

Workforce Management Labor Planning

Examples for optimizing Critical Planning, Earned Value and completing the Cycle

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Meet The Experts



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— ARCORO; WFM SUMMIT

Workforce Management

*Peace across Labor Planning;
Critical Planning, Earned Value, Completing the Cycle*

[40min]



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03. Aligning Earned Value & the Labor Plan [15min]

04. Stabilize WIPs, Forecasts, & the Workforce [5min]

05. Review/Q&A [5min]



— 01

Today's Intent & Workforce Management

[5min]



Today's Key Takeaways

Critical & accurate workforce planning made feasible.

Earned Value processes continuously tied back to the labor plan.

Stabilize WIPs, Forecasts, & the Workforce

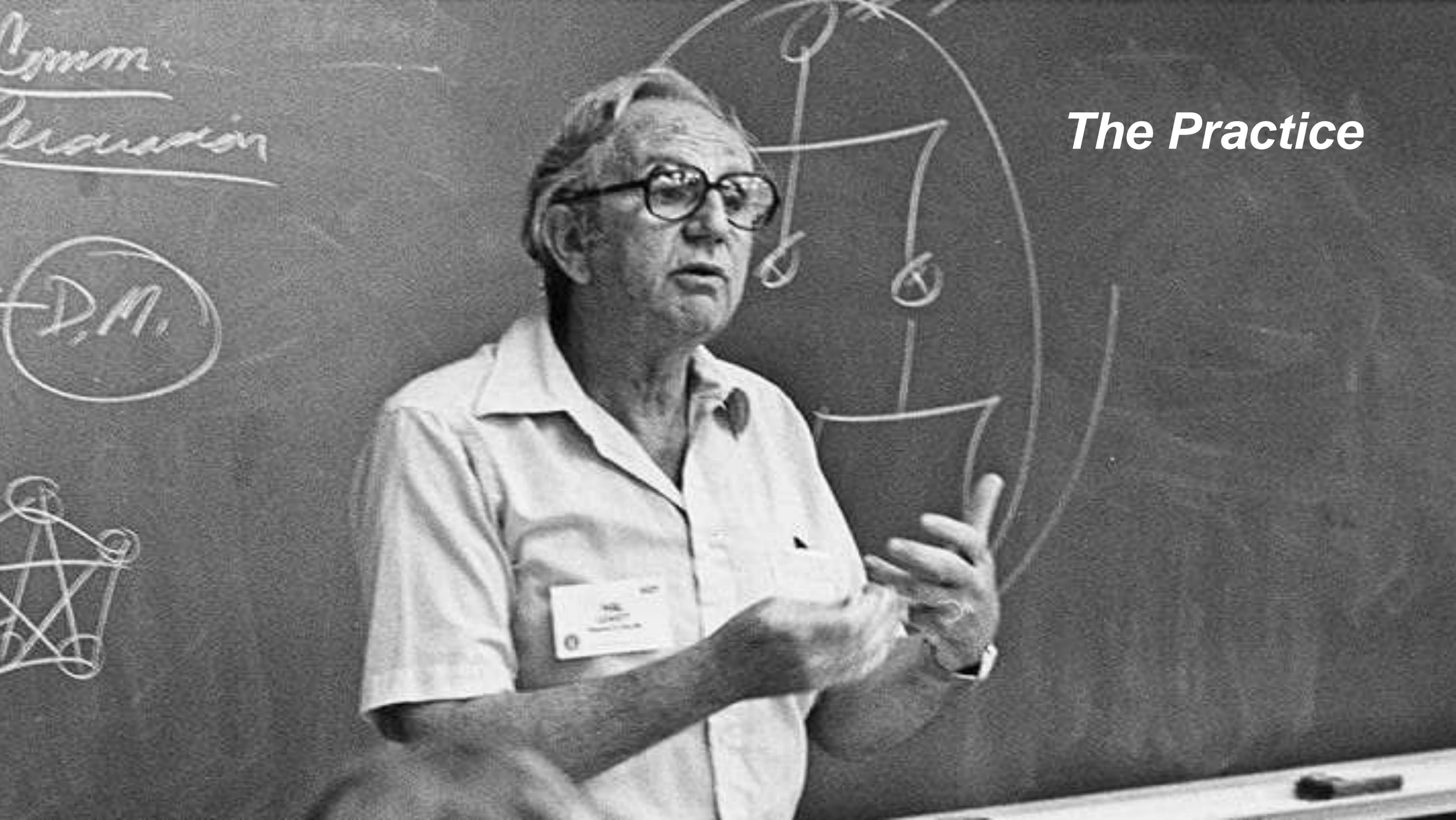


What is WFM?

A Complex Ever-Changing Problem



The Practice



WFM is a Business Practice

People

Who should be involved

Process

How it should be done

Technology

Enable people, support process



People, Process, Technology (P.P.T.) has been the framework for business practices.

[EST 1964; Harold Leavitt]

PEOPLE

Who should be involved.

[HINDERED]

PROCESS

What should they be doing and when.

[OBSTRUCTED]

TECHNOLOGY

Tool that enables people and supports the process.

[WAS MISSING]



A Better Way

TAGS

- FORK** Forklift
- CMCDL** Commercial Driver License
- OSH30** OSHA 30
- OSH10** OSHA 10
- BACK** Background Check

ATTACHMENTS

Upload Files

harold-le

QR CODE

Kansas City

Batch Search Projects Sort Projects By Name

Search Resources

Available Assigned Off

0 Filters Applied

Rapid Assign

Sort Cards By Job Title

SHOWING: 2

- AR** Alexander Robinson Journeyman
- EM** Ethan Martin Apprentice LVL 3

461 Ocean Boulevard

Project Number: 2

(2)

- Eric Clapton** 11/16/20 - 7/23/21
- Brian Witt** 2/8/21 - 7/23/21

(5) Large Conduit

- CR** Christopher Rogers 7/16/20 - 7/23/21

BLDG 1

- MR** Madelyn Ross 9/29/20 - 7/23/21
- EG** Emily Garcia 1/21/21 - 7/23/21

BLDG 2

- Jack Sparrow** 11/30/20 - 7/23/21
- Carter Gonzalez** 6/10/21 - 6/22/21

(0) INSTALL [29-31 MAR2021]

1-Kansas City

Home People Projects Assignments / Gantt Requests Time Off Communications Dashboards Reports

NEW Projects People Search Projects Configure

Status Active

	February	March			April			
	Feb 13	Feb 20	Feb 27	Mar 6	Mar 13	Mar 20	Mar 27	Apr 3
[AM16z24] Amtrak Station (Active)								
Assignments - Cost (\$126K)	8,680	9,800	9,800	9,800	9,800	9,800	9,800	9,800
Bob Schwartz								
Ryan Wolkey								
John Deere								
Requests - Cost (\$44.8K)	0	0	528	2,640	2,640	2,640	2,640	4,560
Foreman								
FLOOR 1								
Journeyman								
Apprentice - 3rd Yr								
Journeyman								
[KC2020-001] Arrowhead Stadium (Active)								
Assignments - Cost (\$110K)	24,940	21,340	17,840	17,840	17,840	9,840	0	0
Zoey Baratheon								
Josiah Barnes								
Ellie Bailey								
Gary Fuchs								
Sarah Covington								
Ethan Castle								
Pat McGoniggle								
Jon Jones								
OFFICE								
George Ruth								
Joseph Jackson								
FIELD								
Christian Ramirez								
Christopher Rogers								
[KC2021-002] Kauffman Stadium, (Active)								



WFM Categories

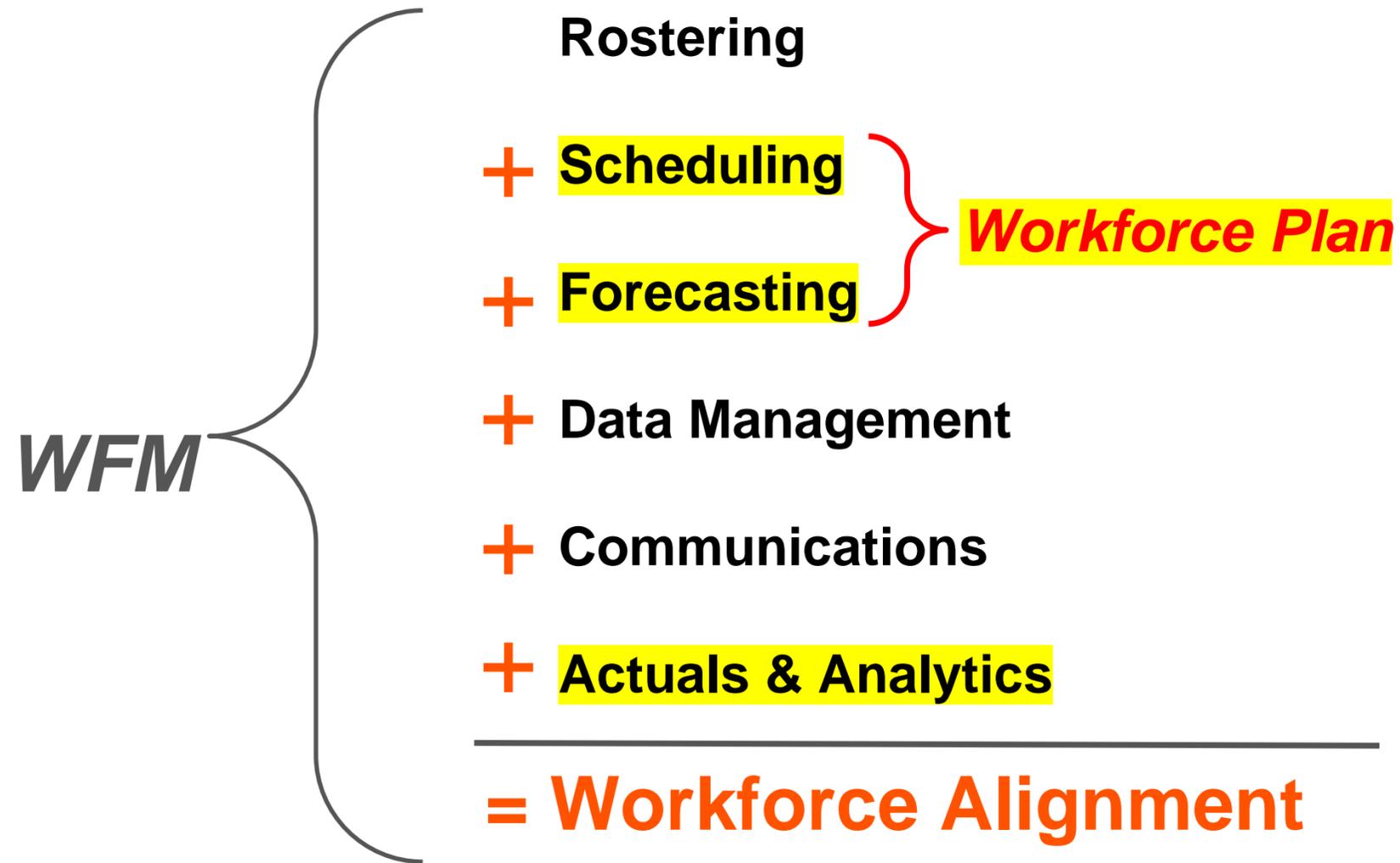
WFM

- Rostering
- + Scheduling
- + Forecasting
- + Data Management
- + Communications
- + Actuals & Analytics

= **Workforce Alignment**



WFM Categories



— 02

The Workforce Plan; *Feasible & Critical*

[10min]



**Workforce Planning for every person across
every project is critical...**

but typically unfeasible...

without the proper tools...



— THE WORKFORCE PLAN; *FEASIBLE & CRITICAL*

Workforce Planning is critical.

