

22<sup>ND</sup> ANNUAL



22<sup>ND</sup> LCI CONGRESS  
OCTOBER 19-23

# Owners Approaches to Delivering Lean Capital Programs

Panel – Scott Nelson (Advocate Aurora), Ashley Aye (HCA Healthcare), Cindy Deihl (P&G)  
Moderator – Victor Sanvido (Southland Industries)

October 21, 2020

# Owners Approaches to Delivering Lean Capital Programs



***Scott Nelson***

System Vice President-  
Planning, Design &  
Construction,  
Advocate Aurora



***Cindy Deihl***

Vice President,  
Procter & Gamble



***Ashley Aye***

Director-Strategy  
& Productivity,  
HCA Healthcare



***Moderator***

***Victor Sanvido***

Senior VP,  
Southland Industries



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# Advocate Aurora Health Outpatient Collaborative

Scott Nelson, System Vice President, Design & Construction

THE ABC'S OF LEAN: TRANSFORMATION THROUGH ACTIONS, BEST PRACTICES AND COACHING

# Advocate Aurora Health Outpatient Collaborative





# Advocate Aurora Purpose & Vision

***“We help people live well.”***

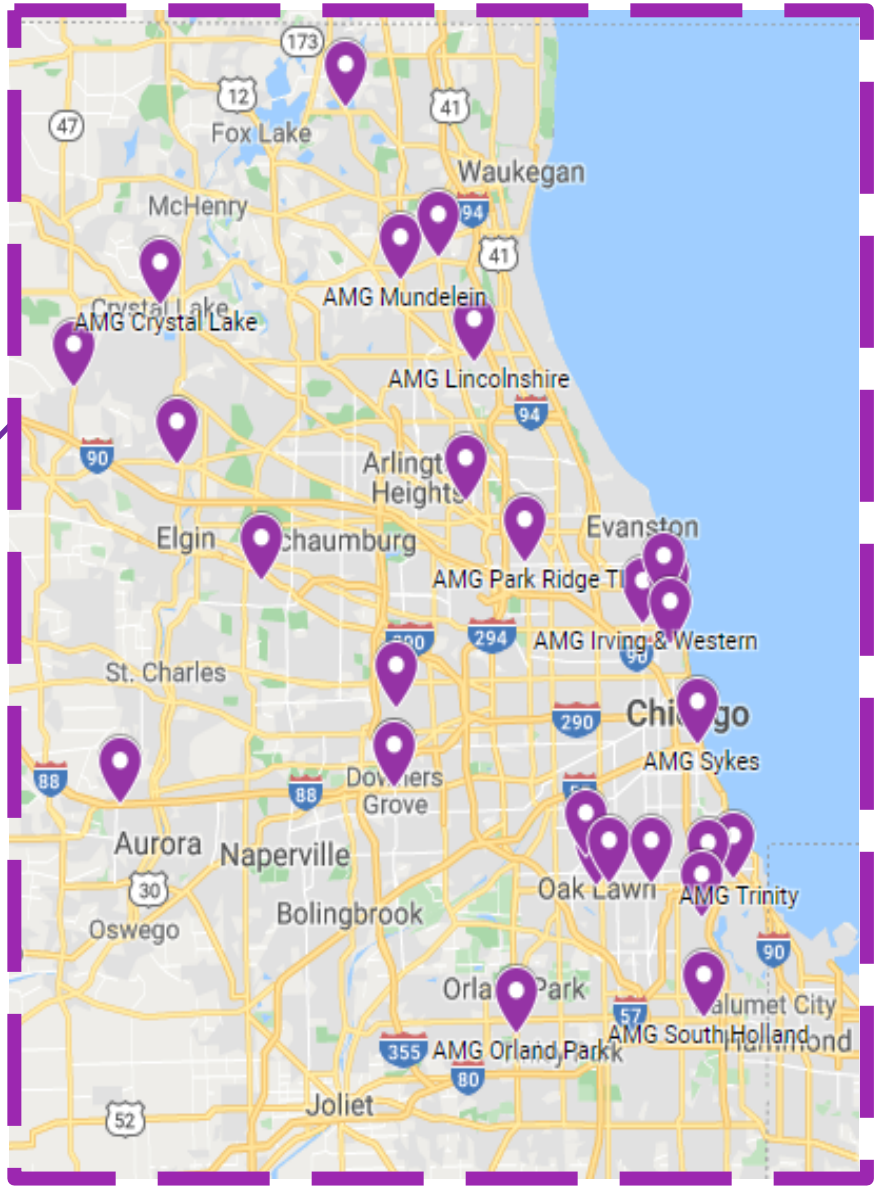
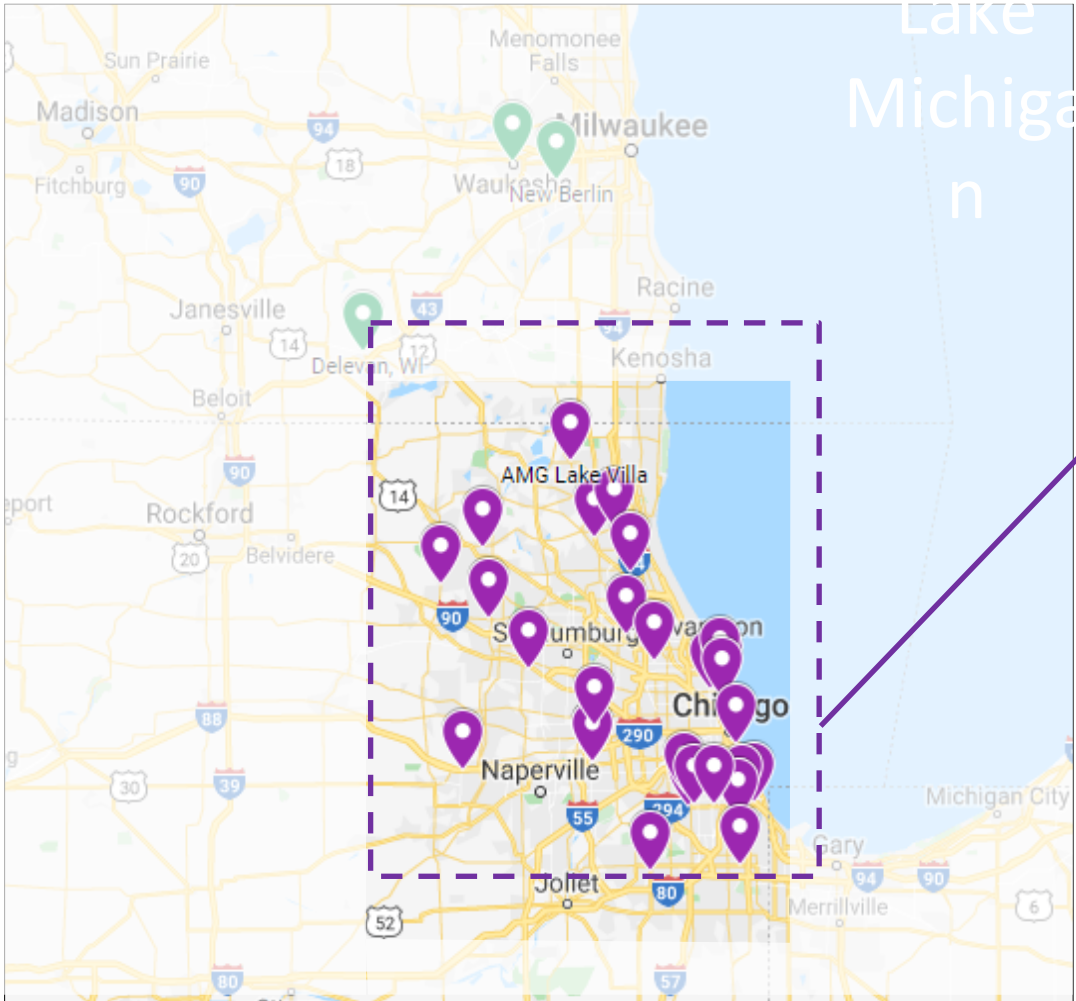
Advocate Aurora Purpose

