



**SPECIAL MEETING OF THE CPS ENERGY BOARD OF TRUSTEES
CONVENING AS THE RISK MANAGEMENT COMMITTEE
TO BE HELD ON AUGUST 28, 2023**

LOCATION: CPS ENERGY BOARD ROOM (500 MCCULLOUGH AVE.)

THIS MEETING WILL FOLLOW THE REGULAR BOARD OF TRUSTEES MEETING

At any time during the Board Meeting, the Board may go into an executive session as permitted by the Texas Open Meetings Act, (Chapter 551 of the Texas Government Code) regarding any item on this agenda.

AGENDA

ITEM	TOPIC	ACTION	PRESENTER/ SPONSOR
1	CALL TO ORDER	Execute	Mr. John Steen
2	PUBLIC COMMENT Pre-Registration on Wednesday, August 23, 2022 5:00 PM – Friday, August 25, 2022 1:00 PM. Dial (210) 353-4662 or email PublicCommentRegistration@CPSEnergy.com	Discuss	Mr. John Steen
3	APPROVAL OF: <ul style="list-style-type: none"> Minutes of the Risk Management Committee (RMC) meeting held on 12/19/2022 	Vote	Mr. John Steen
RISK MANAGEMENT COMMITTEE			
4	ENTERPRISE RISK & CONTROLS UPDATE	Discuss	Ms. Annamarie Rangel
5	CURRENT MACROECONOMIC ENVIRONMENT & RELATED RISKS (Mr. Eric Brown, PFM Financial Advisors)	Discuss	Ms. Annamarie Rangel
6	ERP PROGRAM FINANCIAL UPDATE	Discuss	Mr. Evan O'Mahoney
7	ADJOURNMENT	Execute	Mr. John Steen
If the Board meeting has not adjourned by 4:55 PM, the presiding officer shall entertain a motion to continue the meeting, postpone the remaining items to the next Board meeting date, or recess and reconvene the meeting at a specified date and time.			

Draft for review and approval
at the August 2023 meeting

**CPS ENERGY
MINUTES OF THE SPECIAL MEETING OF THE BOARD OF TRUSTEES
HELD ON DECEMBER 19, 2022**

The Special Meeting of the CPS Energy Board of Trustees convening as the Risk Management Committee was held on Monday, December 19, 2022 in the Board Room on the First Floor of the CPS Energy headquarters located at 500 McCullough, San Antonio, Texas.

I. CALL TO ORDER

Committee Chair Dr. Romero called the meeting to order at 4:51 p.m.

Present were Board members:

Dr. Francine Romero, Chair
Ms. Janie Gonzalez
Dr. Willis Mackey
Mr. John Steen
Mayor Ron Nirenberg

Also present were:

Mr. Rudy Garza, Interim President & CEO
Ms. Shanna M. Ramirez, Chief Legal & Ethics Officer, General Counsel & Board Secretary
Mr. Cory P. Kuchinsky, Chief Financial Officer & Treasurer
Ms. Vivian Bouet, Chief Information Officer
Ms. Lisa Lewis, Chief Administrative Officer
Mr. Benny Ethridge, EVP
CPS Energy staff members
City of San Antonio officials
Interested Citizens

II. PUBLIC COMMENT

There were no members of the public wishing to provide public comment.

III. ENTERPRISE RISK & CONTROLS UPDATE

Mr. Jonathan Tijerina, Vice President of Enterprise Risk and Development, and Mr. Anthony Werland, Director of Enterprise Risk Management & Solutions, provided an update on enterprise risk and control activities CPS Energy facilitated and led to help strengthen the resiliency of the organization.

IV. AUDIT SERVICES UPDATE

This item was tabled.

Draft for review and approval
at the August 2023 meeting

V. GAS COMPLIANCE & AUDIT OVERVIEW

This item was tabled.

VI. ADJOURNMENT

There being no further business to come before the Board, upon a motion duly made by Trustee Dr. Mackey and seconded by Mayor Nirenberg and upon an affirmative vote by all members present, the meeting was unanimously adjourned at 5:02 p.m. by Chair Dr. Romero.

Shanna M. Ramirez
Secretary of the Board

DRAFT



ENTERPRISE RISK & CONTROLS UPDATE

PRESENTED BY:

Annamarie Rangel

Director, Enterprise Risk Management & Solutions (ERMS)