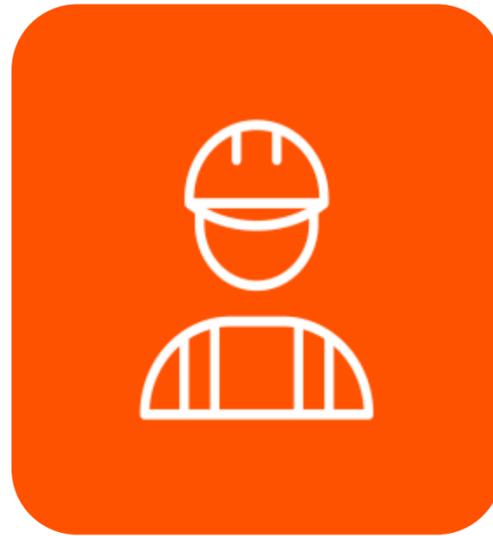
Despite ever changing conditions and Murphy's Law, we should plan every person, every project, every time...





Define: Construction Workforce Plan

*...and why so
unfeasible...*



Construction Workforce Plan:

a projection of what your people and your equipment are going to do to complete a construction project or projects.

PROJECT A

PROJECT SCHEDULE

WORKFORCE PLAN

STAFF PLAN

Resource 1



Resource 2



Resource 3



LABOR PLAN

Resource 1



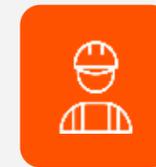
Resource 2



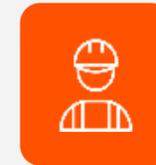
Resource 3



