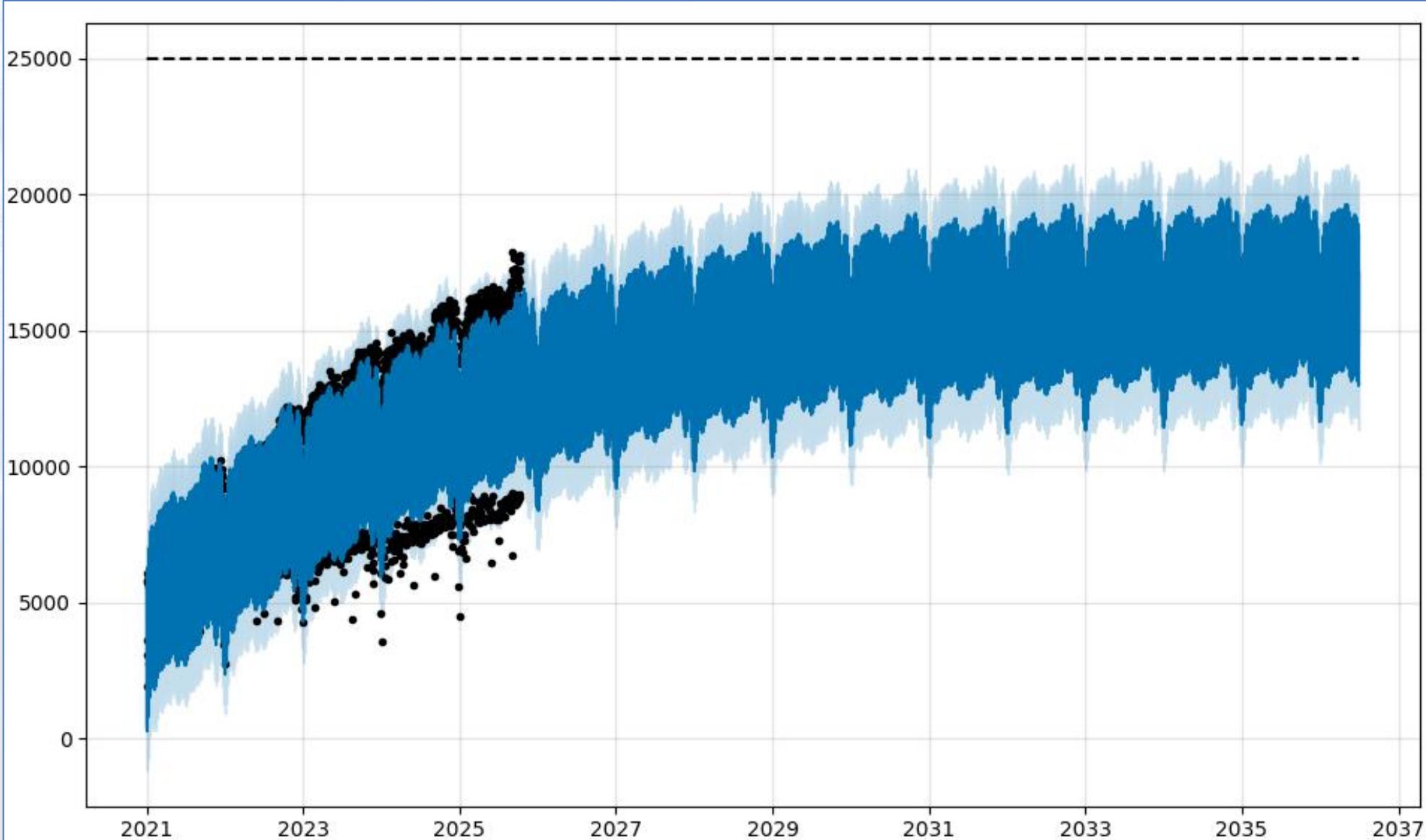
FY 2027 through 2029 PROJECTIONS: SCHEDULED TRIPS
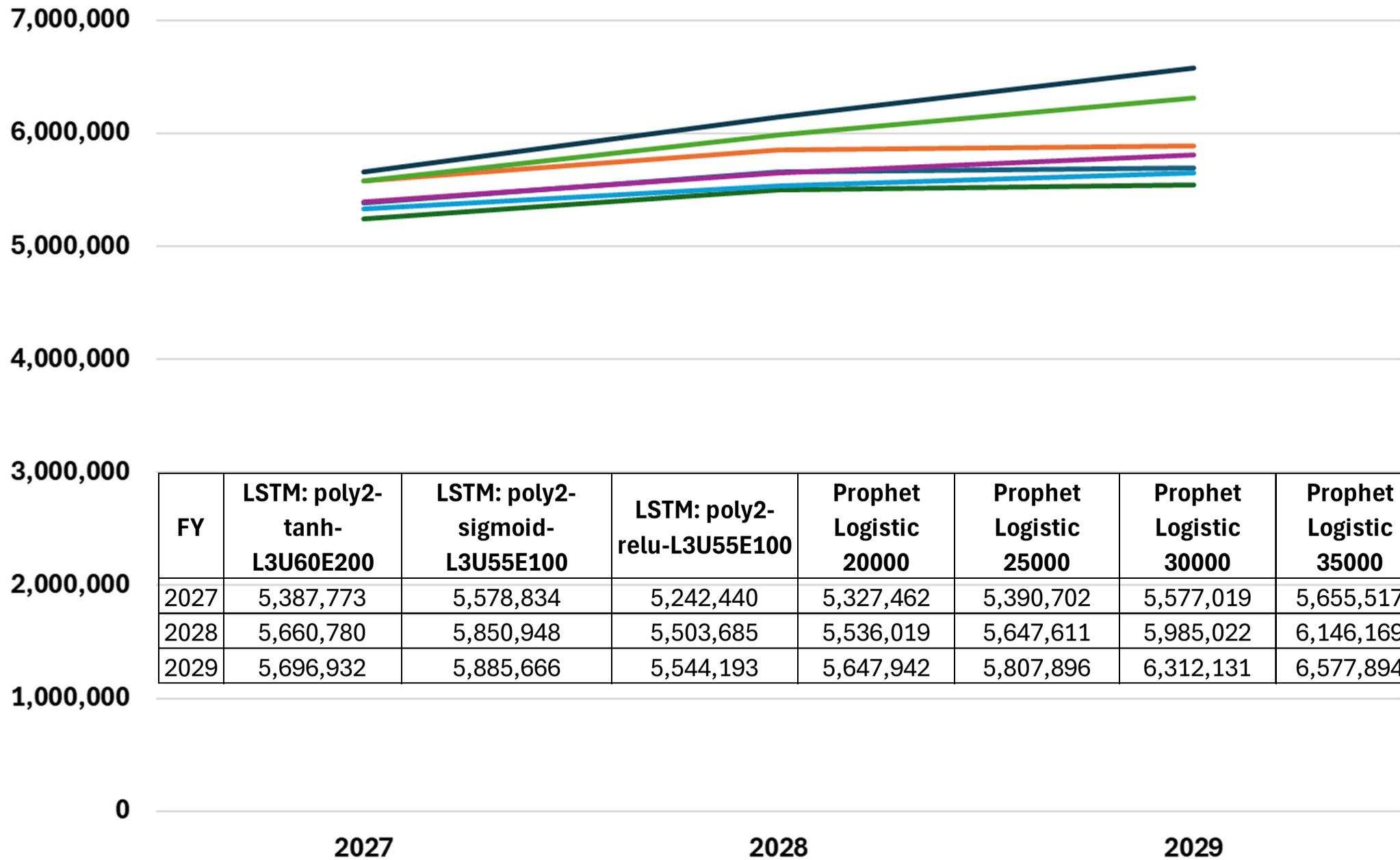
FY	LSTM: poly2-tanh-L3U60E200	LSTM: poly2-sigmoid-L3U55E100	LSTM: poly2-relu-L3U55E100	Prophet Logistic 20000	Prophet Logistic 25000	Prophet Logistic 30000	Prophet Logistic 35000
2027	5,387,773	5,578,834	5,242,440	5,327,462	5,390,702	5,577,019	5,655,517
2028	5,660,780	5,850,948	5,503,685	5,536,019	5,647,611	5,985,022	6,146,169
2029	5,696,932	5,885,666	5,544,193	5,647,942	5,807,896	6,312,131	6,577,894

