



# Union County Jail Population Forecast



February 3, 2025

# Introduction



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35+ years of experience

25+ years of experience

Since 2018:

- 30 Detention Center Needs Assessments
- 19 Detention & Prison Master Plans

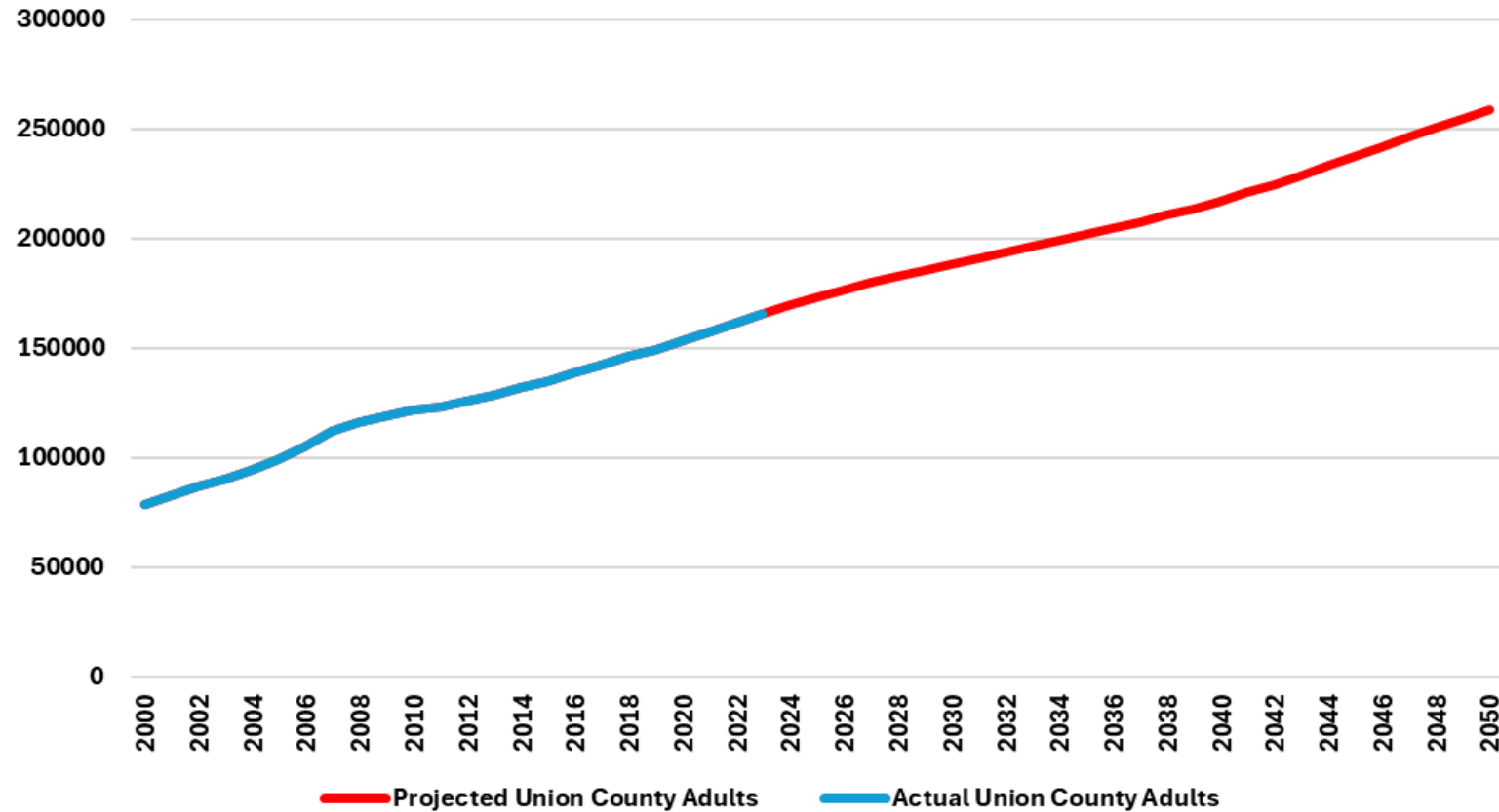


# Introduction - Project Purpose

- The **purpose** of this study is to analyze the local criminal justice system and project the size of the future offender population and bedspace needs for Union County.
- Our **process** includes :
  - Interviewing key stakeholders,
  - Creating a forensic reconstruction of the facility's data,
  - Developing an analysis that depicts the future size of the population, and
  - Developing forecast scenarios that illustrate a range of options.