August 28, 2023

Informational Update



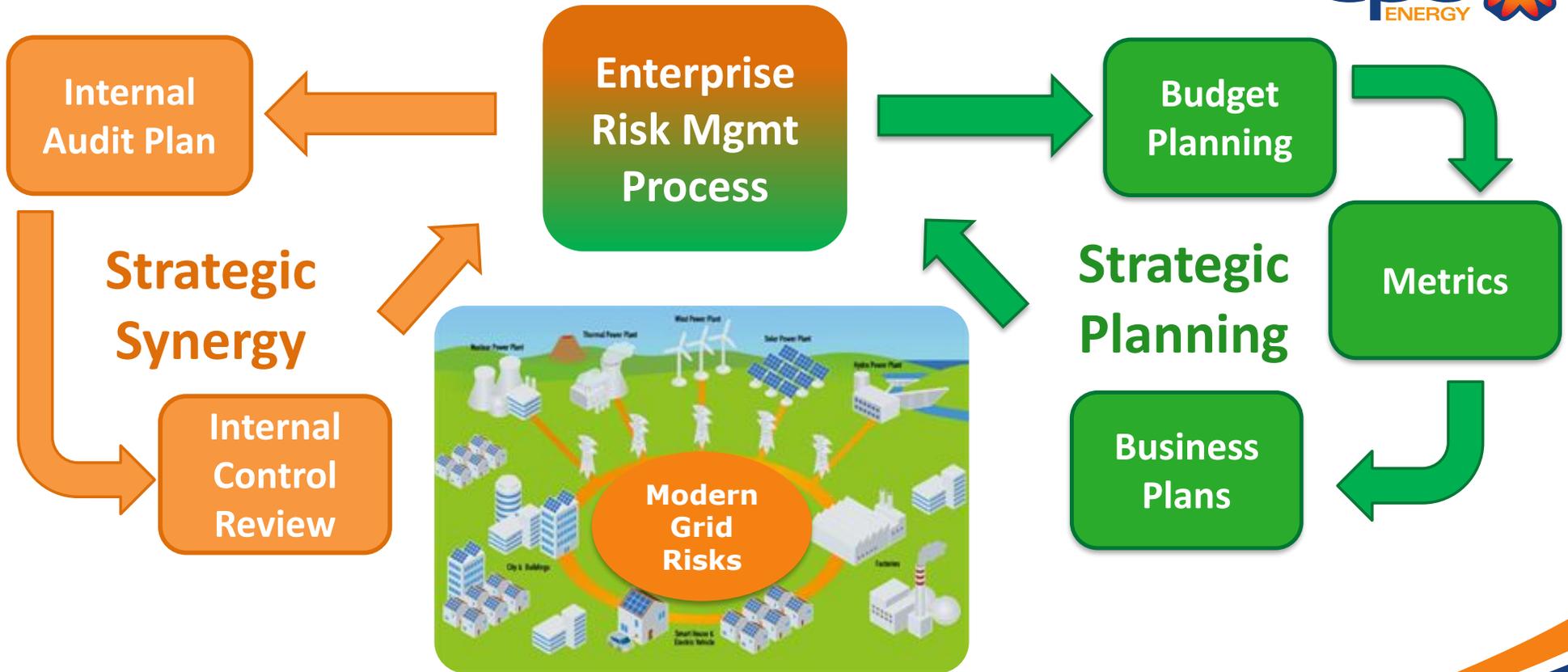


AGENDA

- **STRATEGIC ENTERPRISE ALIGNMENT**
- **CURRENT ENTERPRISE RISK MANAGEMENT & SOLUTIONS (ERMS) INITIATIVES**
- **ENTERPRISE RESOURCE PLANNING (ERP) RISK MANAGEMENT**
- **EMERGING RISKS**



STRATEGIC ENTERPRISE ALIGNMENT



Our ERMS team helps us to engage more effectively & mature the enterprise risk & controls culture.

CURRENT ERMS INITIATIVES



Enterprise Risk & Insurance	Internal Controls
 <p>Partnering with leadership on risk mitigation planning & collaborating with the Business Planning & Budget teams to gain alignment</p>	 <p>Collaborating with Risk Management, People & Culture, & Audit Services on enterprise risk & internal controls training</p>
 <p>Assessing credit & counterparty risk</p>	 <p>Reviewing risk mitigation plans to identify & assess internal controls</p>
 <p>Leading insurance policy renewals & facilitating power plant engineering loss inspections</p>	 <p>Developing & implementing an internal controls strategy</p>

ERMS continues to support the organization in a variety of ways to improve on our effectiveness of risk management.

ERP RISK MANAGEMENT



The ERP Transformation is a complex & intense initiative that requires risk management to meet goals & objectives.

- Partnering with an independent verification & validation vendor (IV&V)
- Collaborating with the ERP Transformation team, Audit Services & Cyber Security
- Establishing a more robust process for overseeing & managing associated ERP project risks
- Allocating a resource to focus on the oversight of ERP risks

Common ERP Risks	
	Roles & Responsibilities
	Organizational Change Management
	Data Governance
	Security & Controls

Enhanced oversight of the ERP Transformation will help ensure risks are transparent, prioritized & managed.



EMERGING RISKS GARTNER BENCHMARK

Top Emerging Risks Timeline

By Risk Score*

Rank	3Q22	4Q22	1Q23	2Q23
1	Macroeconomic Downturn	Escalation of Conflict in Europe	Evolving Sociopolitical Expectations	Third-Party Viability
2	Key Material Shortages	Key Material Shortages	Third-Party Viability	Mass Generative AI Availability
3	Energy Price Inflation	Stagflation Expectations	Critical Infrastructure Failure	Financial Planning Uncertainty
4	Critical Infrastructure Failure	Critical Infrastructure Failure	Financial Planning Uncertainty	Cloud Concentration Risk
5	Escalation of Conflict in Europe	Financial Planning Uncertainty	China Trade Tensions	China Trade Tensions

Source: 2Q23, 1Q23 4Q22, 3Q22 Gartner Emerging Risk Surveys
Risk Score Q1 2023 and Earlier: SQRT (Impact x Inverse Time Frame) x Frequency Selected as a Top 10 Emerging Risk
Q2 2023 and Ongoing: Cube Root (Impact x Inverse Time Frame x Frequency Selected as a Top 10 Emerging Risk Rescaled)

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Several of our risks align with the top emerging risks identified in Gartner's quarterly survey.