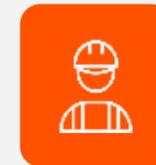
Resource 4



Resource 5



Resource 6



EQUIPMENT PLAN

Resource 1



Resource 2



Resource 3



Resource 4



Resource 5

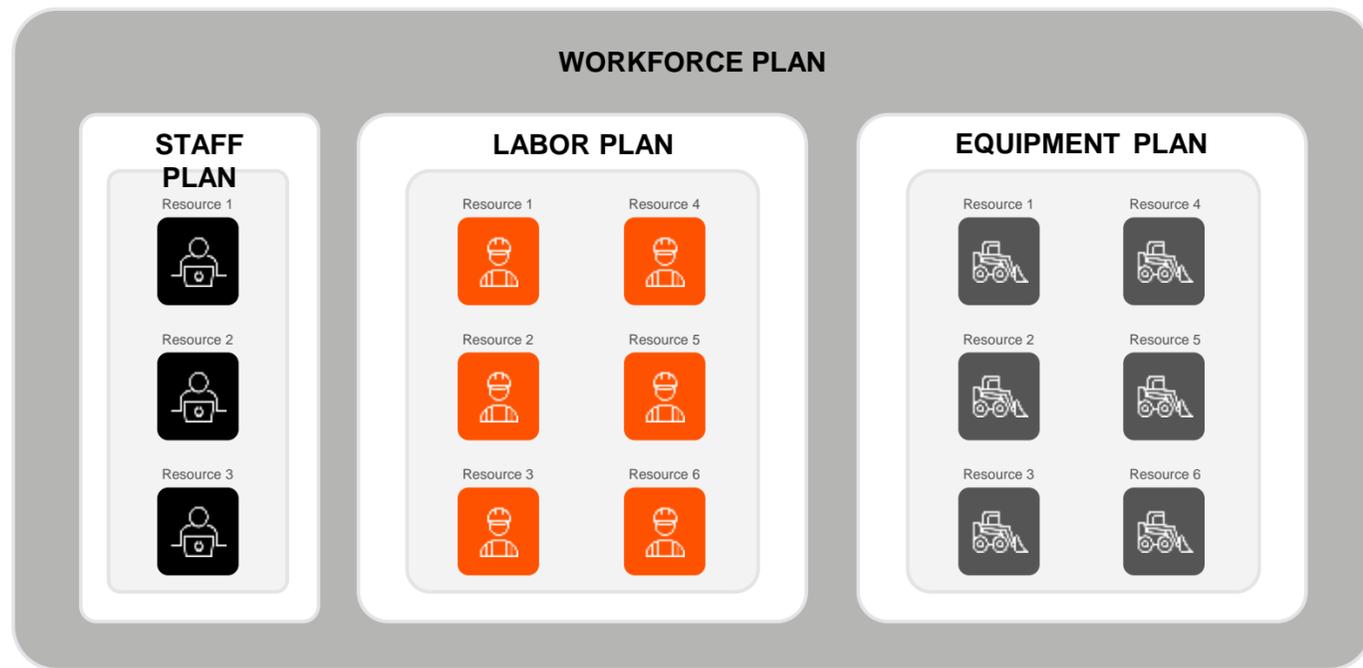


Resource 6

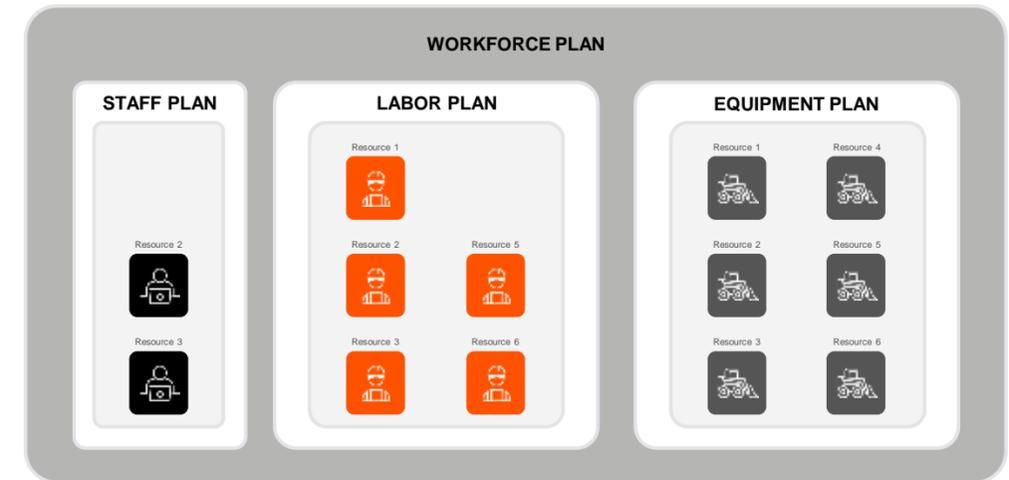


— THE WORKFORCE PLAN; *FEASIBLE & CRITICAL*

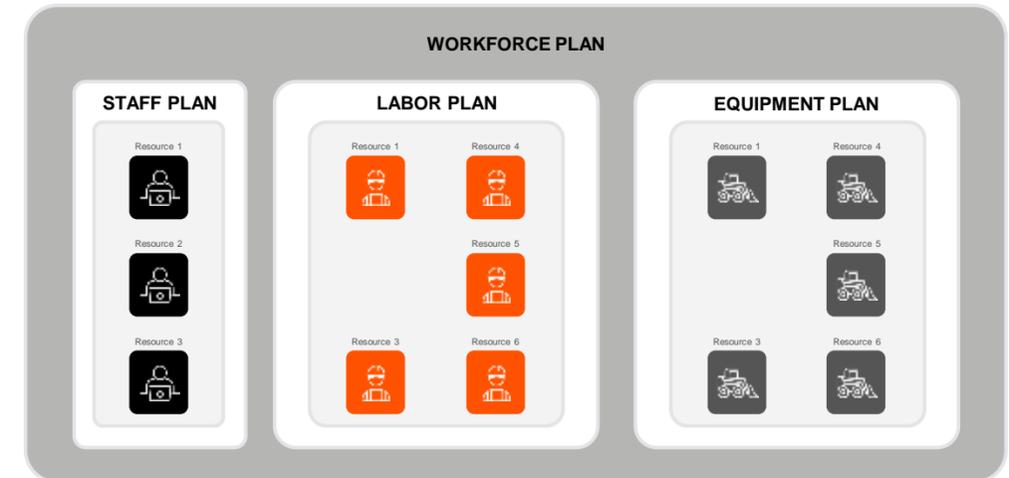
PROJECT A PROJECT SCHEDULE



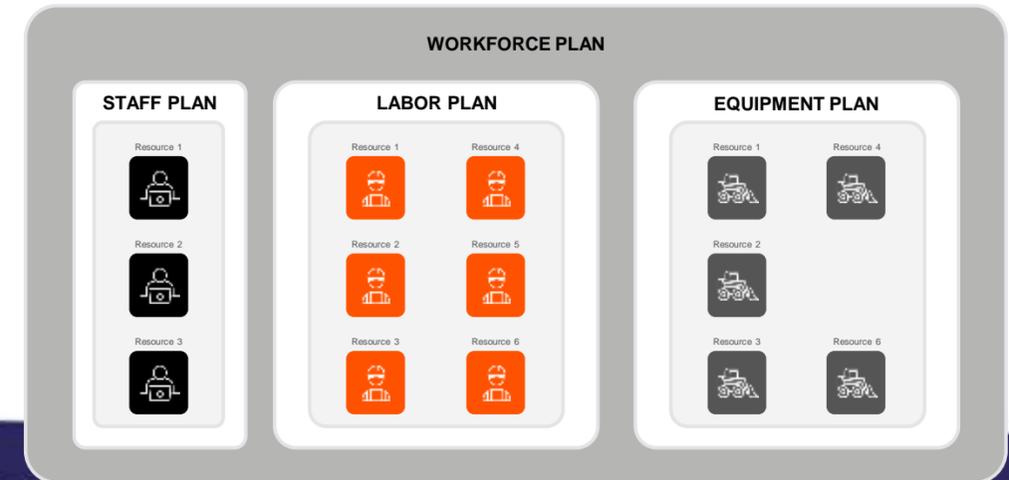
PROJECT B PROJECT SCHEDULE



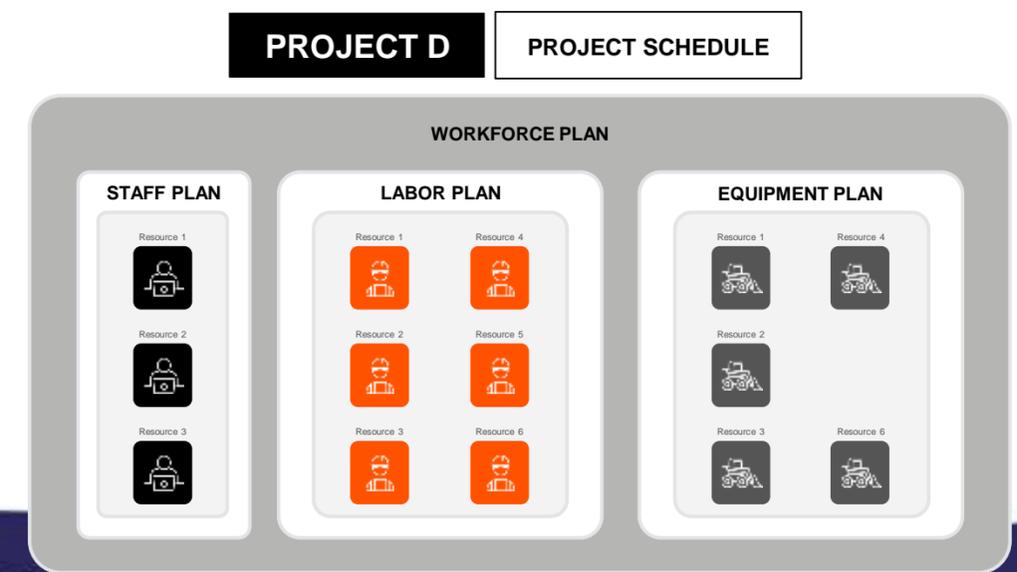
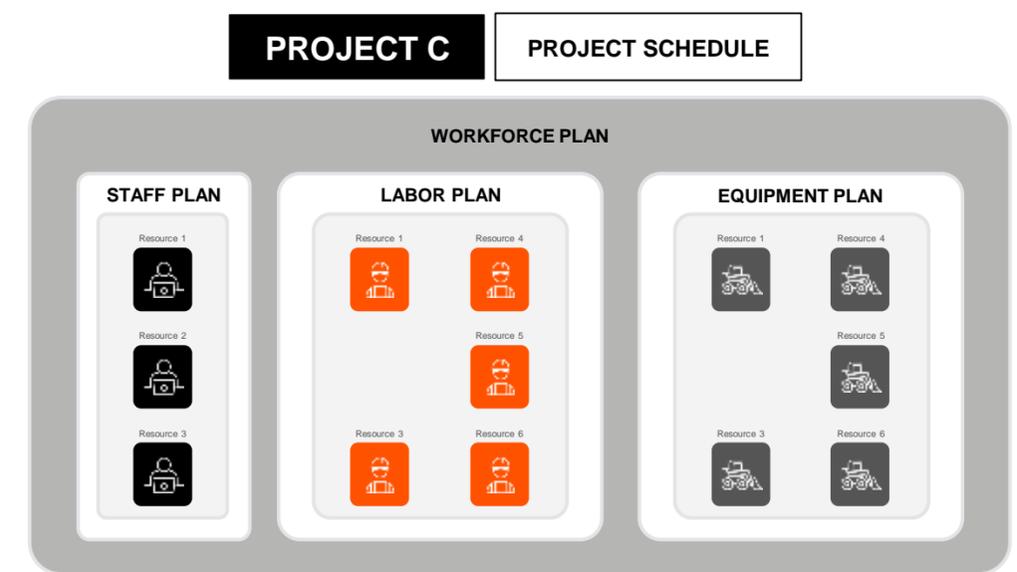
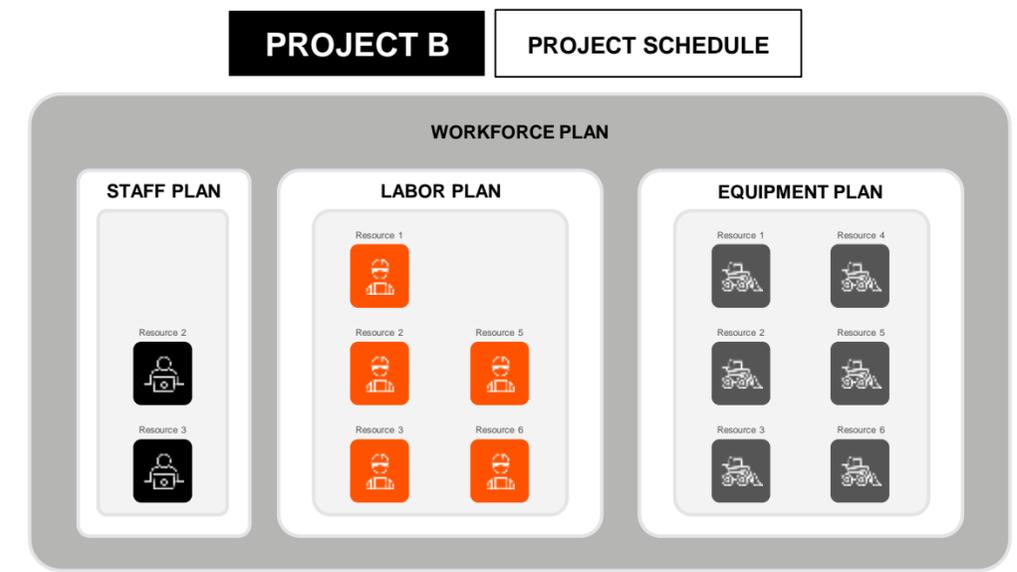
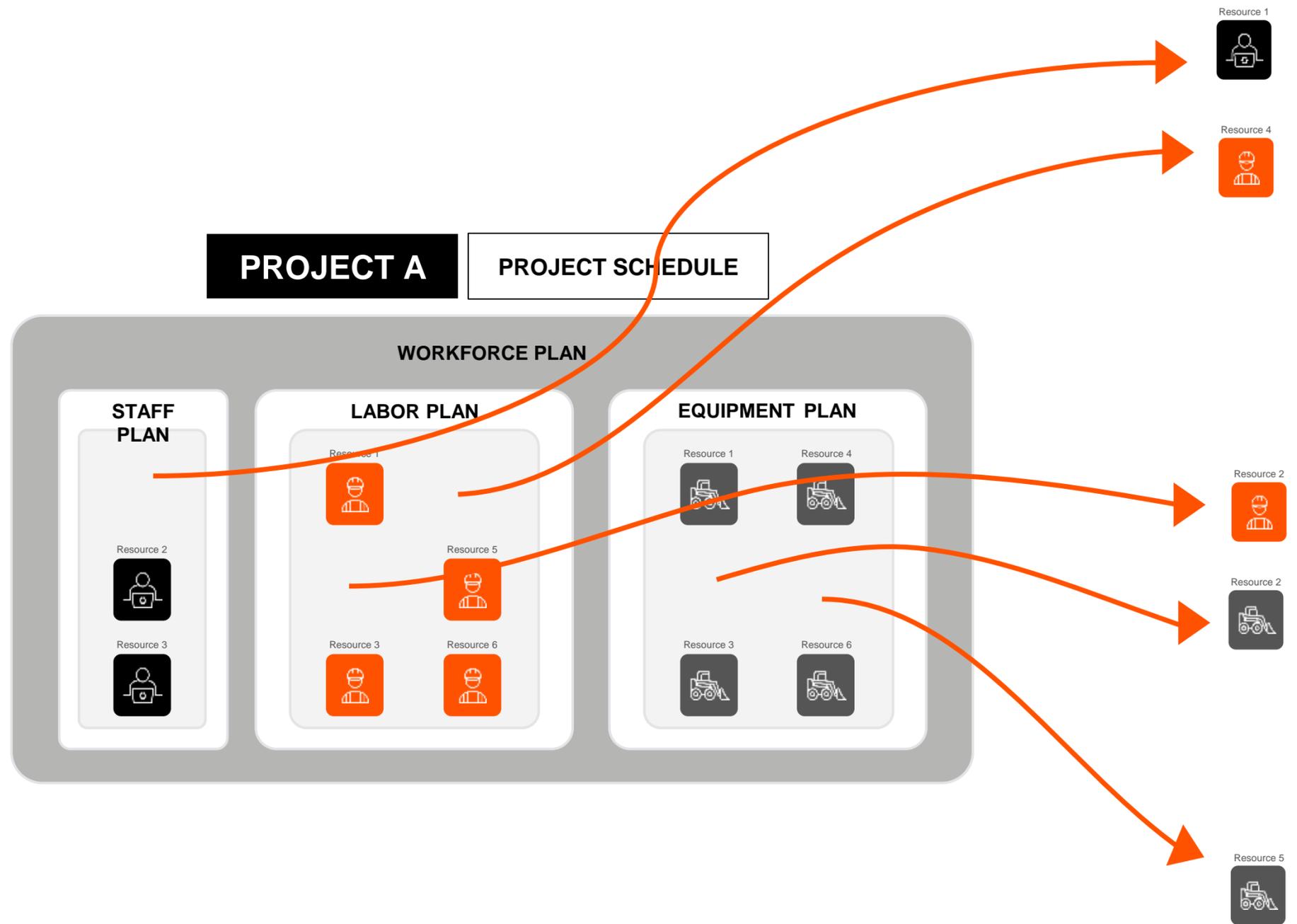
PROJECT C PROJECT SCHEDULE