***“Provide innovative and trusted service, always.”***

Advocate Aurora Support Services Vision

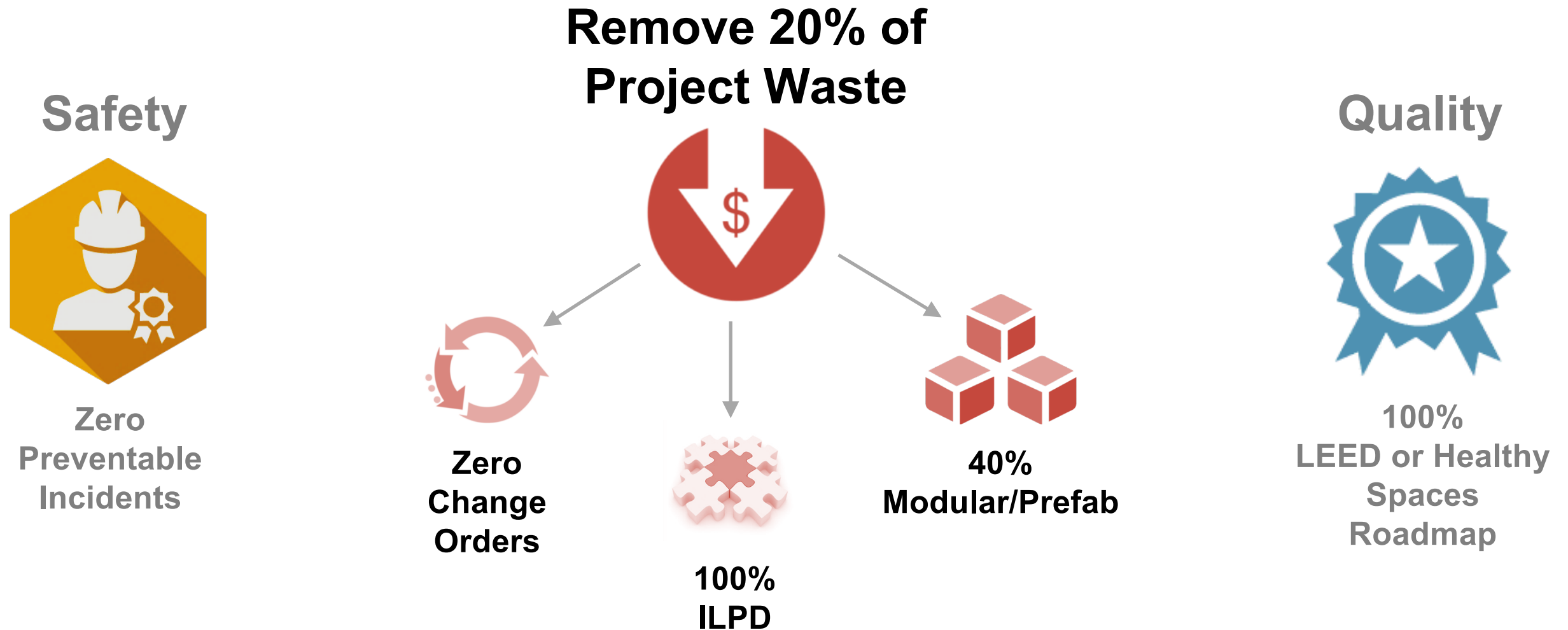
# Advocate Aurora Health Outpatient Collaborative

*Completed thru 2019*





# 2020 Design & Construction Goals



*"Create safe and healing environments through thoughtful collaboration and innovation."*