Source: 2Q23 Gartner Emerging Risks Report

FOCUSED EMERGING RISK MACROECONOMIC UPDATE



**PFM, one of our
Financial Advisors, will
provide their
assessment of current
macroeconomic
developments.**





Thank You





Current Macroeconomic Environment & Related Risks

Presented by:
Eric Brown, Director

August 28, 2023

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Agenda

- ◆ Overview of Macroeconomic Outlook, Drivers, and Risks
 - Inflation
 - Labor Markets
 - Federal Reserve and Monetary Policy
- ◆ Cost of Borrowing
- ◆ Geopolitical Risks
- ◆ Implications for Public Power Utilities



Macroeconomic Outlook Remains Murky, but Optimism Slowly Emerging

- ◆ Mixed economic data points but growing optimism that recession can be avoided in 2023-2024, despite most aggressive Fed tightening in decades
 - Inflation has declined but continues to impact prices and outpace Fed targets
 - Labor market has remained resilient but is gradually cooling
- ◆ Despite optimism, tightening lending conditions increases risk of recession, including one driven by governance or geopolitical risks that come to fruition
- ◆ Recent flash points:
 - Regional banking crisis (March 2023)
 - Debt ceiling standoff (May/June 2023)
 - Fitch downgrade of US Government & GSEs to AA+ (July 2023)
 - Moody's downgrade of banking sector (August 2023)

Moody's Bank Rating Actions on August 7, 2023

Downgrades	Review for Downgrade	Negative Outlooks
M&T Bank	Cullen/Frost	Simmons First National
Webster Financial	Bank of New York Mellon	Fifth Third
BOK Financial	U.S. Bancorp	F.N.B. Corp.
Fulton Financial	Truist	Citizens Financial
Pinnacle Financial	State Street	Capital One
Old National	Northern Trust	Huntington Bancshares
Prosperity Bancshares		PNC
Amarillo National		Regions Financial
Associated Banc-Corp		Cadence Bank
Commerce Bancshares		Ally Financial
		Bank OZK

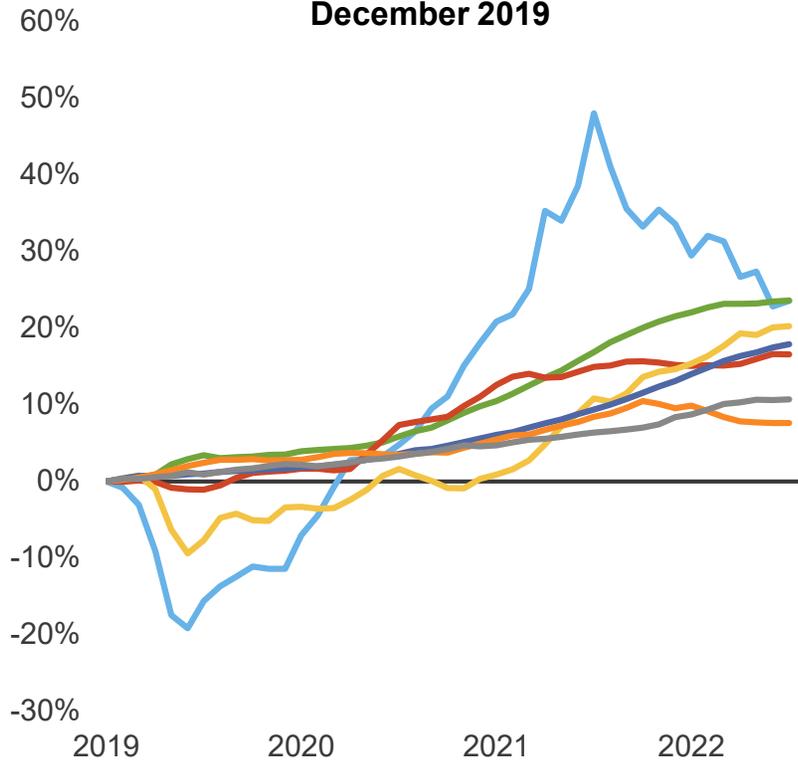
Source: Moody's



Headline Inflation Easing, but Still Elevated

Elevated inflation for a prolonged period increases the risk that future inflation expectations become entrenched at a higher level and lead to wage-inflation spiral

Price Change of Major CPI Components Since December 2019



CPI Component	12-mo. Change	Weight	Contribution to YoY CPI
Energy	-16.7%	6.9%	-1.1%
Food	5.7%	13.4%	0.8%
Transportation	8.2%	5.9%	0.5%
Goods	1.4%	21.4%	0.3%
Shelter	7.8%	34.7%	2.7%
Medical services	-0.8%	6.4%	0.0%
Other Services ¹	4.0%	11.3%	0.5%
Overall	3.0%		

Source: Bureau of Labor Statistics as of July 2023.