FY 2029 through 2035 Scheduled Trip Comparison – Linear LSTM & Meta Prophet

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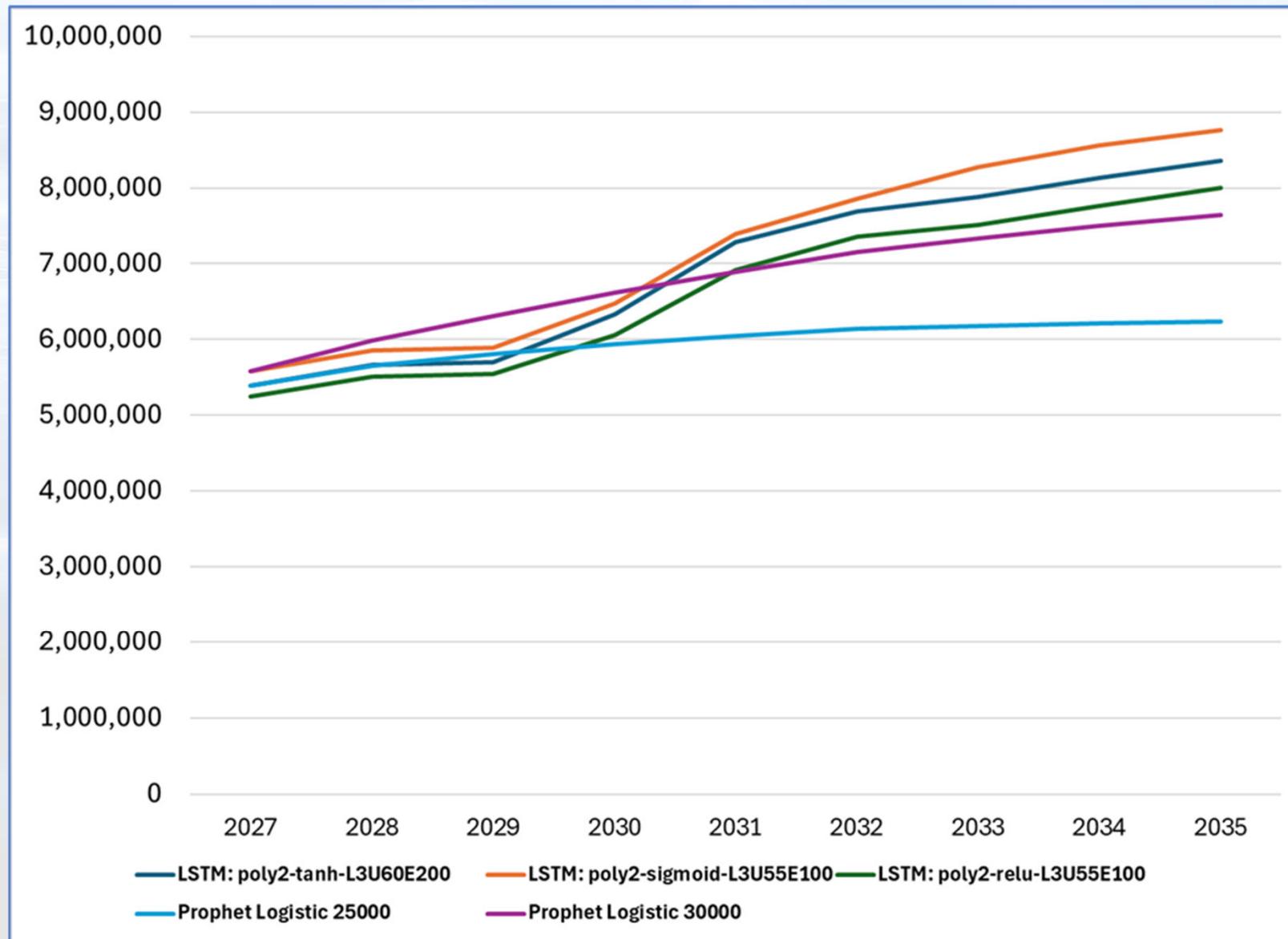
Recommend Model(s): Scheduled Trips