# AAH Outpatient Collaborative Change Management

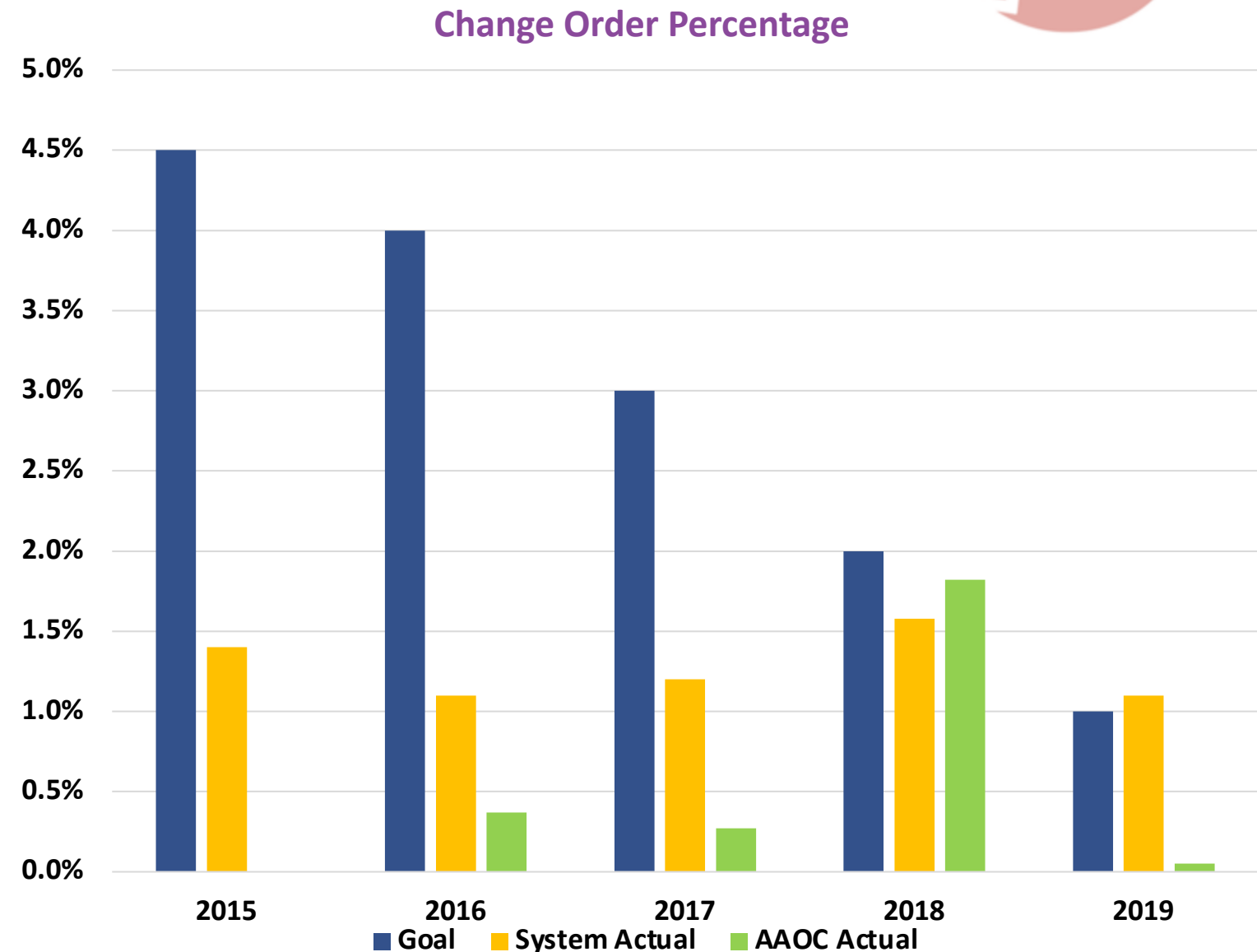


*0% Change Orders By 2020*

## Zero Change Orders By 2020

- Preventable cost even if it was funded from contingency
- Cost beyond code compliance, and NOT a change created by a regulatory compliance demand
- NOT a differing Site Condition or Unforeseen subsurface condition

| YTD Results  | <u>System</u> | <u>AAOC</u> |
|--------------|---------------|-------------|
| <b>2015:</b> | 1.4%          | NA          |
| <b>2016:</b> | 1.1%          | 0.37%       |
| <b>2017:</b> | 1.2%          | 0.27%       |
| <b>2018:</b> | 1.58%         | 1.82%       |
| <b>2019:</b> | 1.1%          | 0.05%       |