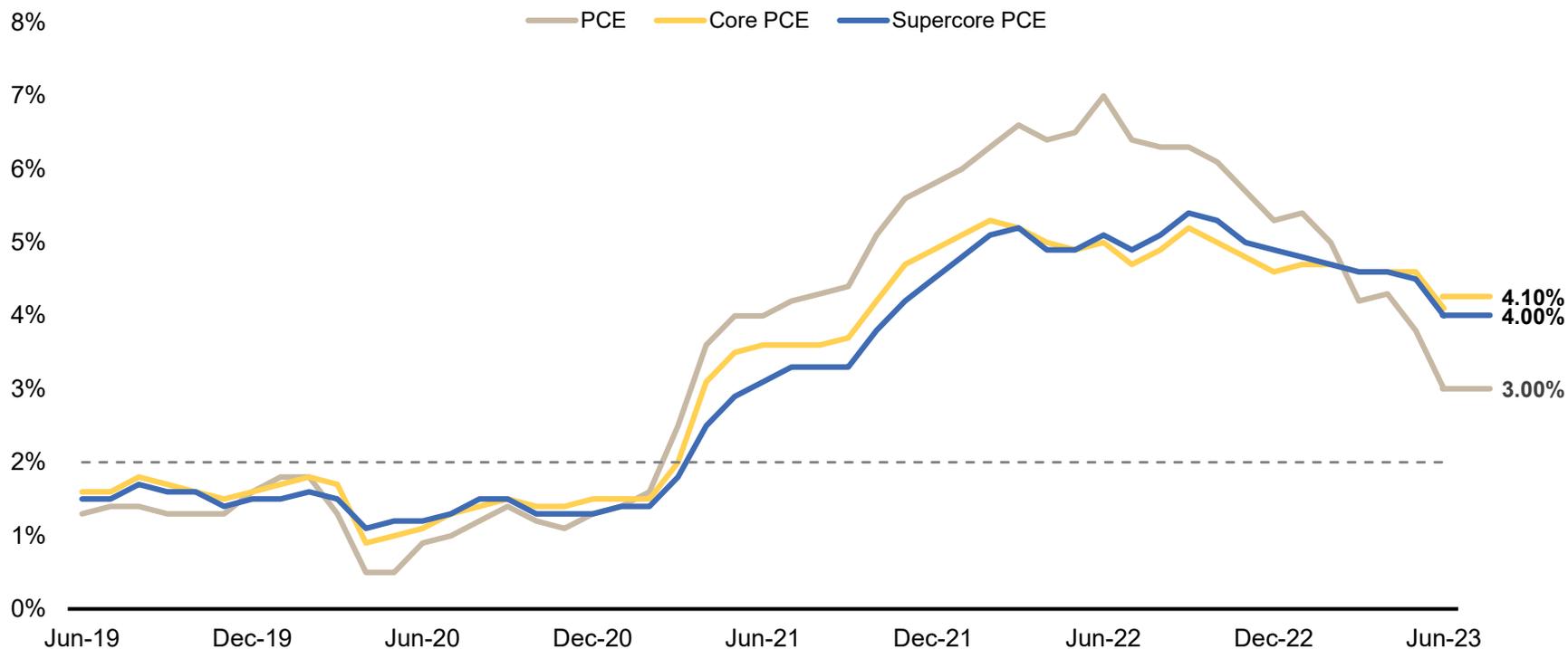
¹Other services is a weighted blend of Water/Sewer/Trash, Household Operations, Recreation, and Education and Communication services.



Key Supercore Inflation Rate Considered by Fed Remains Sticky

Policymakers, economists, and forecasters often track “core” inflation (price growth excluding food and energy) because it tends to be a better predictor of future overall inflation than overall inflation itself

Personal Consumption Expenditure Price Index, Year-over-year



Source: Bureau of Economic Analysis as of August 10, 2023.



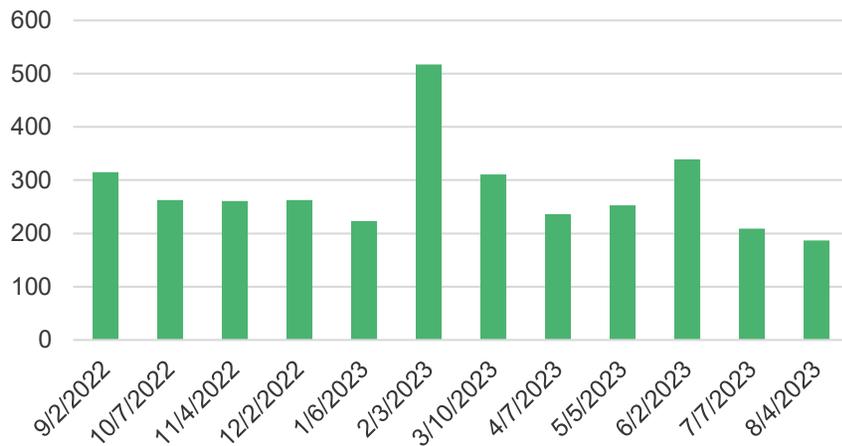
Labor Markets Remain Resilient But Expected to Cool

- ◆ Labor data has remained strong, pointing to an economy capable of weathering a period of rapid interest-rate increases
- ◆ Expectation is for tighter conditions to impact labor market in the second half of 2023

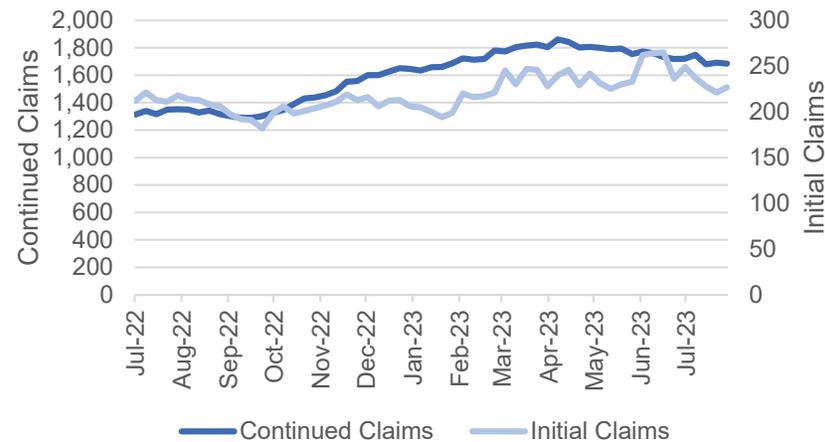
Unemployment Rate



Change in Nonfarm Payrolls (000s)