# Union County Population

Union County Projected Adult Population to 2050

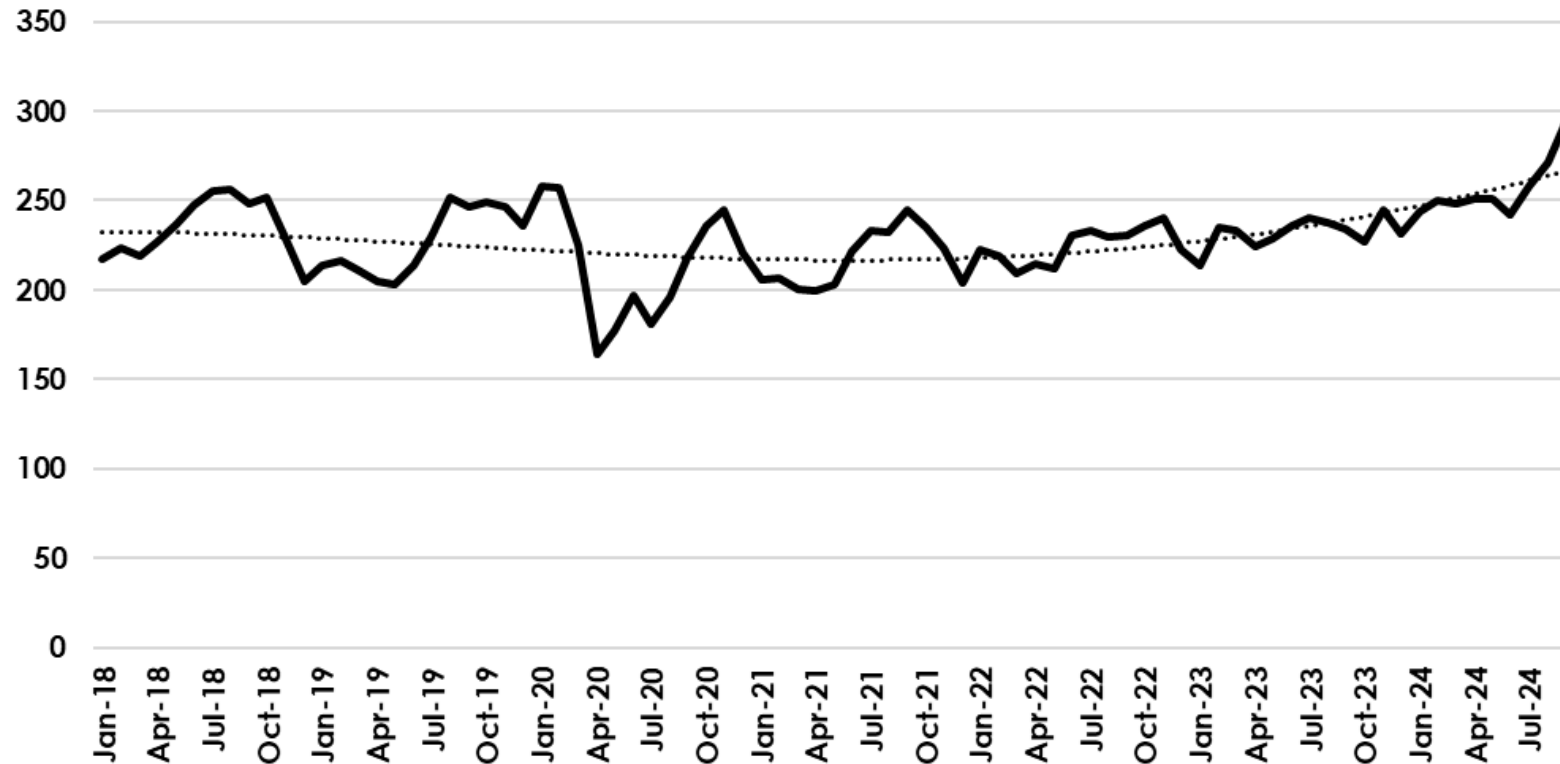


- Used data from NC State Demographer's Office
- Projected overall growth between now and 2050 is 64%
- However, using only adults between 18 and 64 years of age = 52% growth