FY 2027 & 2028:
LSTM
poly2-tanh-
L3U60E200

FY 2029-2036:
Prophet
Logistic
30,000
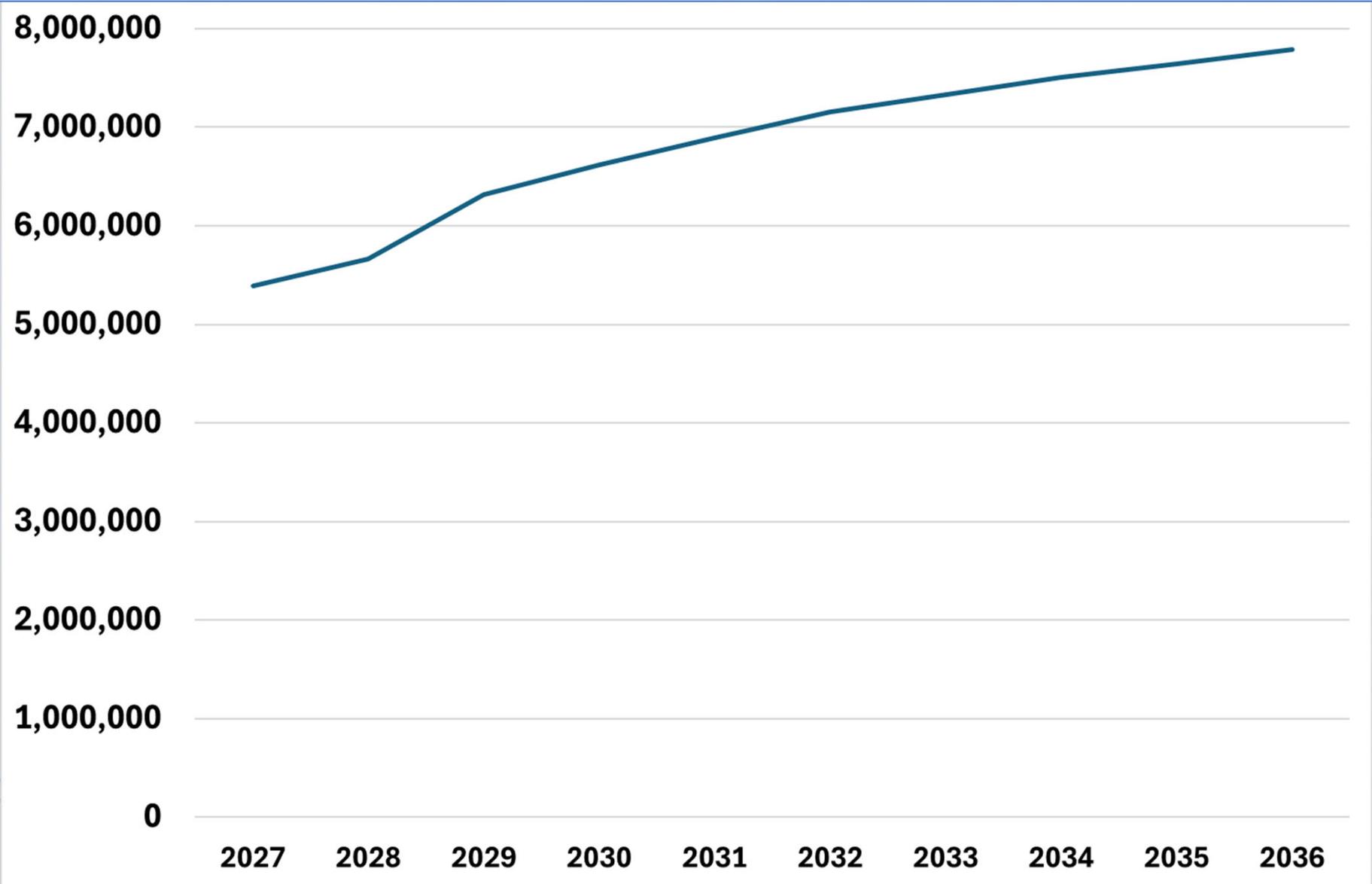
Scheduled Trip Demand - Conclusions

- Forecasting models need to utilize post-pandemic historical data
- Long Short-Term Memory (LSTM) model is the best short-term fit
    - Great Performance in FY 2025
- Completed trip ratio = 80.01%
- National trends exhibit increasing demand for paratransit trips
- Los Angeles County demographic trends suggest increasing demand
- Future Forecasts:
    - Explore and test models that potentially identify signals in demand