Initial and Continued Jobless Claims (000s)





Fed Resumes Rate Hikes After Brief Pause

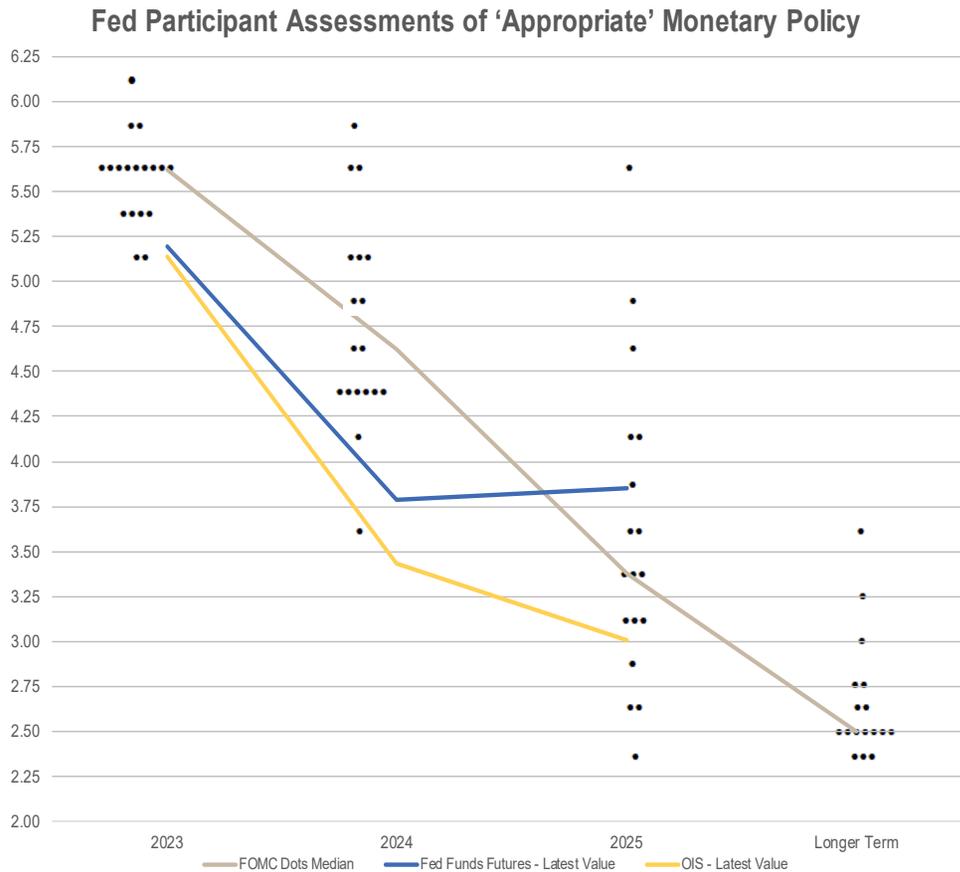
Press release dated July 26, 2023:

- ◆ *“Recent indicators suggest that economic activity has **been expanding** at a moderate pace. Job gains have been robust in recent months, and the unemployment rate has remained low. Inflation remains elevated.”*
- ◆ *“The U.S. banking system is sound and resilient. Tighter credit conditions for households and businesses are likely to weigh on economic activity, hiring, and inflation. The extent of these effects remains uncertain. The Committee remains highly attentive to inflation risks.”*
- ◆ *“The Committee seeks to achieve maximum employment and inflation at the rate of 2 percent over the longer run. The Committee is strongly committed to returning inflation to its 2 percent objective.”*
- ◆ *“In support of these goals, the Committee decided to **raise the target range for the federal funds rate to 5-1/4 to 5-1/2 percent.**”*
- ◆ *“The Committee will continue reducing its holdings of Treasury securities and agency debt and agency mortgage-backed securities.”*



Market Increasingly Forecasting No Additional Fed Funds Rate Hikes

Federal Reserve Board staff now forecasts no recession, but FOMC participant projections trail market expectations



Implied Fed Funds Rate Probability (As of August 7, 2023) ²				
Meeting	# Hikes / Cuts	%Hike / Cut	Implied Rate Δ	Implied Rate
09/20/2023	0.1	0.1%	0.030%	5.359%
11/01/2023	0.4	0.2%	0.091%	5.419%
12/13/2023	0.2	-0.1%	0.060%	5.389%
01/31/2024	-0.1	-0.4%	-0.036%	5.293%
03/20/2024	-0.7	-0.6%	-0.181%	5.147%
05/01/2024	-1.4	-0.7%	-0.352%	4.977%
06/12/2024	-2.2	-0.8%	-0.551%	4.778%
07/31/2024	-3.0	-0.8%	-0.746%	4.583%
09/18/2024	-3.8	-0.9%	-0.961%	4.368%
11/07/2024	-4.6	-0.8%	-1.153%	4.176%
12/18/2024	-5.2	-0.6%	-1.300%	4.029%
01/29/2025	-5.7	-0.5%	-1.416%	3.913%

¹Source: Federal Reserve as of July 26, 2023. Individual dots represent each Fed members' judgement of the midpoint of the appropriate target range for the federal funds rate at each year-end.
²Source: Bloomberg, as of August 7, 2023.