<https://www.osbm.nc.gov/facts-figures/population-demographics/state-demographer/countystate-population-projections>

# Union County Jail Population

Union County Jail Monthly ADP



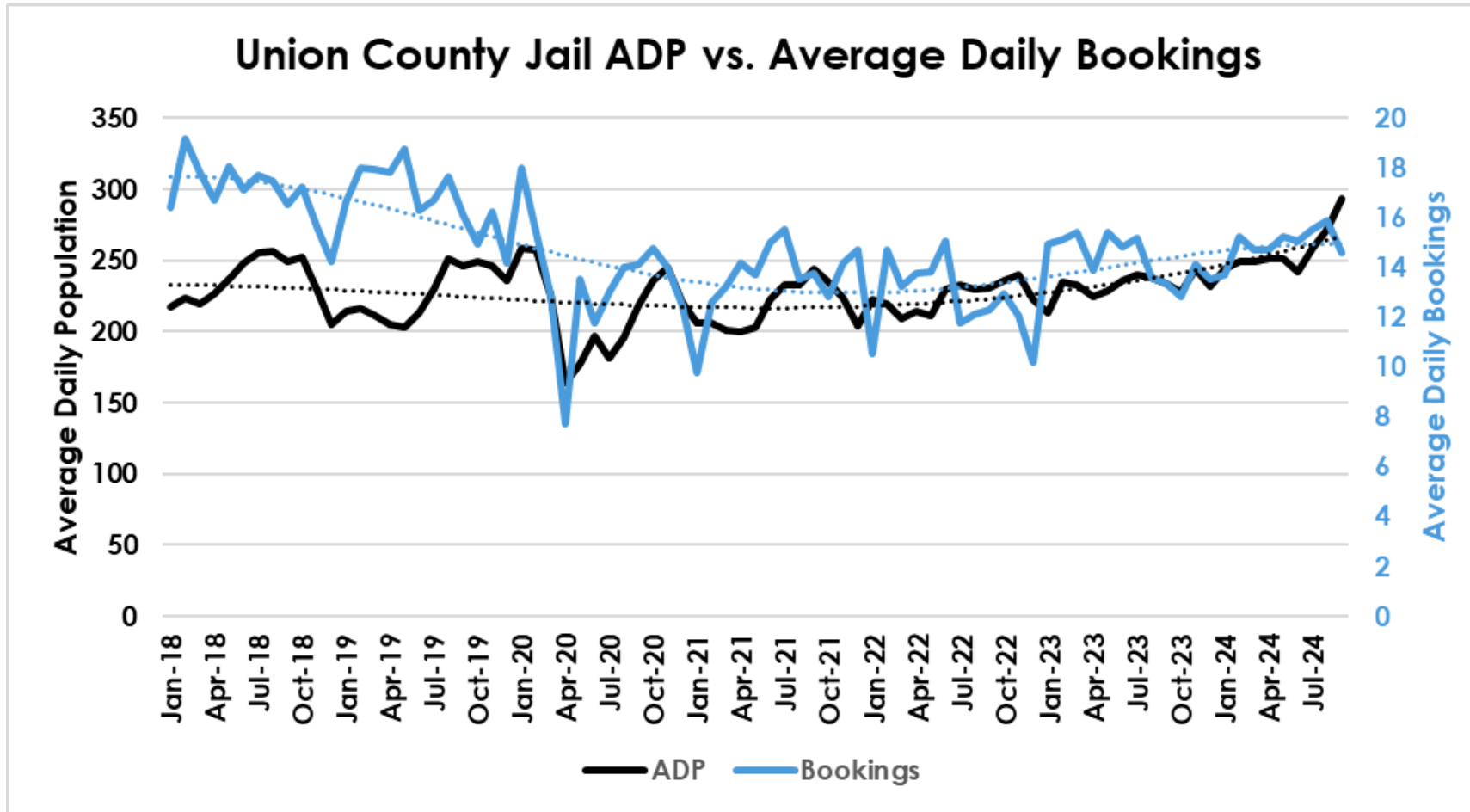
- Breaking into monthly average daily population (ADP) makes the chart smoother