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Scheduled Trip Demand Forecast

Fiscal Year 2027

Fiscal Years 2027 through 2036

Fiscal Year	TOTAL	Antelope Valley	Eastern	Santa Clarita	SF Valley	Southern	West/ Central
2025*	4,857,458	237,126	1,321,500	54,635	676,516	1,752,553	815,127
2026**	5,004,748	225,727	1,445,309	45,927	780,566	1,683,362	823,857
2027	5,387,773	247,175	1,538,507	50,015	827,695	1,840,545	883,836
2028	5,660,780	259,699	1,616,465	52,549	869,636	1,933,809	928,622
2029	6,312,131	289,581	1,802,462	58,596	969,700	2,156,320	1,035,473
2030	6,620,652	303,735	1,890,561	61,460	1,017,096	2,261,715	1,086,084
2031	6,894,797	316,312	1,968,845	64,005	1,059,212	2,355,367	1,131,056
2032	7,151,625	328,095	2,042,184	66,389	1,098,667	2,443,104	1,173,187
2033	7,331,236	336,335	2,093,472	68,056	1,126,259	2,504,461	1,202,652
2034	7,501,935	344,166	2,142,216	69,641	1,152,483	2,562,775	1,230,654
2035	7,641,720	350,579	2,182,133	70,938	1,173,957	2,610,528	1,253,585
2036	7,784,743	357,140	2,222,974	72,266	1,195,929	2,659,386	1,277,047

* Actual Trip Requests

** Original Projections for FY 2025 (no actual trip requests, observations, included)

Shaded rows represent Actual Scheduled Trips (Trip Requests)

MONTH	TOTAL	Antelope Valley	Eastern	Santa Clarita	SF Valley	Southern	West/ Central
Jul-24	370,494	16,514	105,796	3,657	59,109	124,661	60,757
Aug-24	384,622	17,702	110,764	3,669	61,242	128,923	62,322
Sep-24	376,075	17,142	108,611	3,415	60,440	124,967	61,500
Oct-24	415,473	19,400	120,576	3,911	66,267	138,227	67,092
Nov-24	372,790	16,765	108,784	3,300	59,545	122,283	62,113
Dec-24	378,362	16,717	111,240	3,426	60,827	124,465	61,687
Jan-25	372,410	16,372	107,256	3,324	59,684	125,052	60,722
Feb-25	364,790	16,484	105,244	3,279	58,649	122,730	58,404
Mar-25	405,879	17,711	117,032	3,538	64,916	138,354	64,328
Apr-25	407,342	17,504	118,715	3,644	65,741	138,030	63,708
May-25	413,281	18,087	121,152	3,470	66,972	139,038	64,562
Jun-25	395,230	17,357	114,096	3,356	65,128	133,081	62,212
Jul-25	418,005	17,498	121,291	3,541	68,977	140,172	66,526
Aug-25	420,684	18,221	121,676	3,818	70,170	141,566	65,233
Sep-25	428,576	18,079	124,824	3,598	71,519	144,013	66,543
Oct-25	417,836	18,845	120,666	3,834	65,168	140,540	68,782
Nov-25	397,066	17,909	114,668	3,644	61,928	133,554	65,363
Dec-25	429,518	19,372	124,039	3,942	66,990	144,470	70,705
Jan-26	429,061	19,352	123,908	3,937	66,919	144,316	70,630
Feb-26	387,306	17,468	111,849	3,554	60,406	130,271	63,756
Mar-26	423,909	19,119	122,420	3,890	66,115	142,583	69,782
Apr-26	415,802	18,754	120,078	3,816	64,851	139,856	68,447
May-26	428,618	19,332	123,780	3,933	66,849	144,167	70,557
Jun-26	427,669	19,289	123,505	3,925	66,701	143,848	70,401
Jul-26	453,377	20,800	129,464	4,209	69,650	154,880	74,374
Aug-26	441,303	20,246	126,016	4,097	67,795	150,756	72,393
Sep-26	437,004	20,048	124,789	4,057	67,135	149,287	71,688
Oct-26	448,764	20,588	128,147	4,166	68,941	153,305	73,617
Nov-26	431,448	19,794	123,202	4,005	66,281	147,389	70,777
Dec-26	460,445	21,124	131,482	4,274	70,736	157,295	75,534
Jan-27	456,196	20,929	130,269	4,235	70,083	155,844	74,837
Feb-27	420,002	19,268	119,934	3,899	64,523	143,479	68,899
Mar-27	470,064	21,565	134,229	4,364	72,214	160,581	77,112
Apr-27	453,907	20,824	129,615	4,214	69,731	155,061	74,461
May-27	458,671	21,042	130,976	4,258	70,463	156,689	75,243
Jun-27	456,592	20,947	130,382	4,239	70,144	155,979	74,902