# AAH Outpatient Collaborative Funding Our Future

20% Reduced Capital Construction By 2020

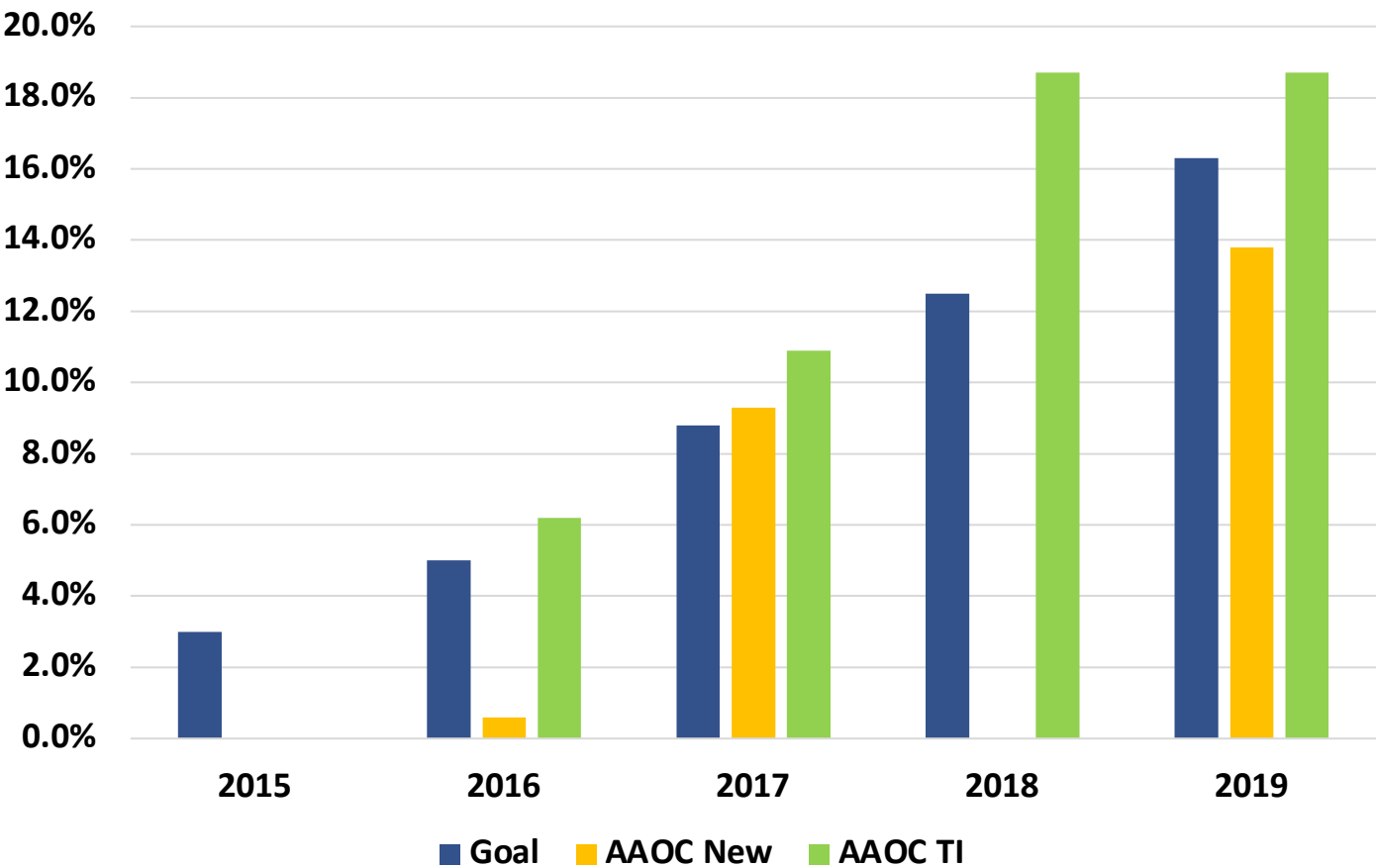


- Multiple projects achieved 15% or higher:
- 16% AMG Lakeview
  - 17% AMG Crystal Lake
  - 17% AMG Imani Village
  - 20% AMG Irving & Western
  - 24% AMG Sykes

Supports 20% Reduced Capital Construction \$ by 2020

| YTD Results | System | AAOC  |
|-------------|--------|-------|