Cost of Borrowing Has Increased on Fed Actions and Economic Outlook



Consensus Bond Yield Forecast (As of August 7, 2023)							
Average Forecasts	Curr.	Q3 23	Q4 23	Q1 24	Q2 24	Q3 24	Q4 24
30-Year UST	4.24%	3.91%	3.84%	3.78%	3.73%	3.73%	3.71%
10-Year UST	4.08%	3.75%	3.64%	3.54%	3.48%	3.45%	3.42%
5-Year UST	4.16%	4.01%	3.86%	3.71%	3.57%	3.47%	3.40%
2-Year UST	4.78%	4.65%	4.41%	4.07%	3.80%	3.58%	3.41%
3M Term SOFR	5.37%	5.32%	5.32%	5.05%	4.69%	4.32%	4.00%

- Interest rates have increased substantially and are projected to remain high, with data-dependent periods of volatility
- Projections reflect expectations of resilient economy that allows the Fed to keep rates higher for longer, but changes to outlook will impact rates going forward
- As a highly-rated essential service utility, CPS Energy remains well-positioned to achieve competitive rates relative to the market



Geopolitical Risks Could Dramatically Alter Economic Landscape

- ◆ **US-China strategic competition.** US-China relations appear to be on a negative trajectory, with Taiwan being the biggest flash point. China has increased its military presence in the South China Sea and there is growing concern that US-China trade tensions could escalate into further financial decoupling, impacting the global economy.
- ◆ **Russia – Ukraine war.** Neither side appears likely to produce a near-term complete victory or agree to a settlement or ceasefire. While war persists, there is the risk of intentional or accidental escalation.
- ◆ **Major cyber attack(s).** Cyber attacks are increasing in scope, scale and sophistication. Repercussions of sustained disruption to critical infrastructure could include a wide-ranging impact on financial markets and the economy.
- ◆ **Gulf tensions.** Confrontation over Iran’s nuclear program remains a risk. Violence in the West Bank and Gaza has been increasing and could inhibit further progress.
- ◆ **Climate risks.** More frequent and severe weather events such as floods, wildfires, hurricanes, and droughts, which can damage infrastructure, disrupt supply chains, and displace residents, leading to resource scarcity and economic instability.
- ◆ **Major terror attack.** Attack leading to significant loss of life and commercial disruption.

Sources: S&P Global, “Top Geopolitical Risks of 2023”. Blackrock, “Geopolitical risk dashboard”, July 25, 2023.



Implications of Macroeconomic Environment for Public Power Utilities

Proactive management of risks related to macroeconomic landscape takes on heightened importance in an uncertain and rapidly shifting macro environment

- ◆ Potential for a renewed inflationary cycle if Federal Reserve eases monetary policy too quickly, further impacting capital and operating costs
- ◆ ...or a recession impacting customer growth and affordability if monetary policy is held too tight for too long or external events tip the scales at a vulnerable time
- ◆ Difference between how markets and the Federal Reserve see the outlook for the economy underscores likelihood of continuing financial market volatility
- ◆ Geopolitical events have become a persistent driver of markets and the economy, with direct and long-lasting impacts, and fallout could dramatically alter the landscape
- ◆ In the meantime, cost of capital is higher and lending conditions are tightening, which will lead to increasing borrowing and liquidity costs¹



Disclosures

Research and forecasts are based on current public information, as of the date of this presentation (or as of such date as may be specified in the presentation), that we consider reliable, but we do not guarantee its accuracy, completeness or suitability. This material is for general information purposes only and is not intended to provide specific advice or a specific recommendation. The information, opinions, estimates and forecasts contained herein are as of the date hereof are subject to change without prior notification.

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ERP PROGRAM FINANCIAL UPDATE

PRESENTED BY:

Evan O'Mahoney

Chief Information Officer (CIO)