Year	ADP	2024 YTD ADP is...
2018	234.7	7% Larger
2019	226.8	11% Larger
2020	214.3	17% Larger
2021	217.4	16% Larger
2022	224.8	12% Larger
2023	232.0	9% Larger
2024	251.8	---

# Jail Population Dynamics

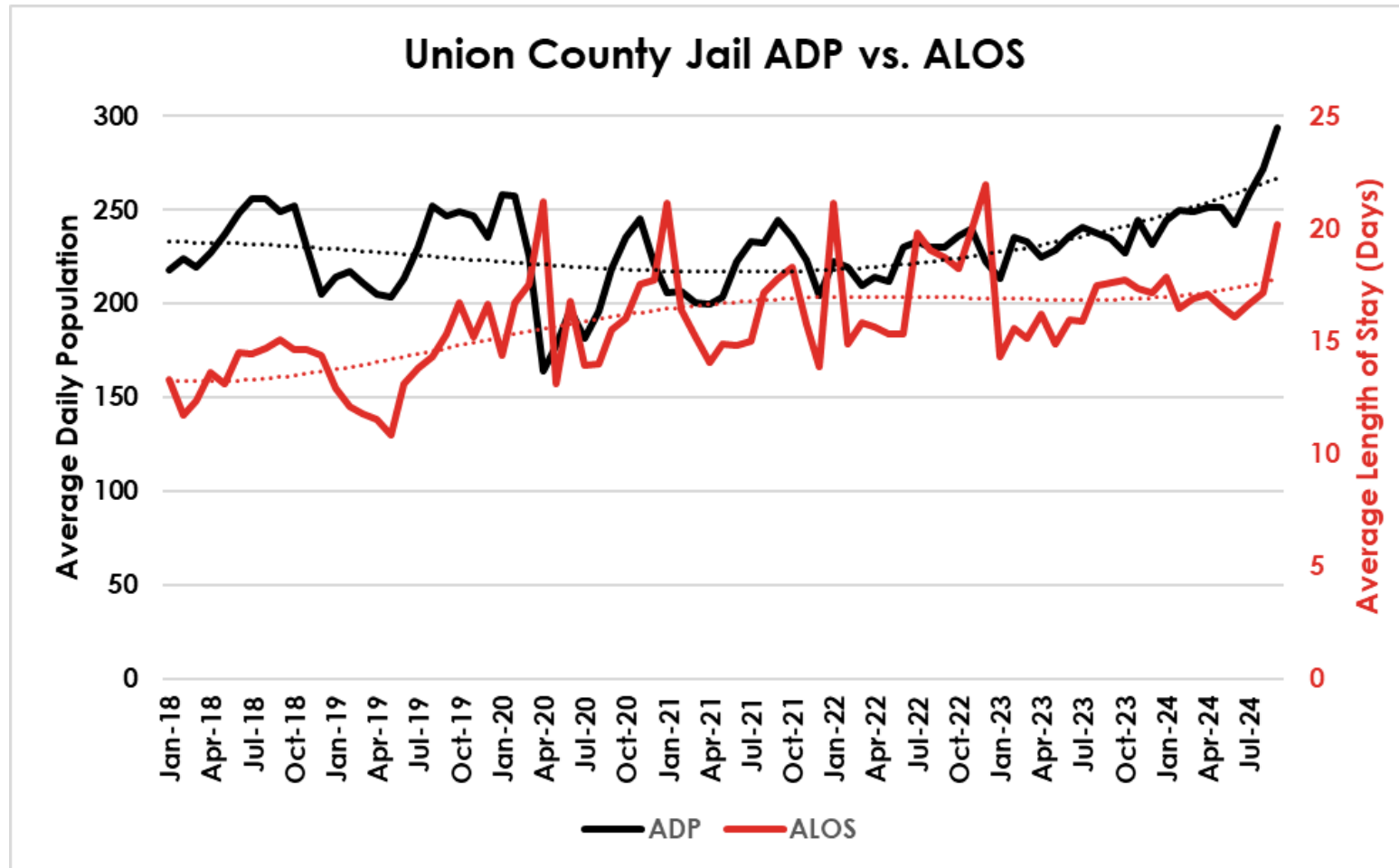
- At a basic level, 2 factors determine all Jail populations:
  - Bookings
  - Average Length of Stay (ALOS)