| 2015:       | NA     | NA    |
| 2016:       | 0.6%   | 6.2%  |
| 2017:       | 9.3%   | 10.9% |
| 2018:       | NA     | 18.7% |
| 2019:       | 13.8%  | 18.7% |

ILPD Savings



# AAH Outpatient Collaborative Prefabrication



Multiple projects achieved higher than 25%:

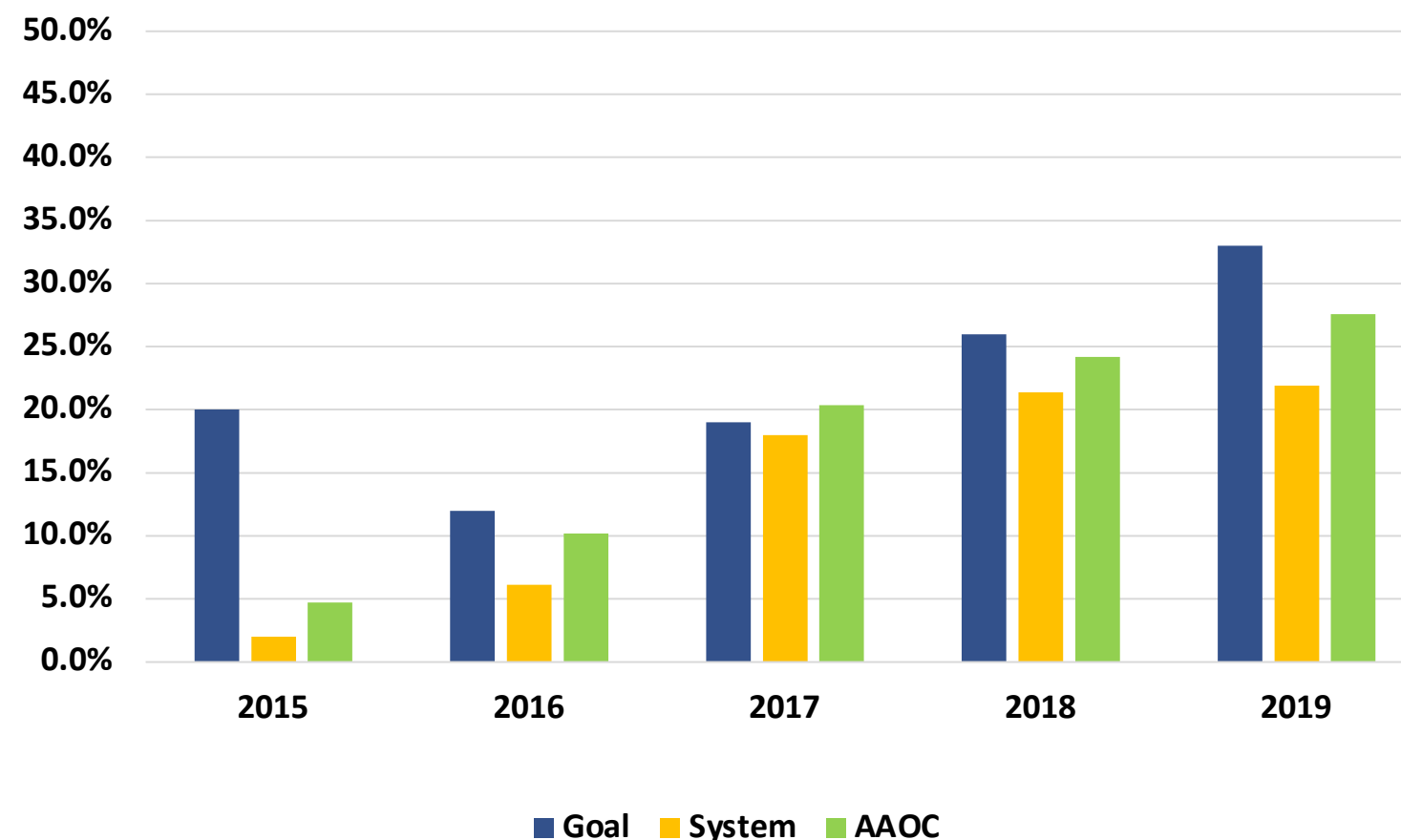
- 26% AMG West Dundee
- 26% AMG Oak Lawn
- 43% AMG Lombard
- 47% ICC Montrose