August 28, 2023

Informational Update





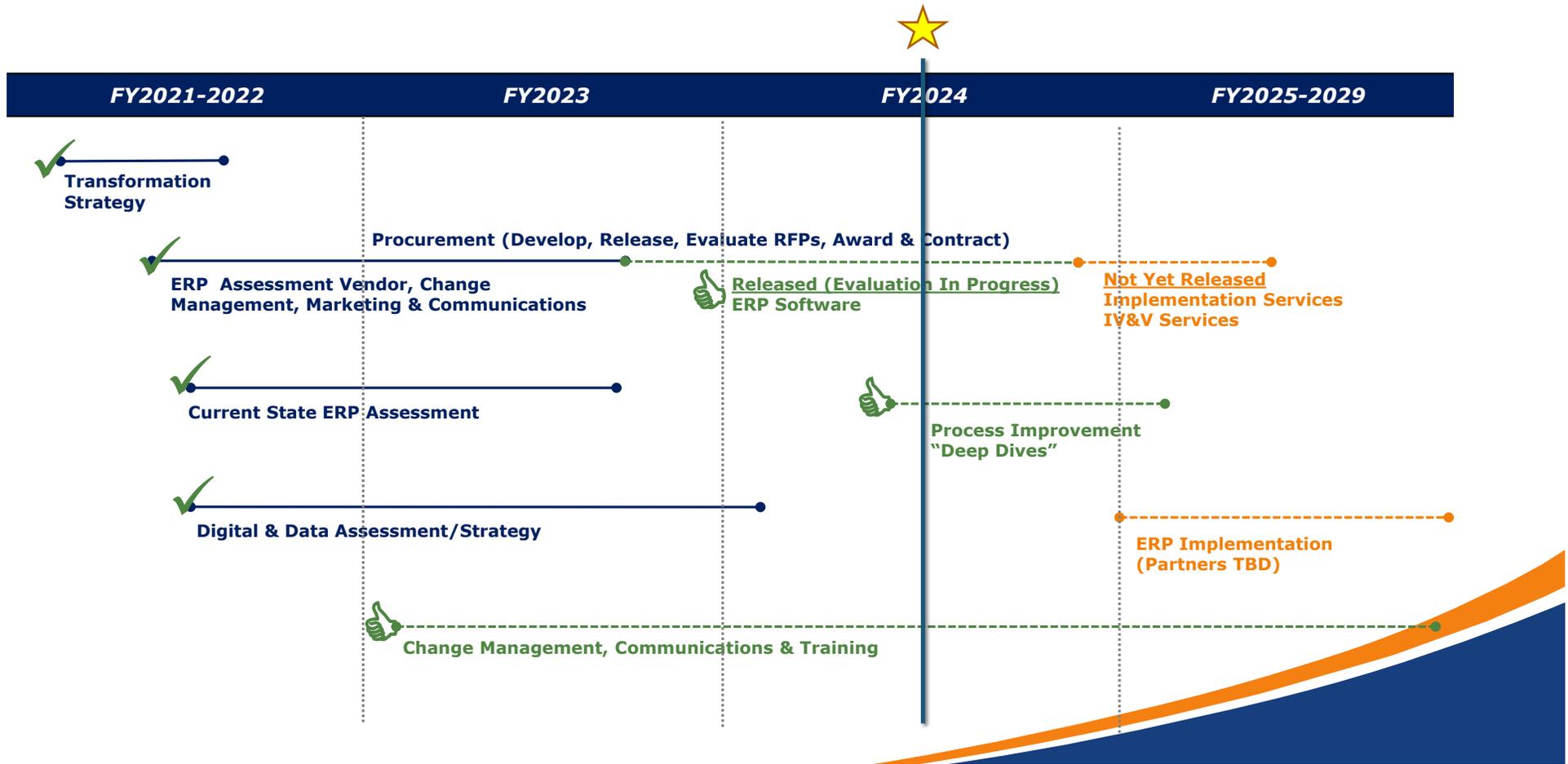
AGENDA

- **PROGRAM ACTIVITIES SUMMARY**
- **INFORMING OUR ESTIMATES**
- **PROGRAM FINANCIAL SUMMARY**

Significant progress across detailed planning activities has informed the development of a financial forecast to support our ERP Transformation Program.