# Union County Jail Bookings vs. ADP



- Extremely strong relationship between bookings and ADP
- Current booking levels are constrained by lack of bed availability
- To be clear, many people are not arrested or diverted from jail due to limited capacity
- If more beds are made available, bookings will increase substantially, as will the jail's population

# Union County Jail: ALOS vs. ADP



- Strong and consistent relationship between ADP and ALOS in last 2 years
- Population uptick is due mostly to ALOS increase
- ALOS is increasing due to the increased level of serious and violent charges in the jail
- If the booking level of 2018 (17 booked per day instead of 14.9), the ADP would be 36 higher
- Moreover, if the front-end processing was not so efficient, the population would be even larger



# Union County Jail Population Forecast

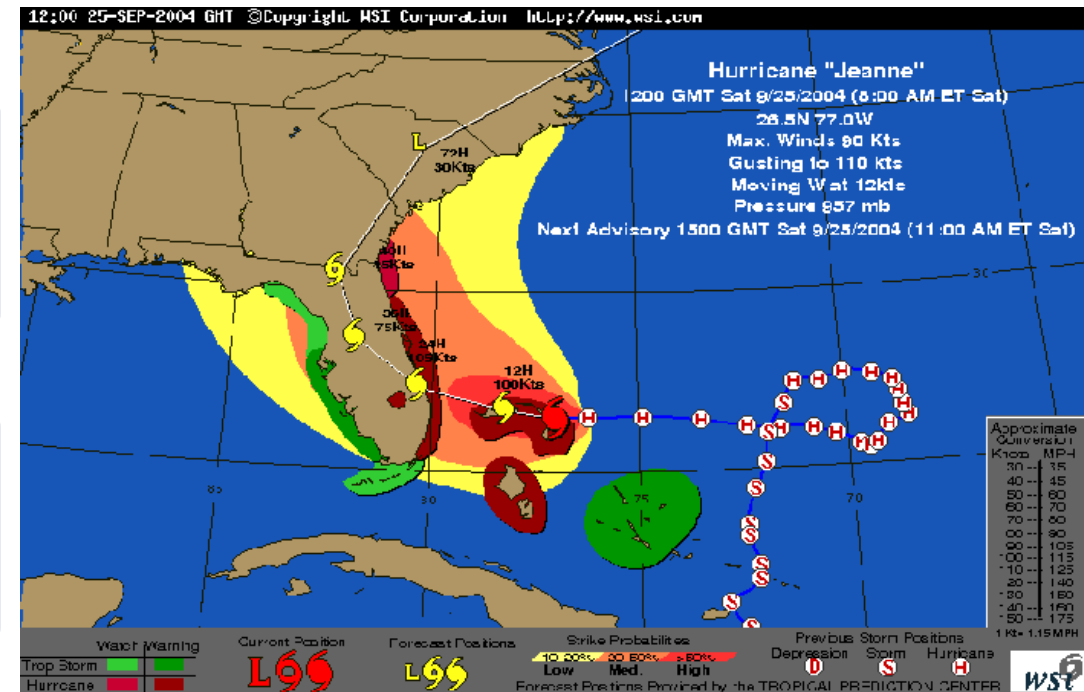
## Jail Population Forecasting



Our time series mathematical models are built with the assumption that there are no unforeseen changes or alterations to laws, practices, public policy, etc. when the forecast was produced