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Summary

- Los Angeles County Population Characteristics

  - The population of ages 55+ is growing as is the number of individuals reporting a disability

- Scheduled Trip Demand

  - LSTM model

    - Good Performance in FY 2025: minimal error of 1.2%

  - Completed trip ratio: 80.01%

- National trends exhibit increasing demand for paratransit trips

- Future Forecasts – Continuous Improvement:

  - Compare Additional Models for Scheduled Trips including Koopman Operator

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Questions

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Consulting

Item 10
Budget Update

2026

Year to Date Ridership – By Region (Feb 26)

TRIPS	Budget YTD	Actual YTD	% Over/Under
Southern	891,807	894,463	0.30%
Eastern/Cert	783,693	811,714	3.58%
Northern	413,368	451,185	9.15%
West/Central	437,329	416,218	-4.83%
Antelope Valley	117,266	110,894	-5.43%
Santa Clarita	20,766	22,374	7.74%
YTD Totals	2,664,229	2,706,848	1.60%

2026

Draft Financials – Feb 2026

Expenses	Budget YTD	Actual YTD	Variance	% Over/ (Under)
Purchased Transportation	$173,711,701	$172,803,754	($907,947)	-0.52%
Paratransit Operations	$20,879,181	$20,356,547	($522,634)	-2.50%
Eligibility Determination	$5,068,890	$4,388,630	($680,260)	-13.42%
CTSA/Ride Information	$292,971	$307,887	$14,916	5.09%
Administration	$8,838,373	$8,288,296	($550,077)	-6.22%
Total Expenses before Depreciation	$208,791,116	$206,145,114	($2,646,002)	-1.27%

FY27 Draft Budget – Planning

|	FY26	FY27	% Change
Purchased Transportation	$263,551,654	$294,540,586	11.8%
Paratransit Operations	$31,287,687	$32,631,082	4.3%
Eligibility Determination	$7,585,185	$7,490,671	-1.2%
CTSA/Ride Information	$433,655	$567,719	30.9%
Administration	$13,011,524	$14,788,490	13.7%
Total Operating Costs	$315,869,704	$349,018,548	10.5%
Capital Program - New	$25,488,600	$20,095,800	-21.2%
Subtotal (Metro request)	**$341,187,826**	**$369,114,348**	**8.2%**
Avalon Principal Payments	$3,150,000	$3,308,590	5.0%
Capital Construction	$12,000,000	$8,000,000	-33.3%
Capital Program Carryover	$1,650,000	$4,252,272	157.7%
Grand Total	**$357,987,826**	**$384,675,210**	**7.5%**

Capital – Rolling Stock

- Replace up to 149 units that have reached their useful life

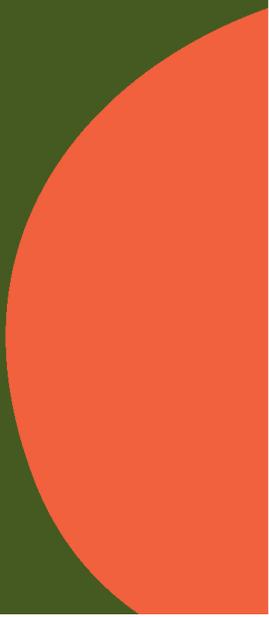- Replace 7 staff units that are now beyond their useful life
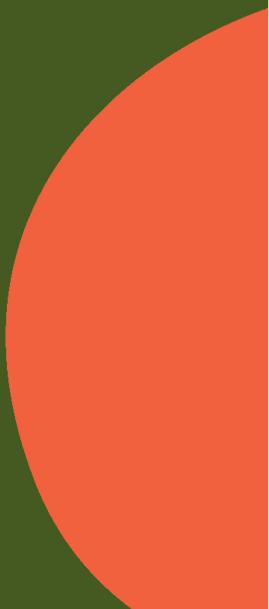
Capital – Facilities Construction