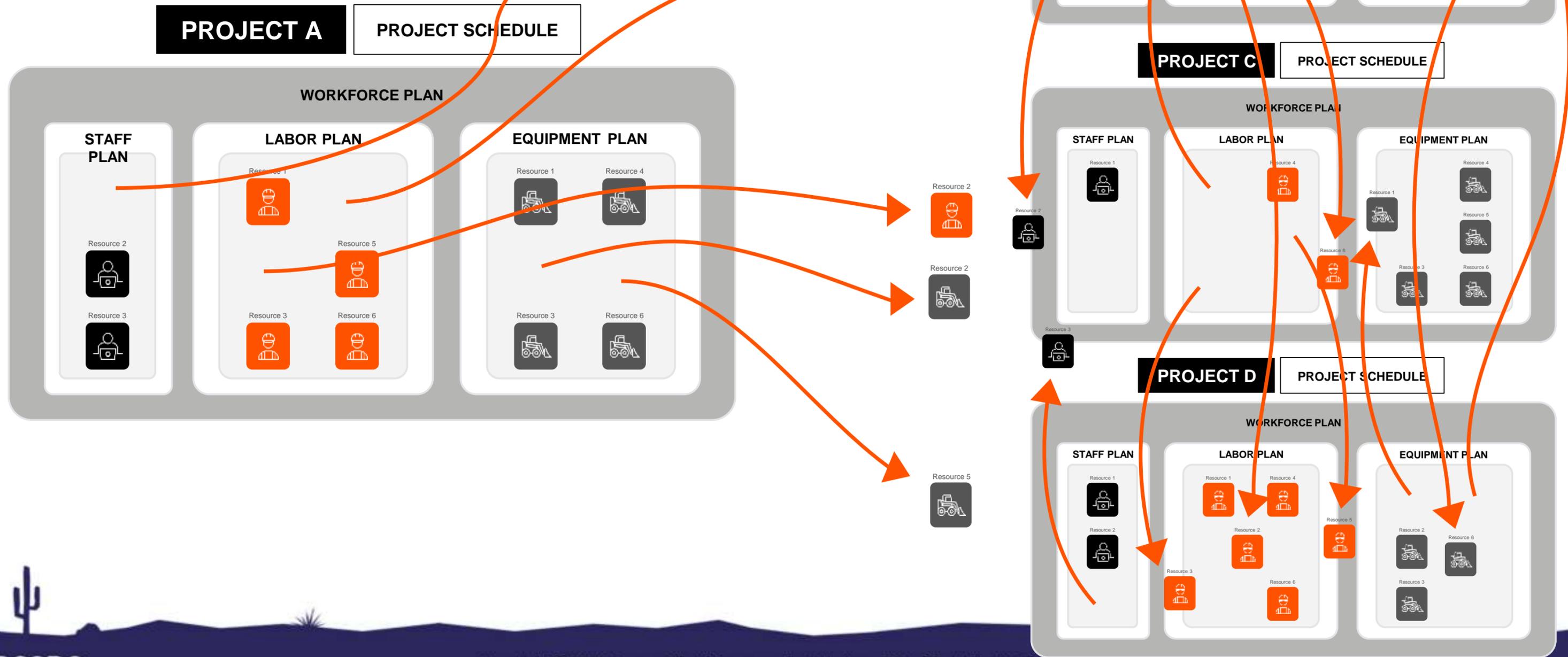
PROJECT D PROJECT SCHEDULE



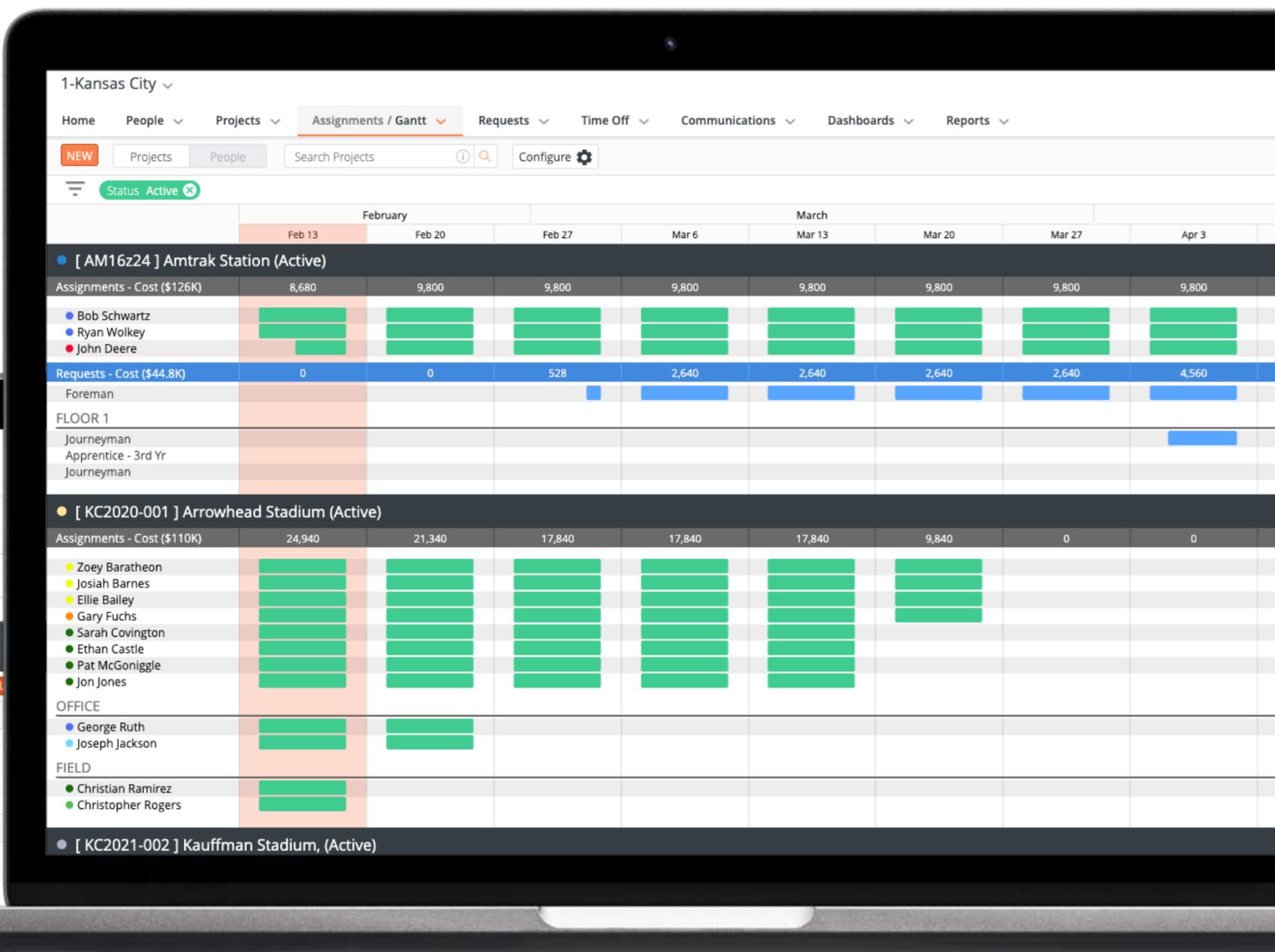
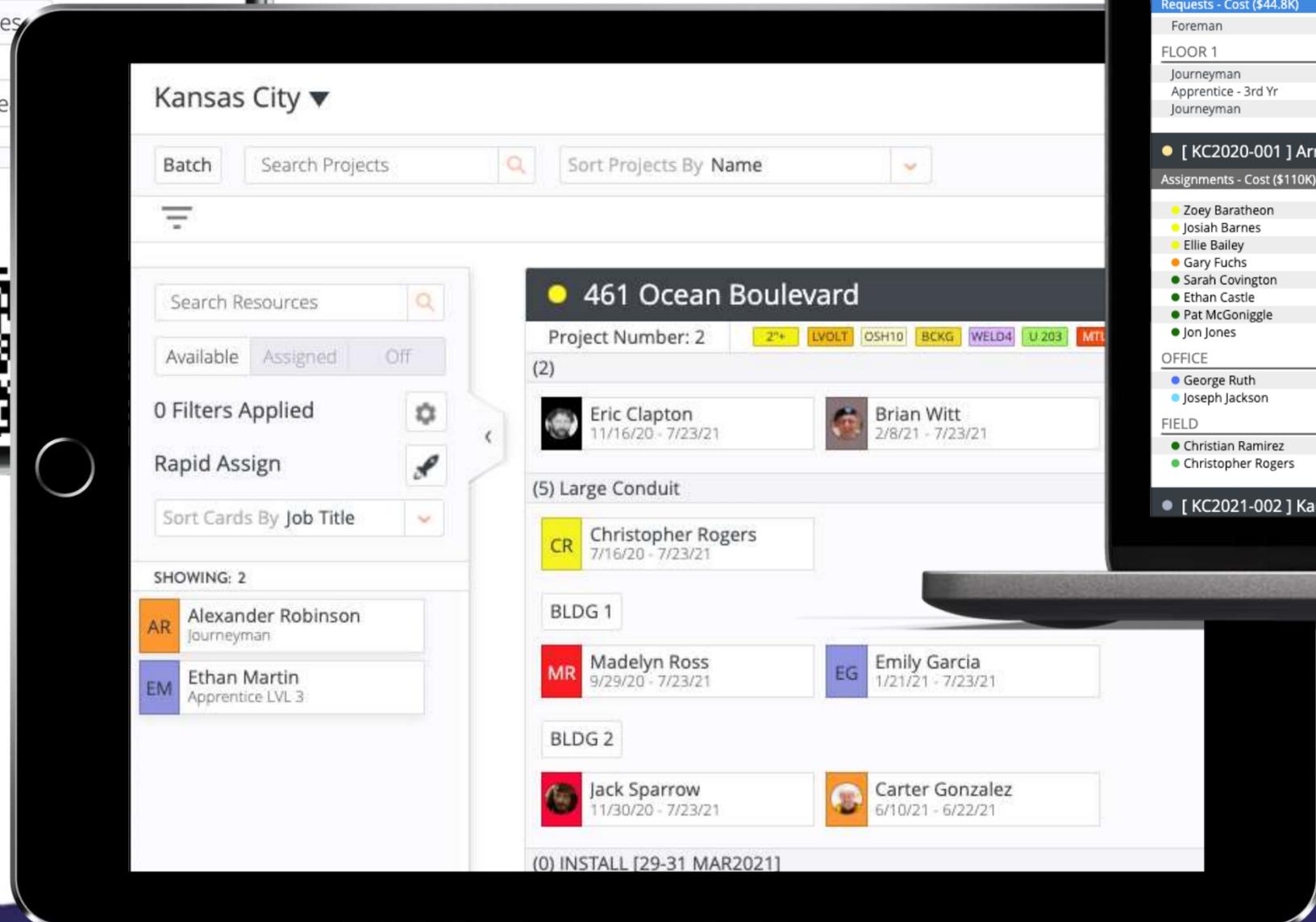
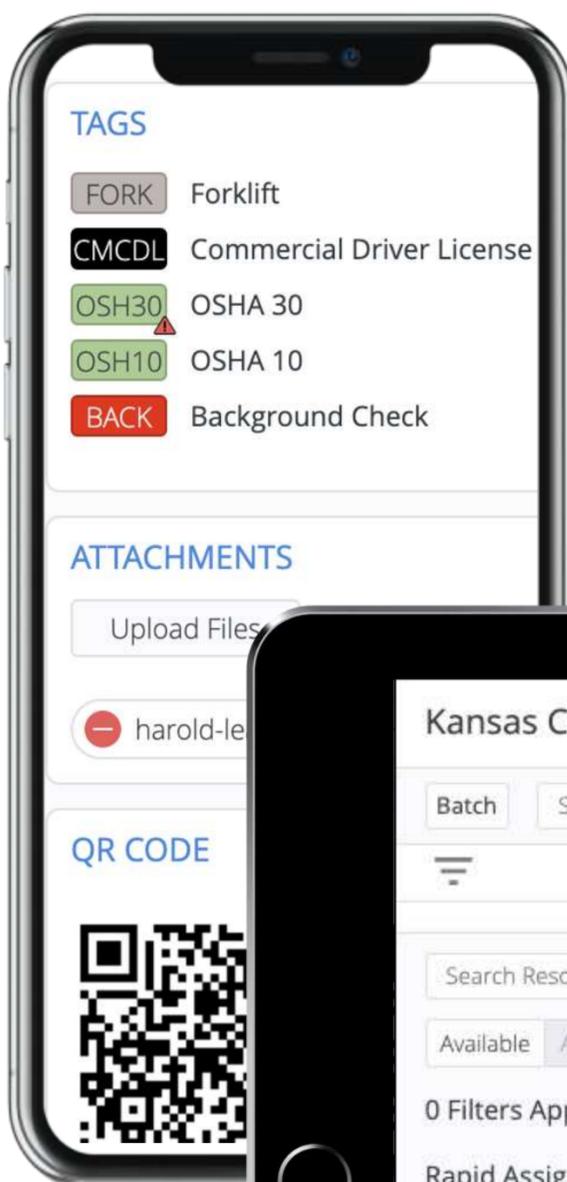
— THE WORKFORCE PLAN; *FEASIBLE & CRITICAL*