PROGRAM ACTIVITIES SUMMARY

PROGRESS BY FISCAL YEAR





WHAT INFORMED THE NUMBERS

CURRENT & FUTURE STATE WORKSHOPS

SMEs Engaged



490

Workshops Held



187

Business Capability Reviewed



18

**2193**

Pain Points Captured

**1199**

Functional Requirements

**750+**

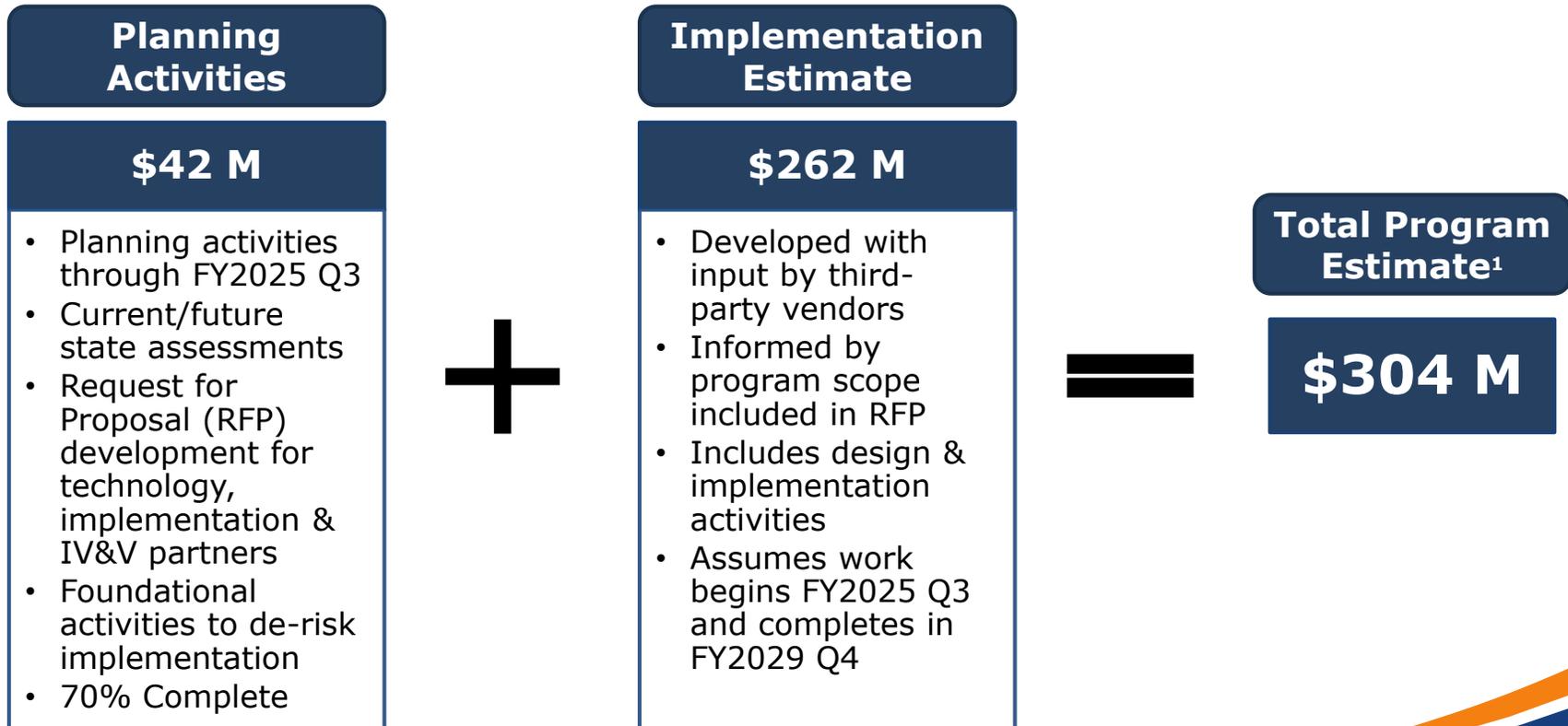
Workshop Hours

Two third-party vendor assessments completed to inform implementation approach, business case development and transition strategy.



PROGRAM FINANCIAL SUMMARY

PLANNING & IMPLEMENTATION PHASES

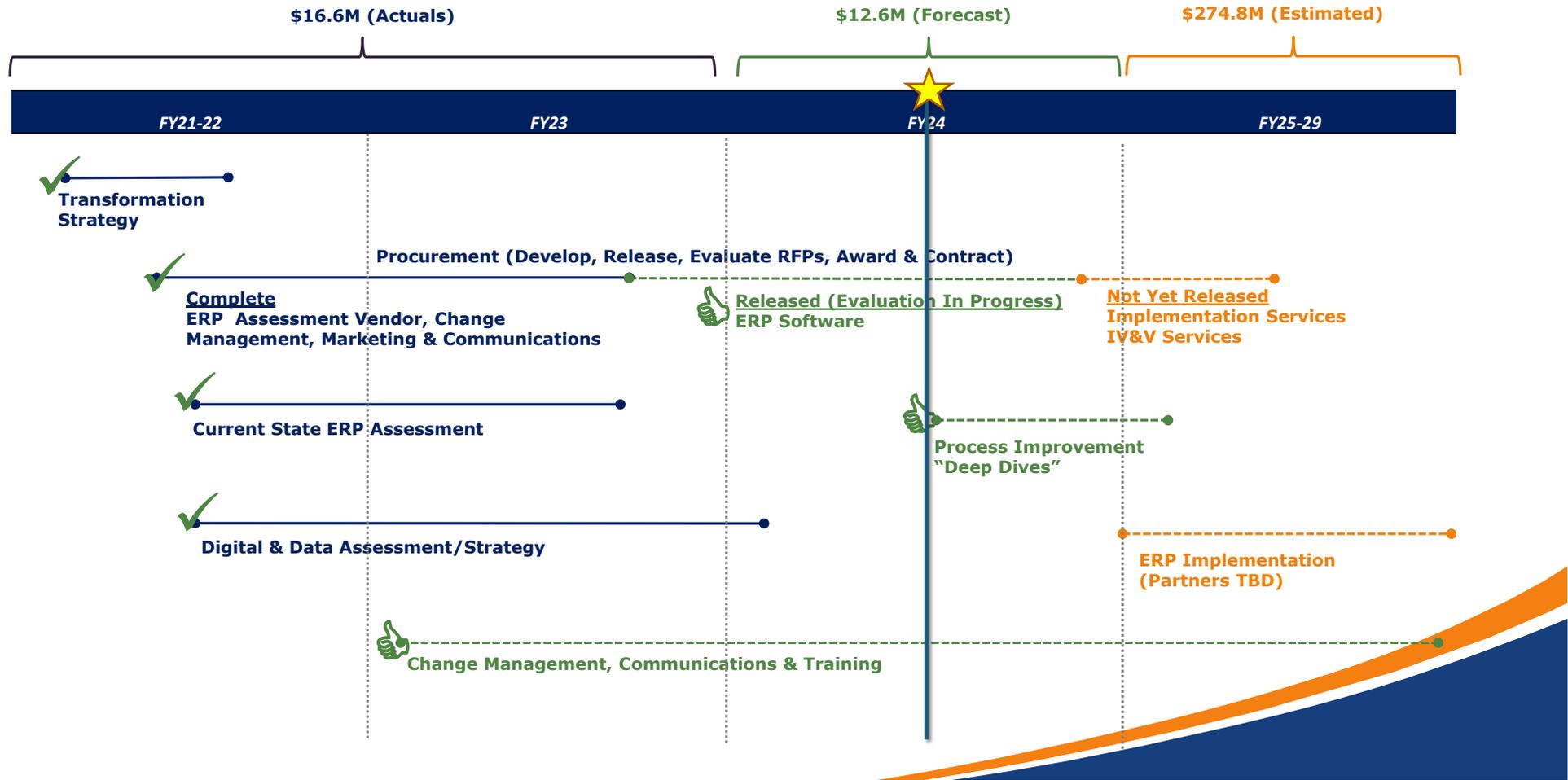


¹Total program estimate informed by current known variables and may be adjusted based on future organizational, technology and market conditions.



PROGRAM FINANCIAL SUMMARY

INVESTMENTS BY PROGRAM PHASE





Thank You