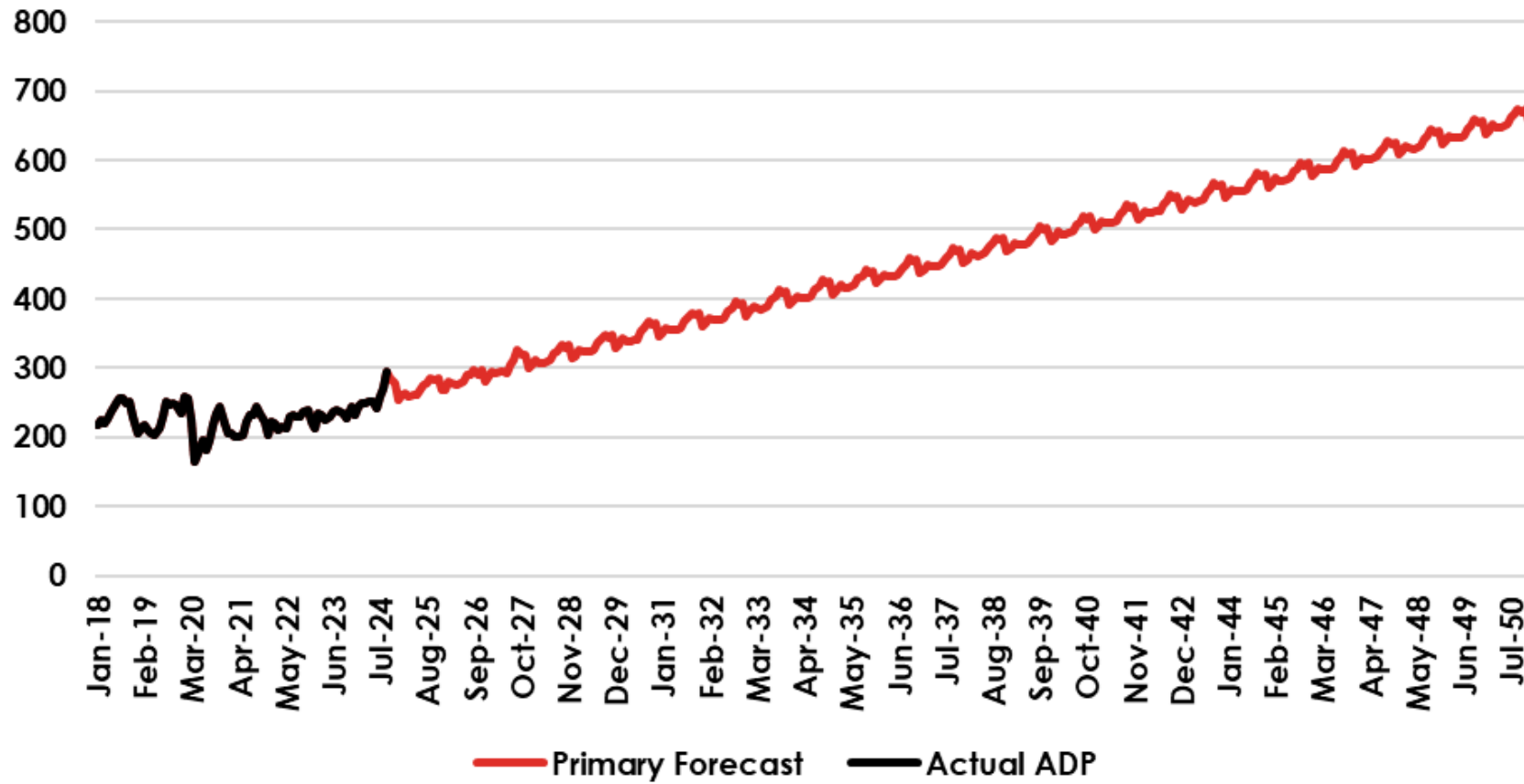


As with weather forecasting, unforeseen events may impact accuracy



# Primary Jail Population Forecast

Union County Jail Primary Forecast



- Primary forecast assumes that nothing changes anywhere in the criminal justice system from where it was in late September 2024
- Forecast is based on multiple projected simulations of bookings (predicted in part by population growth), ALOS (themselves modeled independently), and the prior history of the Jail's ADP
- Over time, bookings will increase from 15 per day to 30 per day
- ALOS will increase from 14 days to 21.9 days
- 2050 ADP = 657

# Union County Jail Forecast – Bed Need

## Average Daily Population vs. Actual Beds Needed

- This forecast does not reflect the required size of a hypothetical facility for 2 key reasons:
  1. It is important to remember that these forecasts are an average daily population. Actual populations will fluctuate above and below that average number. Our calculation indicates a peaking factor of 16.1% for females and 8.6% for males is required.
  2. To operate a facility safely and securely, extra capacity must be available to keep populations separated from each other, such as co-defendants, known enemies, people of different classifications, etc. We applied a standard norm of 15%.

# Union County Primary Forecast – Bed Need

	Females				Males				Total ADP	Total Bed Need
	ADP	Peaking (16.1%)	Classification (15%)	Bed Need	ADP	Peaking (8.6%)	Classification (15%)	Bed Need		
<b>2030</b>	58	9	9	76	291	25	44	360	349	435
<b>2035</b>	74	12	11	97	351	30	53	434	425	531
<b>2040</b>	92	15	14	120	411	35	62	508	503	628
<b>2045</b>	111	18	17	145	469	40	70	580	580	725
<b>2050</b>	131	21	20	172	526	45	79	650	657	822

- The forecast indicates that by 2050, 822 beds are necessary to safely house 657 detainees.