— THE WORKFORCE PLAN; *FEASIBLE & CRITICAL*

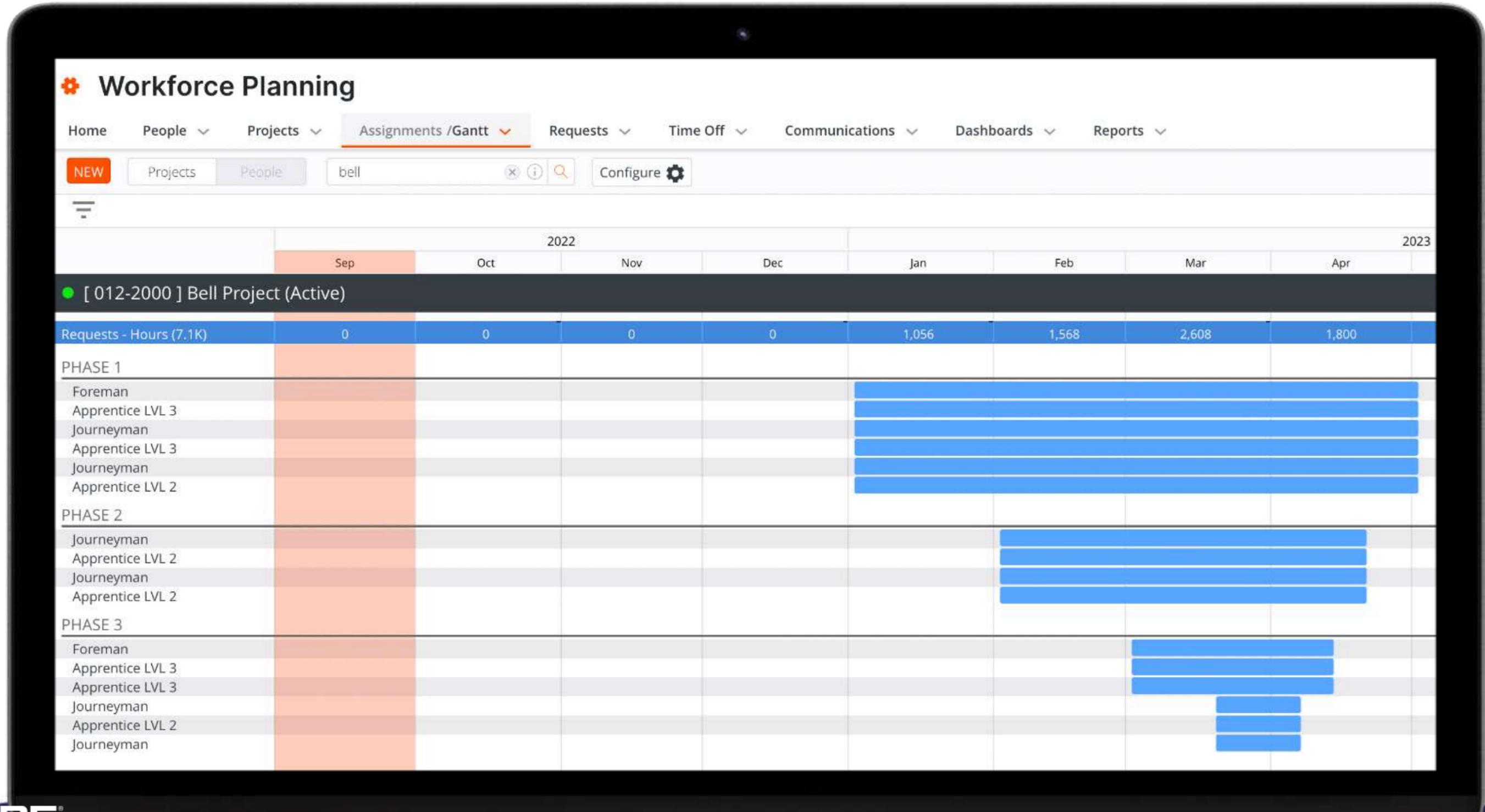


A Better Way



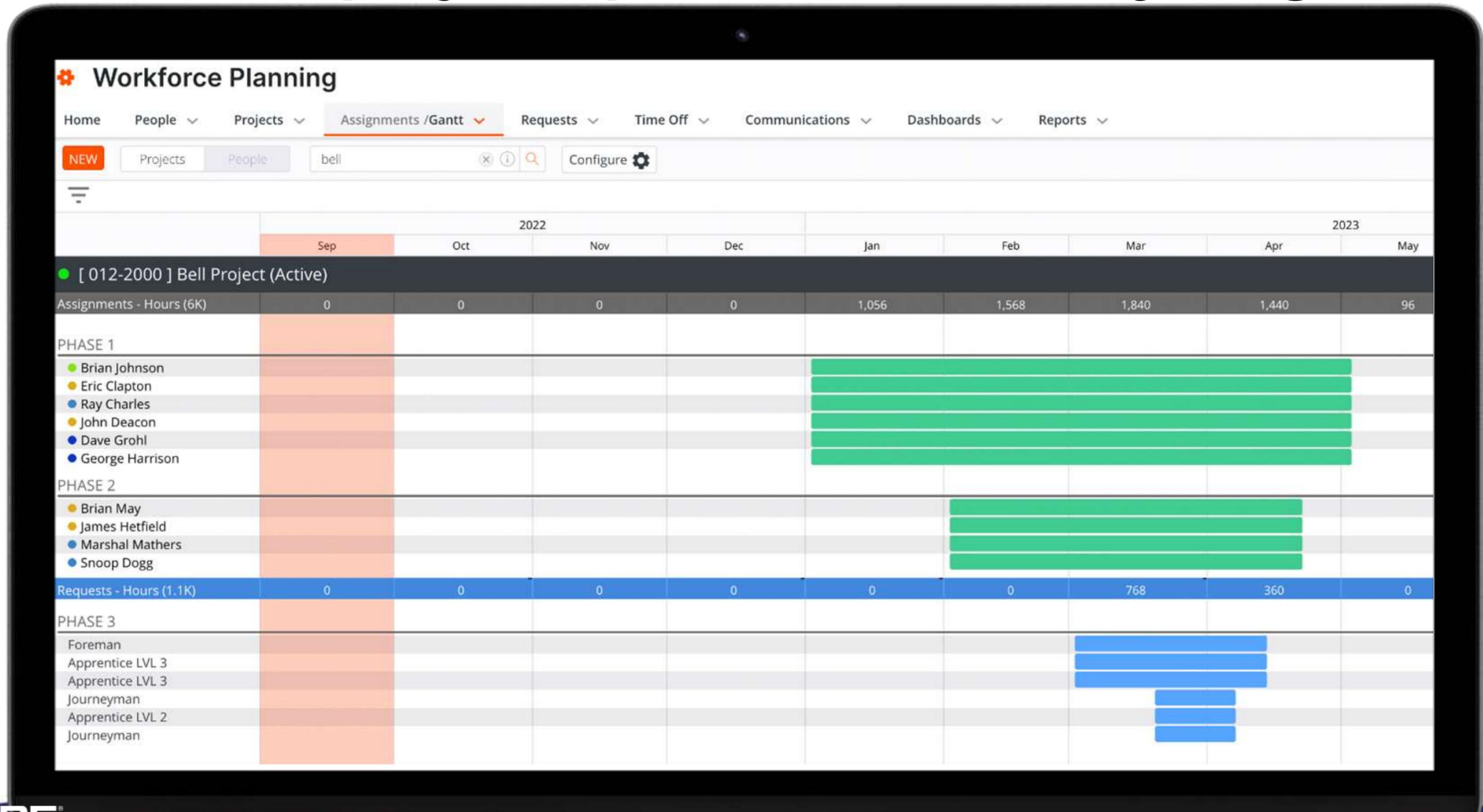
— THE WORKFORCE PLAN; *FEASIBLE & CRITICAL*

All our projects planned...



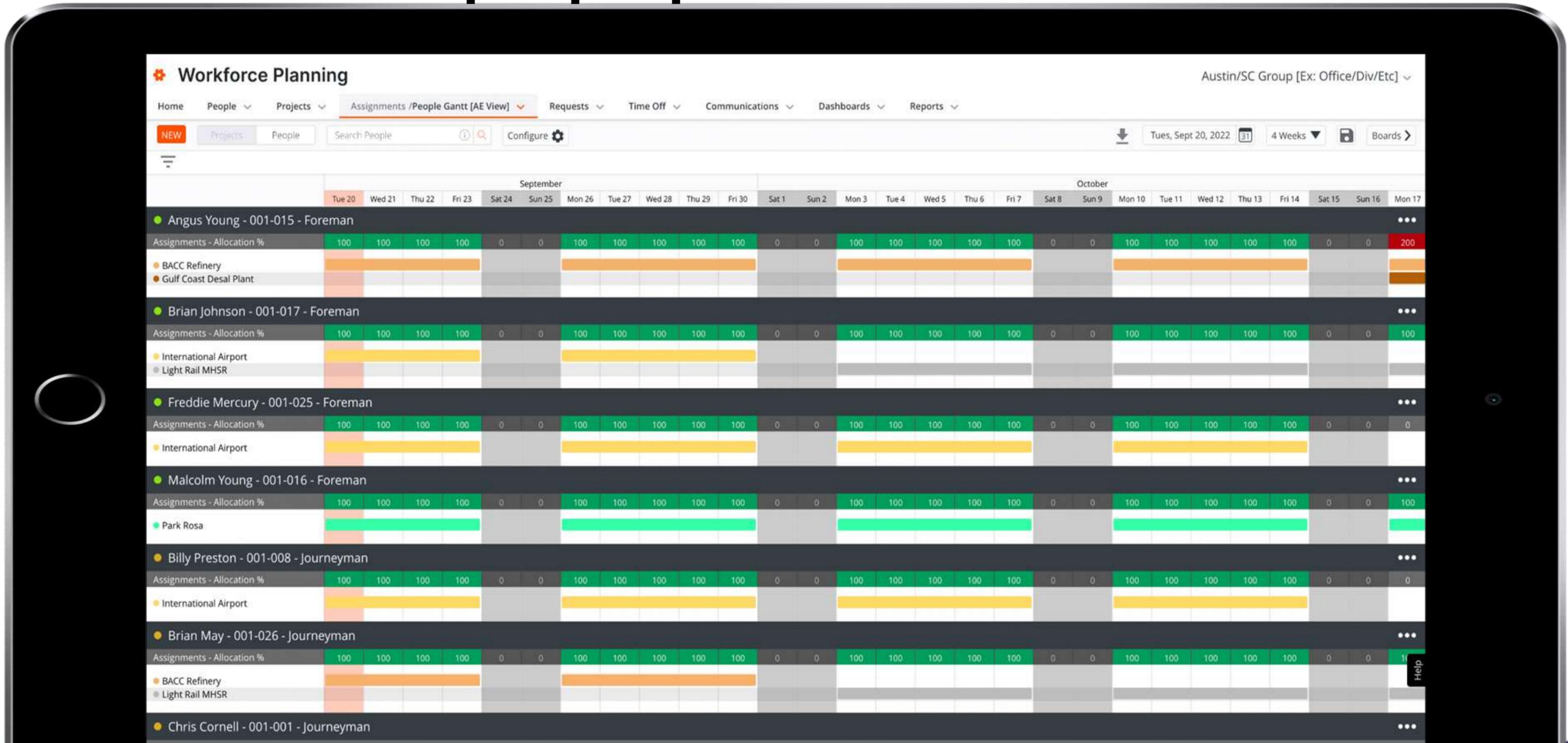
— THE WORKFORCE PLAN; FEASIBLE & CRITICAL

All our projects planned... at every stage...



— THE WORKFORCE PLAN; FEASIBLE & CRITICAL

All our people planned... from field...



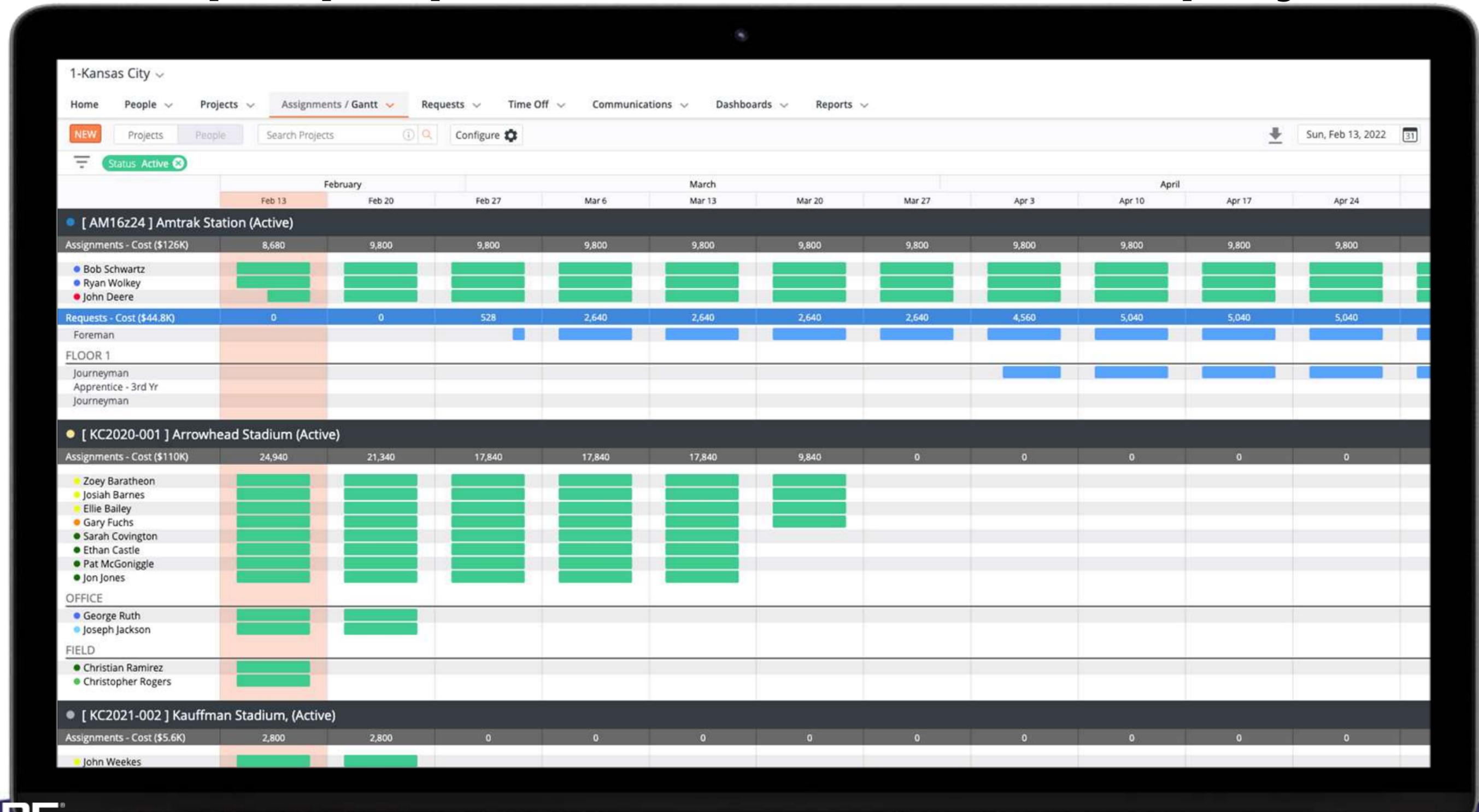
— THE WORKFORCE PLAN; *FEASIBLE & CRITICAL*

All our people planned... to office...