*40% Modular By 2020*

**40% Modular by 2020**

| YTD Results  | <u>System</u> | <u>AAOC</u> |
|--------------|---------------|-------------|
| <b>2015:</b> | 2.0%          | 4.7%        |
| <b>2016:</b> | 6.1%          | 10.17%      |
| <b>2017:</b> | 18.0%         | 20.34%      |
| <b>2018:</b> | 21.4%         | 24.19%      |
| <b>2019:</b> | 21.9%         | 27.56%      |

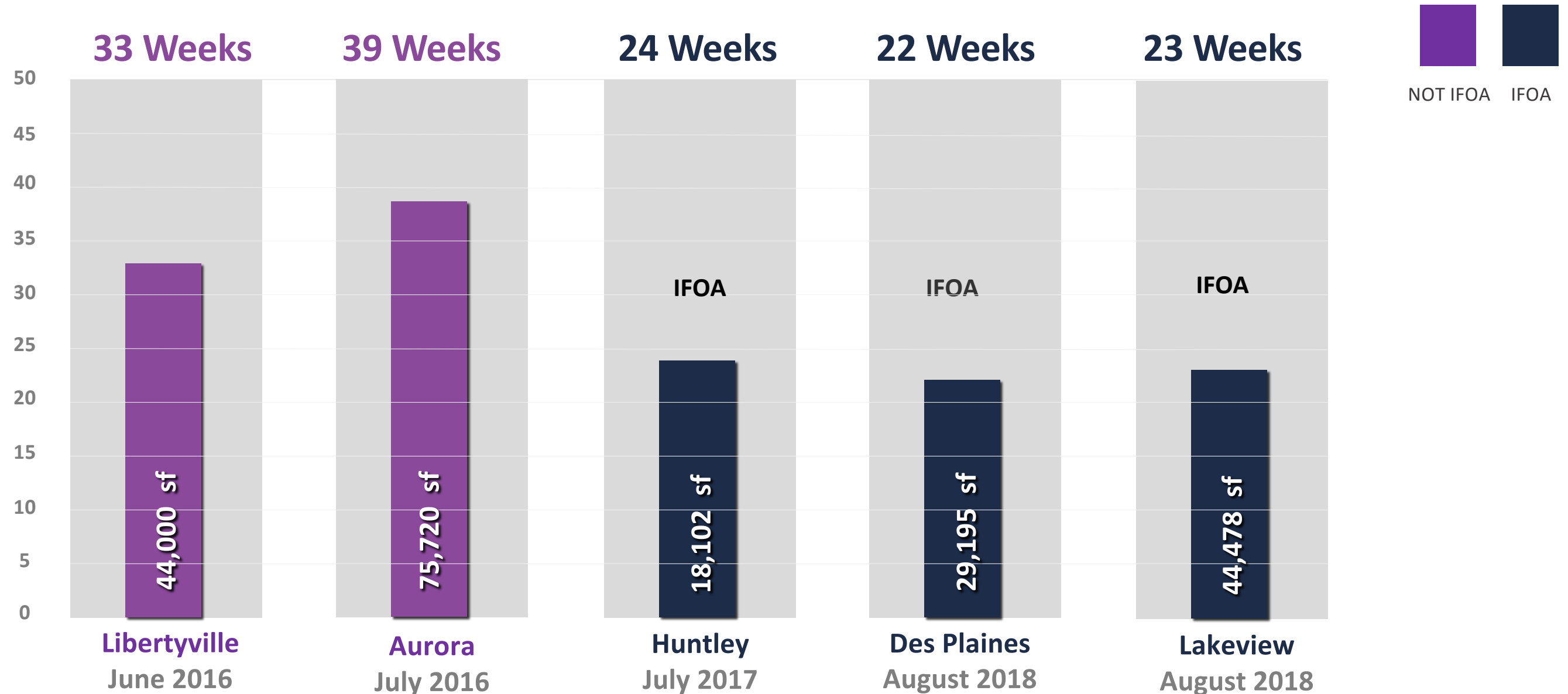
## Modular





# Exceeding Expectations

## *Interior Construction Duration Performance*



# Exceeding Expectations

## *Attributes of a High-Performing Team*

### RESULTS TO DATE (2016 – 2019)

**32 Projects Counted** totaling 556,987 sf

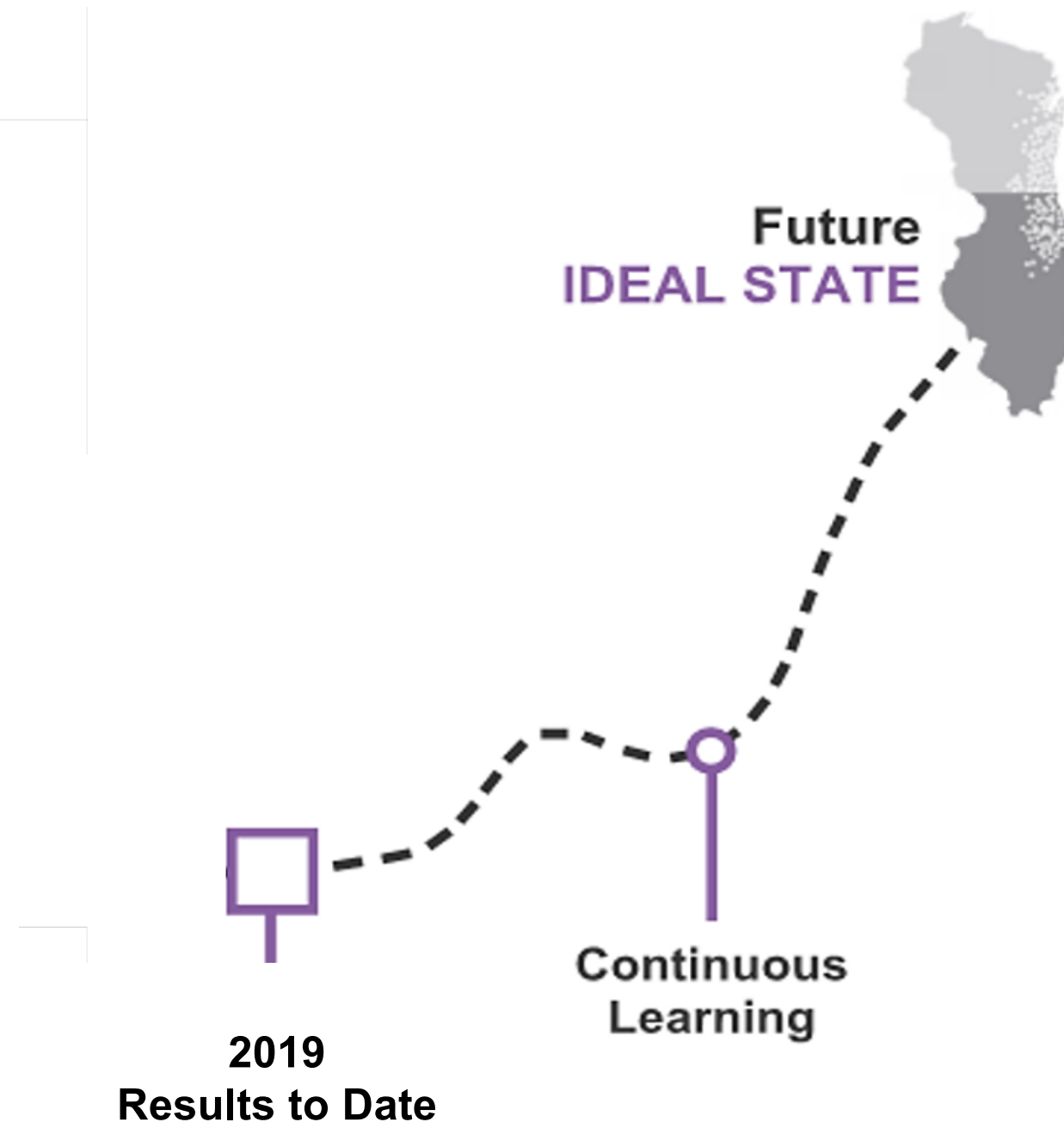
**\$145,702,476** of Construction Value

**\$27,447,396** Prefab and Modular Components  
(18.84% of total spend)

**\$890,675** in Change Orders (0.61%)

4 Safety Incidents

**\$17,719,459** Savings (12.16%)





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# HCA Healthcare

Ashley Aye, Director Strategy & Productivity

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October 21, 2020

# HCA Healthcare Markets

 HCA has a significant presence in **16 of the top 25 U.S. MSAs with the strongest Economic Health Index**



The 16 HCA MSAs ranked in the top 25 MSAs, shaded in blue with the white outline, include 3 MSAs in Utah. | Source: American City Business Journal's 2017 Economic Health Index, a ranking of the relative economic viability of the top 100 MSAs in the US.