- Note the increase in the female population is projected to be higher/faster than the male population (20% in 2050 vs. 16% now).
- **Remember, this assumes that nothing changes in current arrest/detention/processing practices.**

# Post-Facility Opening - Booking Increase

- Our primary forecast is a model of current behaviors, practices, and policies of the Criminal Justice system
- Based upon past experiences and our visits with stakeholders in Union County, we anticipate an immediate doubling of bookings when a new facility opens
- Future bookings are projected to increase due to Union County/Regional population growth

# Post-Facility Opening - Booking Increase

Year	With Current Policies and Practices Continuing			With An Expanded Jail Facility Allowing For More Bookings At Projected ALOS		
	Daily Bookings	Total ADP	Total Bed Need	Daily Bookings	Total ADP	Total Bed Need
<b>Current</b>	14.9	255	319	30	657	822
<b>2030</b>	17.7	349	435	32.9	721	901
<b>2035</b>	20.5	425	531	36.1	791	988
<b>2040</b>	23.4	503	628	39.2	858	1073
<b>2045</b>	26.2	580	725	42.4	929	1161
<b>2050</b>	30	657	822	45.5	996	1246

# Next Steps for Jail Study

1. Determine total number of beds for full build out
2. Program development
  - Operational scenario development
  - Building component narratives
  - Space allocation tables
3. Preliminary staffing estimates
3. Comparative operational cost model
  - Full capacity
  - Phased capacity

# Next Steps for Union County

1. Board Retreat on February 12, 2025
  - Staff will present scenarios with different bed counts and core sizes
  - Scenarios will include high level cost estimates
  - County Manager will provide the Board with a recommendation
  - Action Requested will include decision on bed count and core size
2. Staff will direct Design Team to begin programming and complete study
  - 60-90 days to complete the study after bed count/core decision
3. Presentation of full report to the Board at a June/July meeting