— THE WORKFORCE PLAN; *FEASIBLE & CRITICAL*

All our people planned... across all our projects...



**Other areas of the business
become beneficiaries of a
standardized WFM practice...**

**We can make the transition to
a team-oriented approach.**

Visibility

Accountability

Data



— 03

Aligning Earned Value & the Labor Plan

[15min]

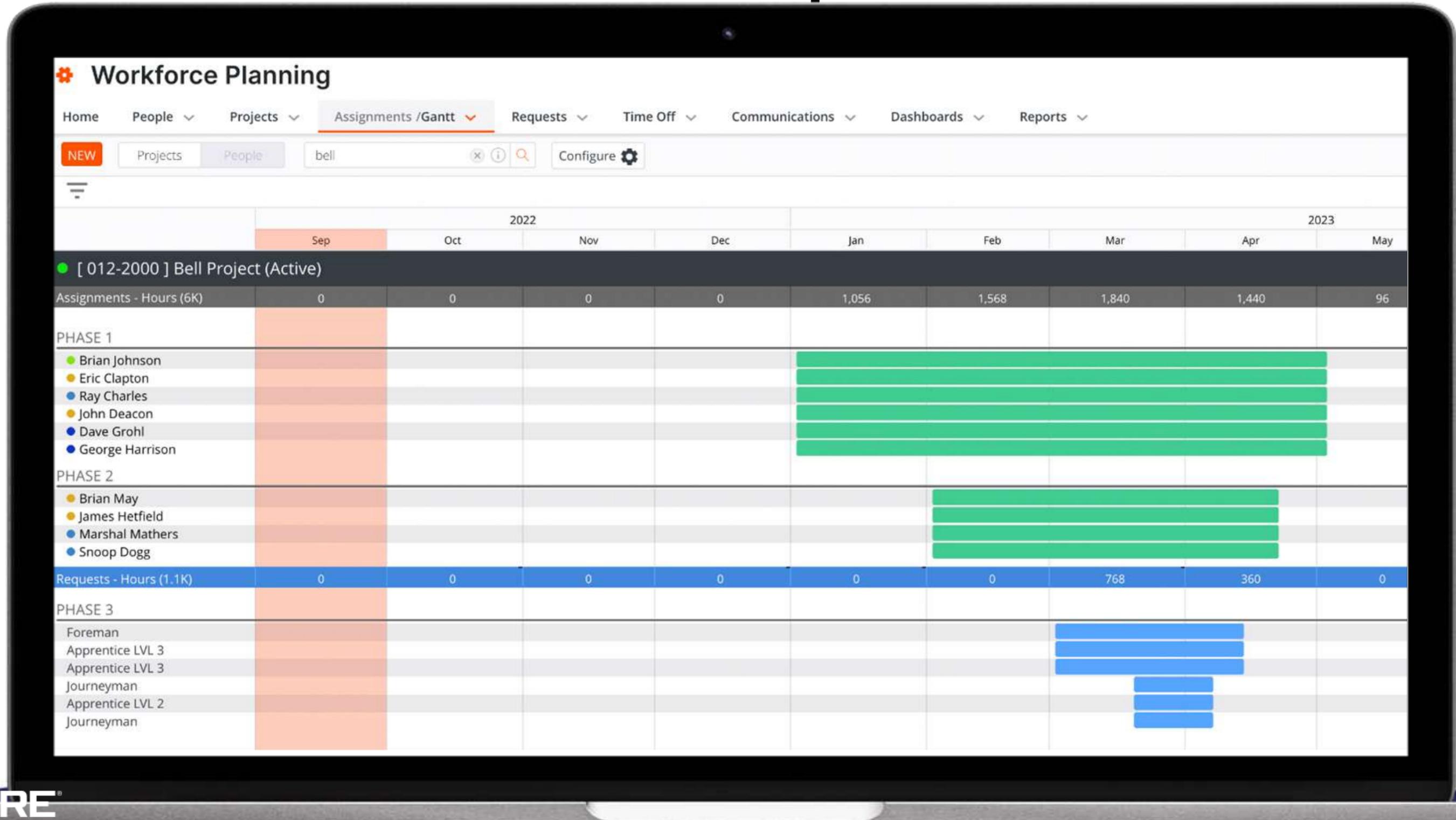


Earned Value Analysis (EVA):

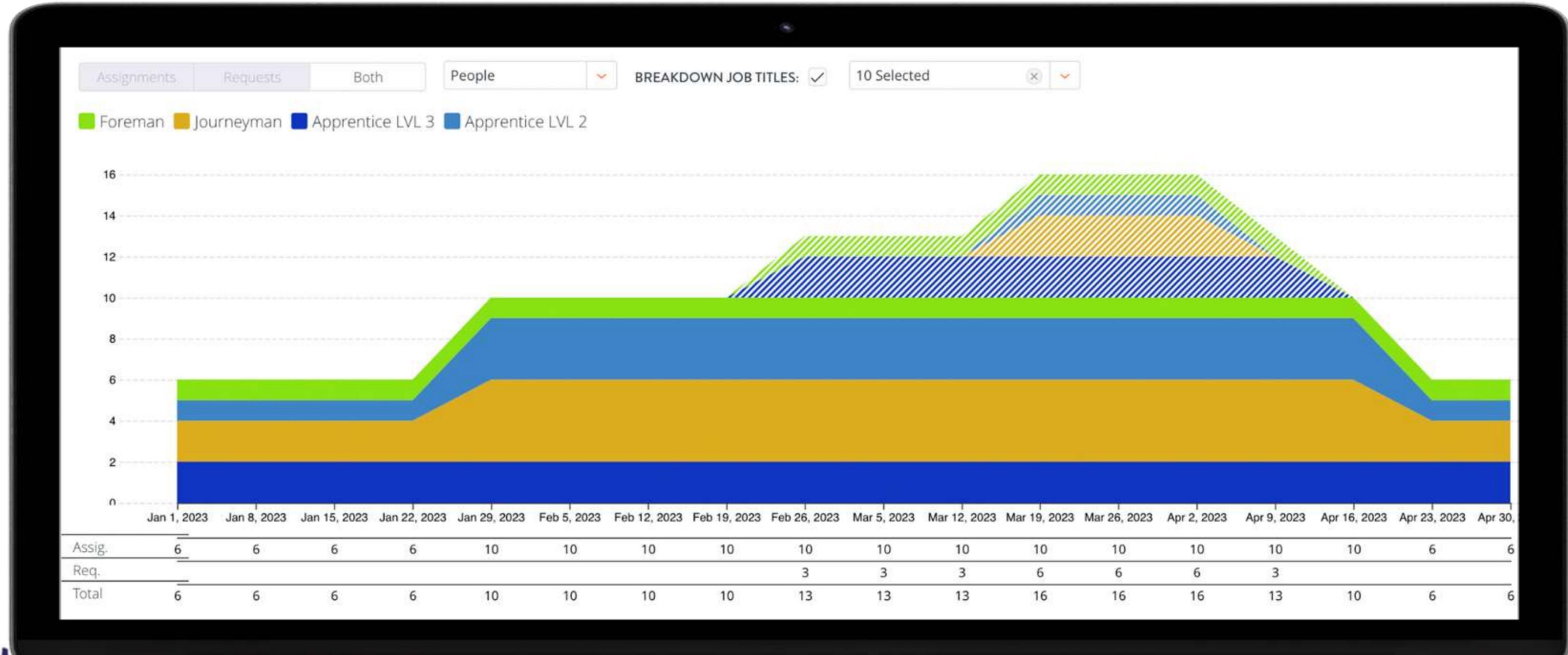
An industry standard method of measuring a project's progress at any given point in time. Compares the planned amount of work with what has actually been completed to determine if the cost, schedule, and work accomplished are progressing in accordance with the plan. **EVA provides a measurement of productivity and a basis for course correction during a project.**

EVA tells us:
“Are we trending ahead, behind, or on-track of budget?”

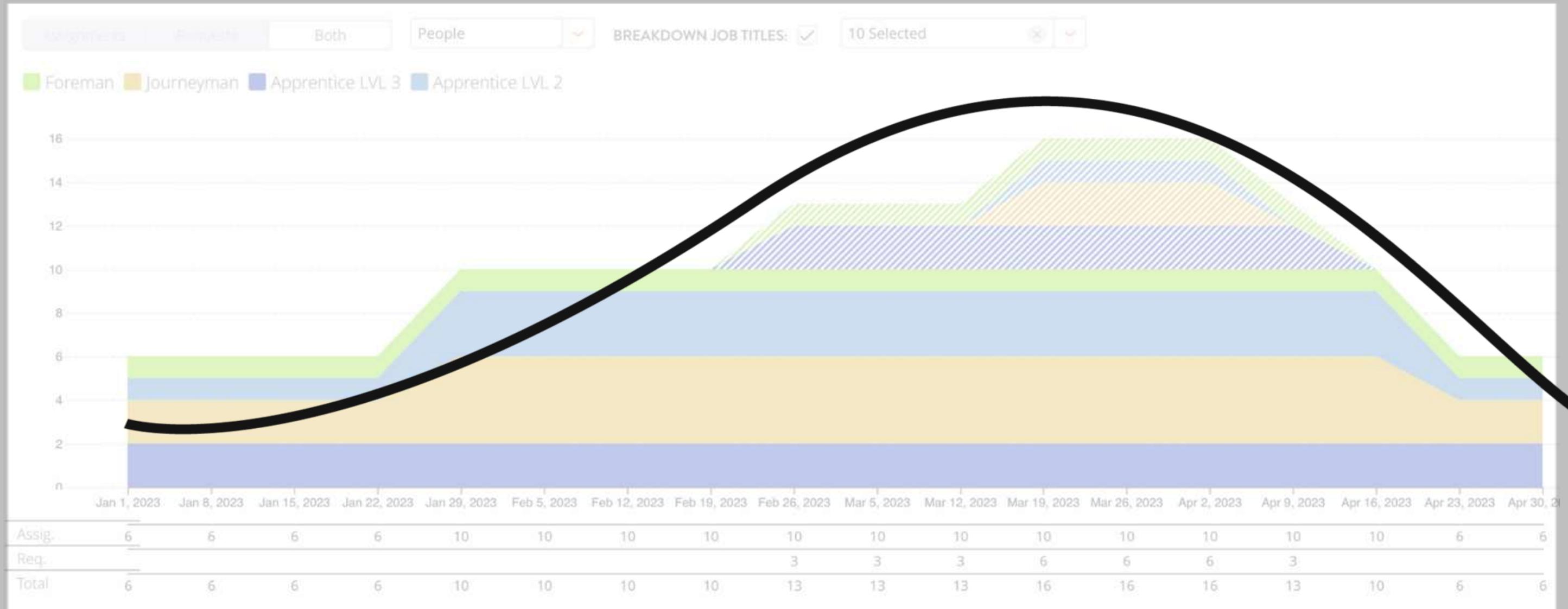
Our labor plan...