- Bids/Proposal for Antelope Valley and Avalon expected in May/June 2026

- Board action on both properties projected in June 2026

2026

Next Steps

- Finalize draft budget - May 2026

- Metro budget approval/Access funding request – May 2026
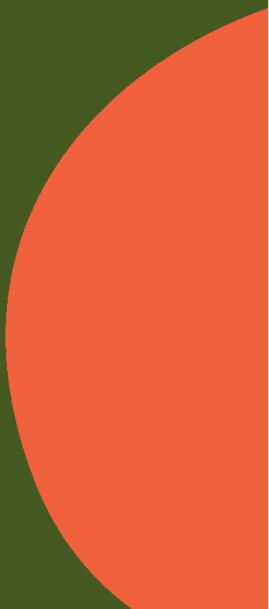
Item 11

Operations Update

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Statistics

	January 2025	January 2026	% Change
Vehicle Trips Completed	289,863	331,011	+14%
Passenger Trips Completed	356,373	401,894	+13%
Reservation Calls Answered	193,191	221,201	+14%
ETA Calls Answered	59,487	74,333	+25%
Online Reservations	48,287	63,684	+32%

2026

Performance Report Card

| Key Performance Indicator	Standard	January 2026	FY26
On Time Performance	≥ 91%	92.2%	92.1%
Excessively Late Trips	≤ 0.10%	0.02%	0.03%
Excessively Long Trips	≤ 5%	2.7%	2.8%
Missed Trips	≤ 0.75%	0.25%	0.28%
Denials	≤ 0	0	0
Access to Work On Time Performance	≥ 94%	96.1%	93.9%
Average Hold Time in Seconds (Reservations)	≤ 120	48	56
Calls On Hold > 5 Min (Reservations)	≤ 5%	2.1%	2.8%
Calls On Hold > 5 Min (ETAs)	≤ 10%	2.8%	3.5%
Calls On Hold > 5 Min (Cancellations)	≤ 10%	3.6%	2.7%
Complaints Per 1,000 Trips	≤ 4.0	1.6	1.8
Preventable Incidents per 100,000 Miles	≤ 0.25	0.29	0.20
Preventable Collisions per 100,000 Miles	≤ 0.85	0.82	0.72
Mean Miles Between Major Mechanical Failures	≥ 50,000	59,921	71,560

Abilities Expo

- March 27th to 29th
- Booking Address:
  - **300 E. Ocean Blvd,Long Beach, Stand 4**
- Communication
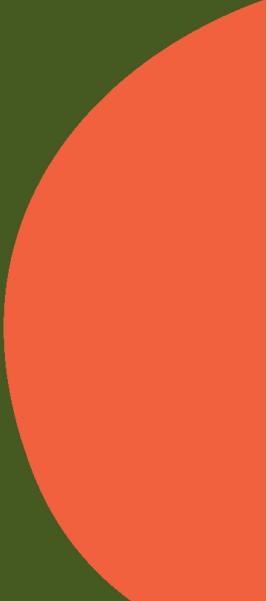 - WMR App
  - Email
  - Website
  - Reservation Hold Message

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26
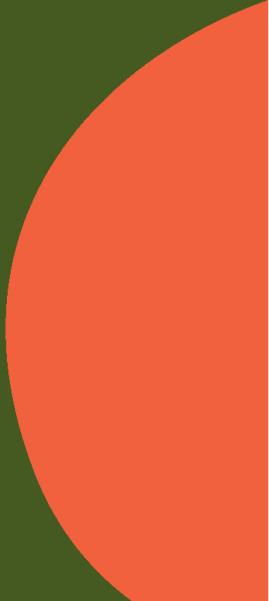
Abilities Expo

2026

FIFA World Cup 2026

- 8 matches between June 12th and July 10th
- Preparations continue
  - Draft term sheet received from Metro
  - Metro requesting 15 vehicles to operate 4 shuttle routes; will reimburse costs
  - Final pickup/drop-off locations being finalized
  - Walk through at Los Angeles Stadium (formerly SoFi) occurred on March 11th