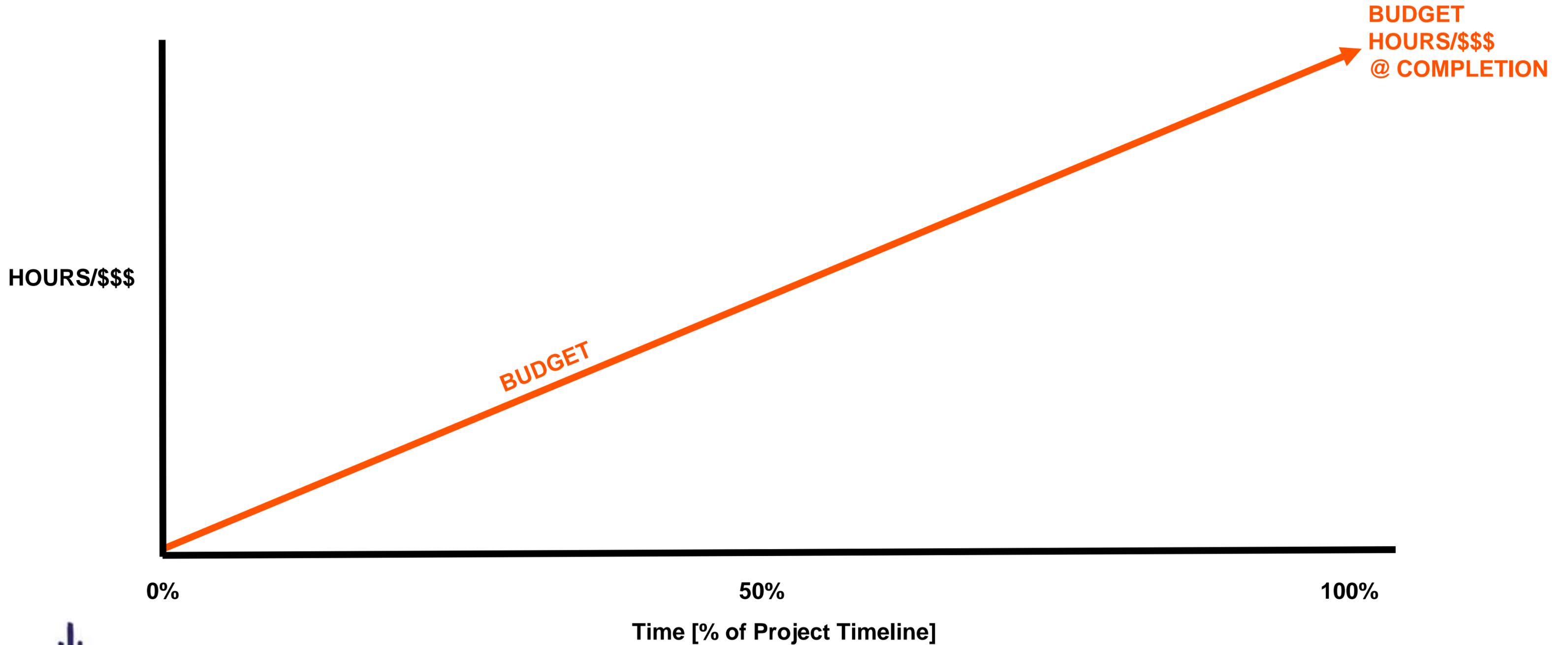
Our labor plan...



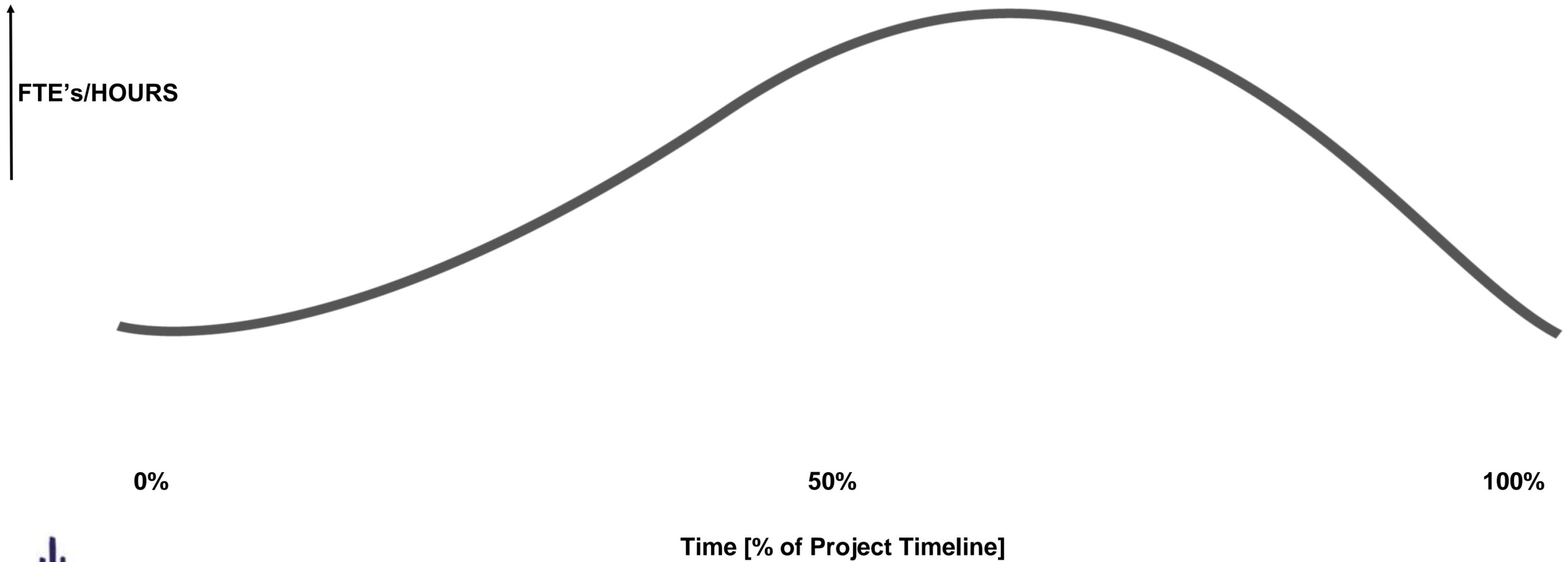
Our labor plan...



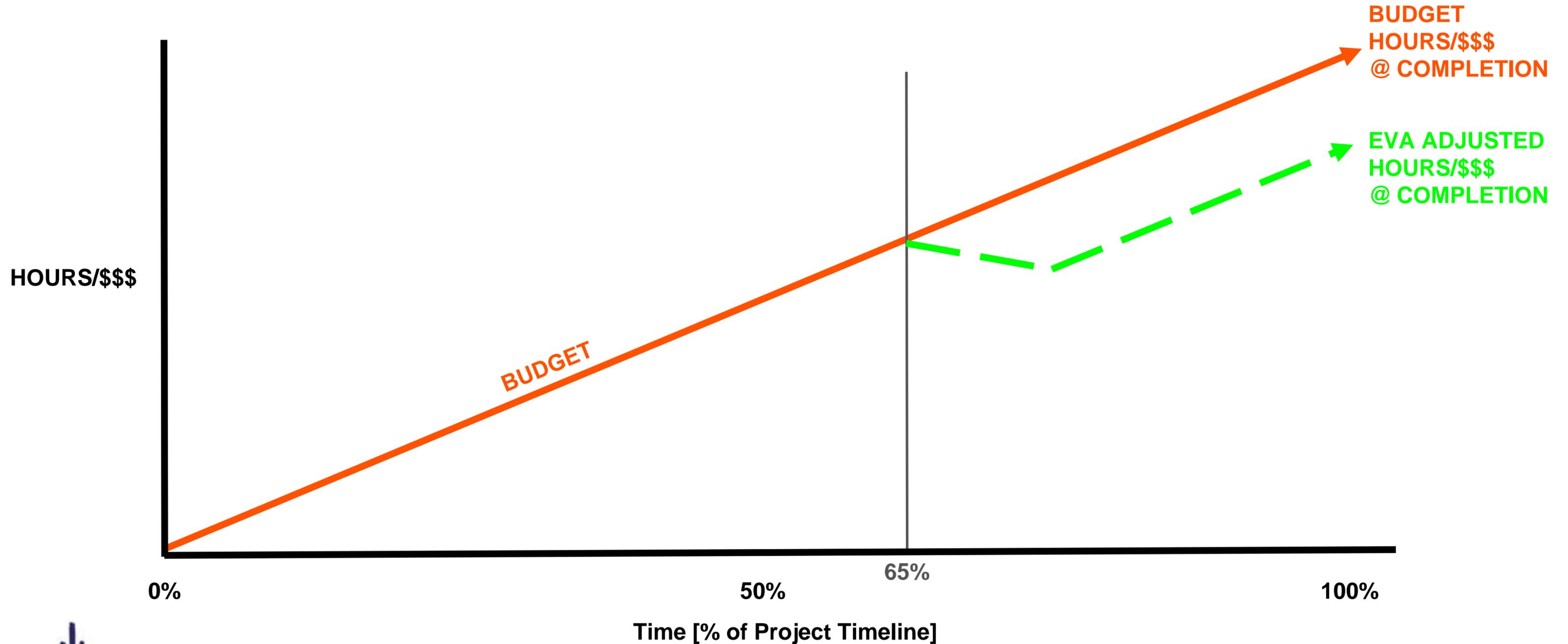
Our Earned Value plan...



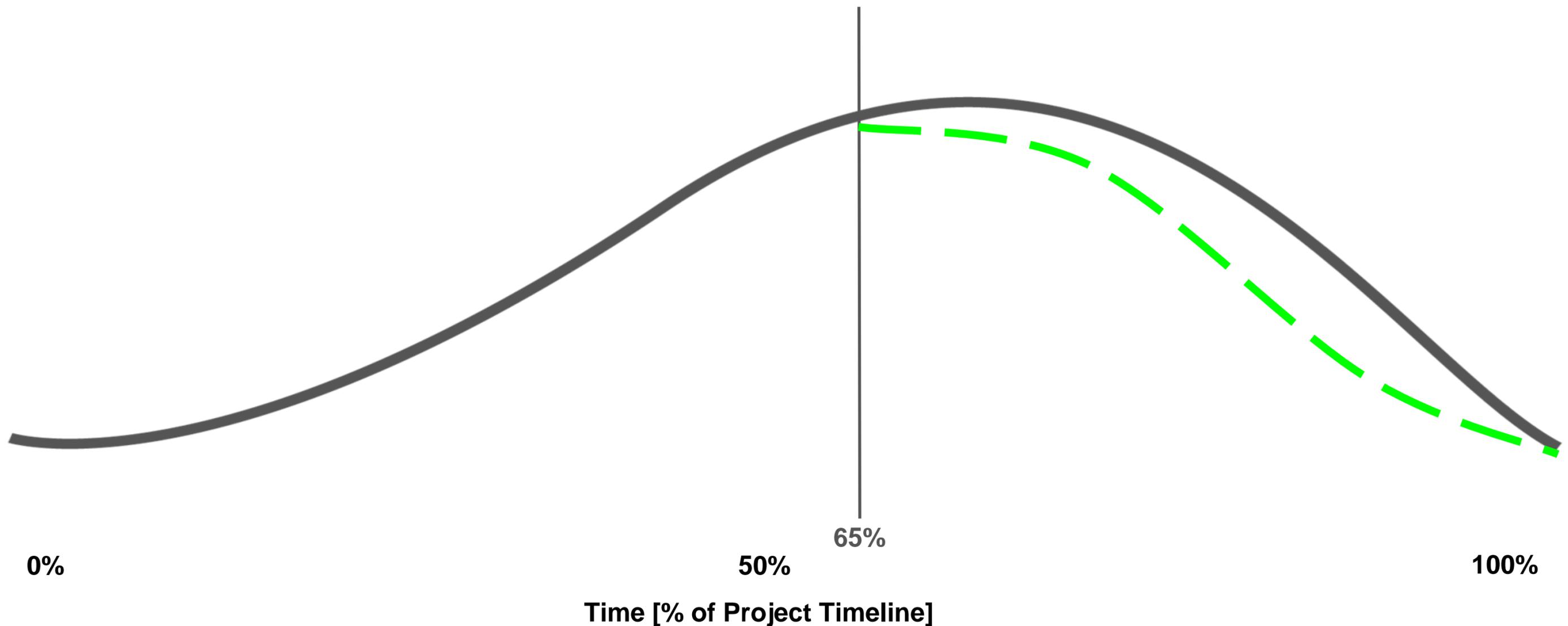
Our labor plan...



Our Earned Value w/ Assessed Profit...

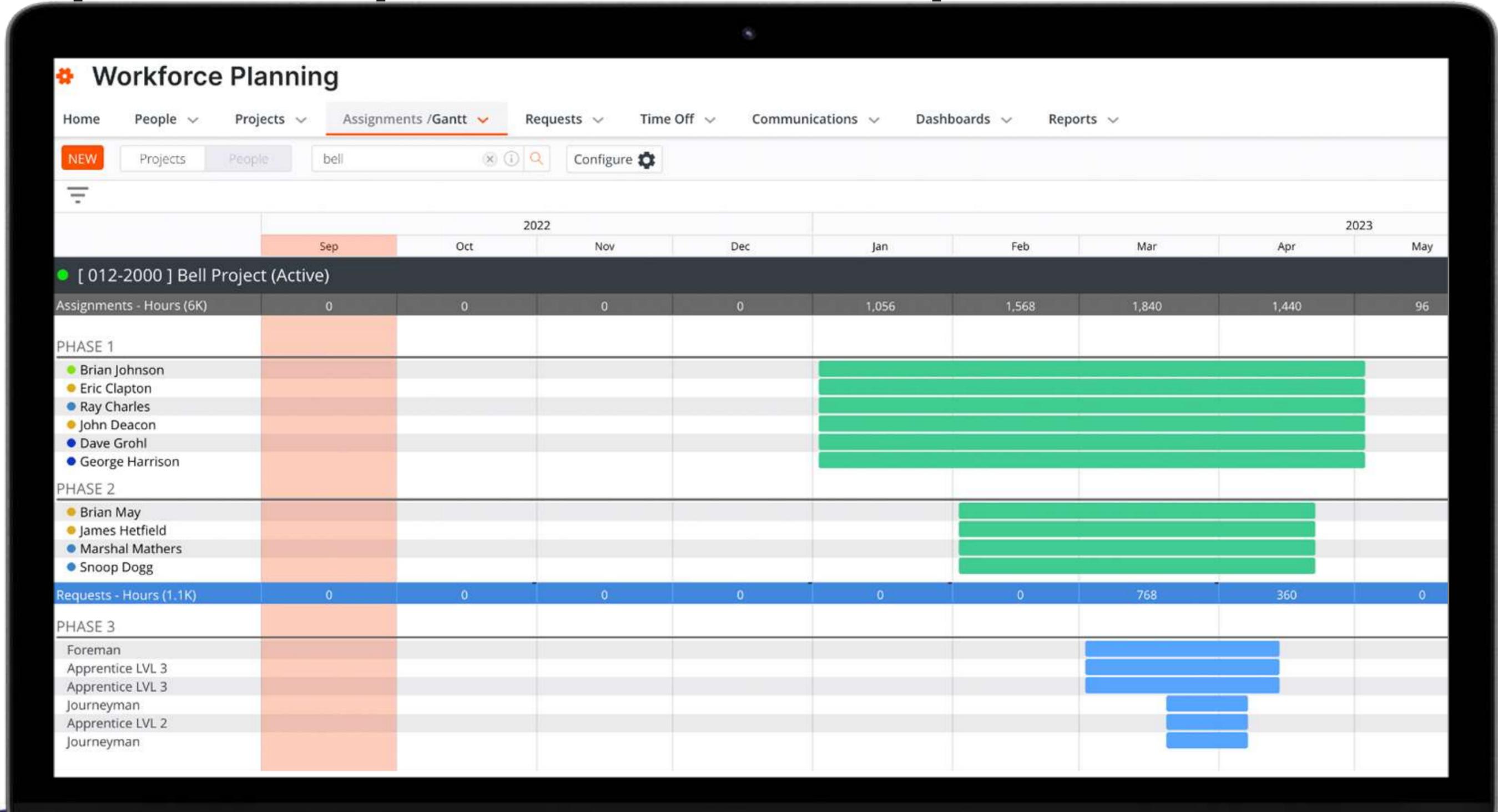


Update the plan... or lose the earnings in the end.



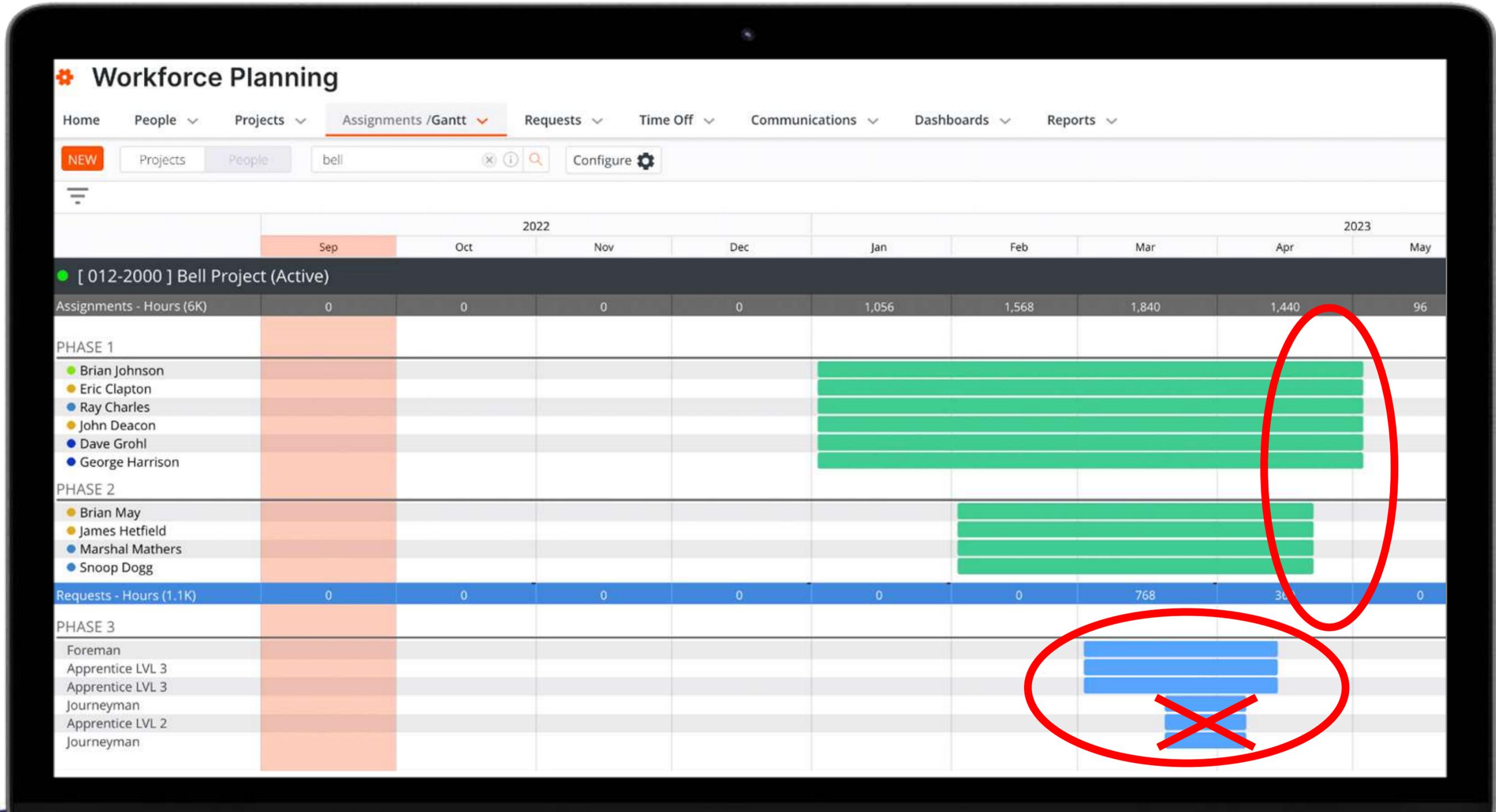
— ALIGNING EARNED VALUE & THE LABOR PLAN

Update the plan... or lose the profits in the end.



— ALIGNING EARNED VALUE & THE LABOR PLAN

Update the plan... or lose the profit in the end.



— 04

Stabilize WIPs, Forecasts, & the Workforce

[5min]



Plan and conduct EVA across every project

PROJECTS	EVA HOURS/\$\$\$ @ COMPLETION	HOURS/\$\$\$ PLANNED	SYNCED?
Project #1	1000	1000	YES
Project #2	500	500	YES
Project #3	1500	1500	YES
Project #4	100	150	NO
Project #5	500	400	NO



Stabilize WIP's, Forecasts, & the Workforce

PROJECTS	EVA HOURS/\$\$\$ @ COMPLETION	HOURS/\$\$\$ PLANNED	SYNCED?
Project #1	1000	1000	YES
Project #2	500	500	YES
Project #3	1500	1500	YES
Project #4	100	100	YES
Project #5	400	400	YES

PM TEAM *LABOR MANAGERS*

Accurate Company-Wide Forecasts

Active Resources: 32	2022					2023				
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	
Assigned - Hours (26.3K)	5,450	4,272	4,664	4,320	2,592	1,592	1,840	1,440	96	
Requested - Hours (1.2K)		80					768	360		
Total - Hours (27.5K)	5,450	4,352	4,664	4,320	2,592	1,592	2,608	1,800	96	

	2022					2023				
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	
[007-1935] BACC REFINERY										
Assigned - Hours (2.8K)	1,576	1,040	232							
Requested - Hours (80)		80								
Total - Hours (2.9K)	1,576	1,120	232							
[008-1904] BALLPARK RENOVATION										
Assigned - Hours (2)	2									
Requested - Hours (0)										
Total - Hours (2)	2									
[012-2000] BELL PROJECT										
Assigned - Hours (6K)					1,056	1,568	1,840	1,440	96	
Requested - Hours (1.1K)							768	360		
Total - Hours (7.1K)					1,056	1,568	2,608	1,800	96	
[005-1913] GULF COAST DESAL PLANT										
Assigned - Hours (4K)		432	1,584	1,584	384					
Requested - Hours (0)										
Total - Hours (4K)		432	1,584	1,584	384					
[002-1911] INTERNATIONAL AIRPORT										
Assigned - Hours (2.1K)	1,760	360								
Requested - Hours (0)										
Total - Hours (2.1K)	1,760	360								
[004-1912] LIGHT RAIL MHSR										

— 05

Review

[5min]



— REVIEW OF CONTENTS

01. Defined Workforce Management

02. The Workforce Plan; Feasible & Critical

03. Aligning Earned Value & the Labor Plan

04. Stabilize WIPs, Forecasts, & the Workforce



Today's Key Takeaways

Critical & accurate workforce planning made feasible.

Earned Value processes continuously tied back to the labor plan.

Stabilize WIPs, Forecasts, & the Workforce

Thank You!

Questions? -Please come ask us.



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