Project Pipeline:

**\$3.4B**  
In Flight

**300 +**  
Projects



**Expansions**

**49%**



**Renovations**

**31%**



**Greenfields**

**20%**

# Strategic Partners in Lean Project Delivery - 30+ Years

10

Designers



12

General Contractors



7

MEP Subcontractors  
(Florida market only)



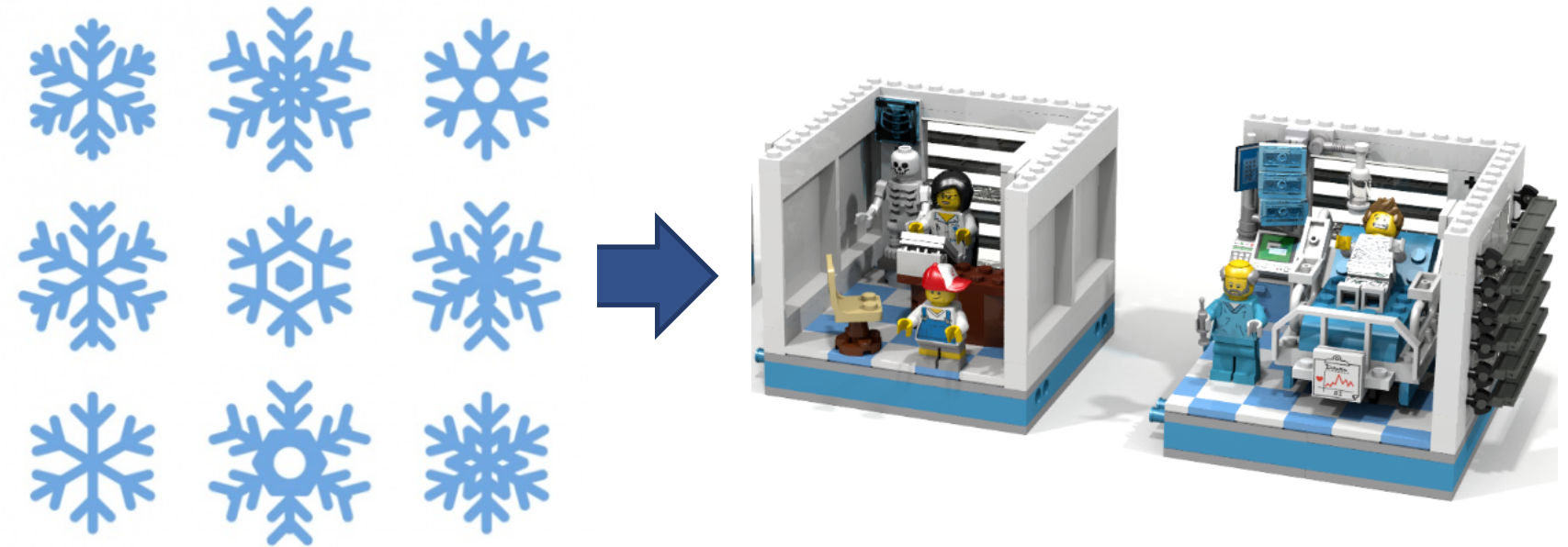
- Enable a consistent project delivery approach
- Advocates embedded within firms to assist with Lean deployment
- Cohort of resources sharing industry best practices
- Support innovation in design and construction



# Moving from “Snowflakes” to “Legos<sup>®</sup>”

## Standard Design Elements:

- Medical Surgical Patient Rooms (2012)
- Operating Room (2013)
- Emergency Dept./ FSER (2014)
- Exterior Walls (2018)
- Casework (2018)
- Women’s Services (2019)



Standardization of design elements enables:

- Sourcing Efficiencies
- Off-Site Manufacturing

# Sourcing Agreements Leverage Volume & Standardization



**Strategic  
Suppliers**

16

## HCA Healthcare Market Basket Price Change (2015-2018)

| Category   | % Change |
|------------|----------|
| Lighting   | 1.3%     |
| Plumbing   | 1.3%     |
| Mechanical | 3.9%     |
| Flooring   | -5.7%    |
| ACT        | 5.3%     |
| Generators | -1.7%    |
| Drywall    | 11.0%    |
| Average    | 2.2%     |

**vs.**

**~8%  
Market  
% change**

## Benefits:

- Competitive Price
- Supplier Service and Warranties
- SKU Level Transparency
- Standardized Vendor Reporting

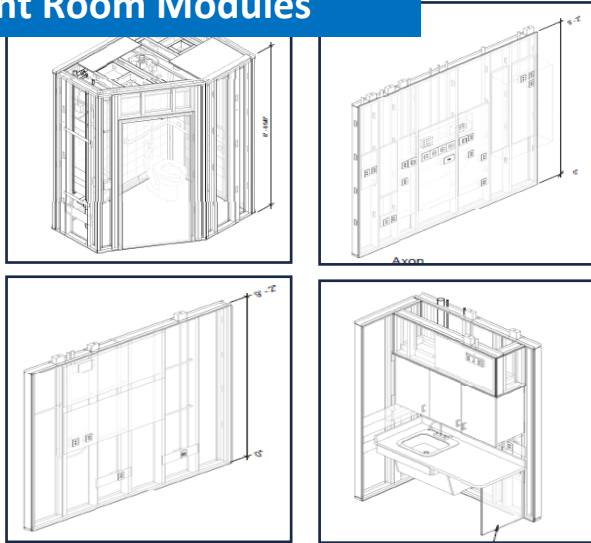
*\*\*Commit to purchase 80-85% of spend through HealthTrust (GPO) strategic agreements\*\**



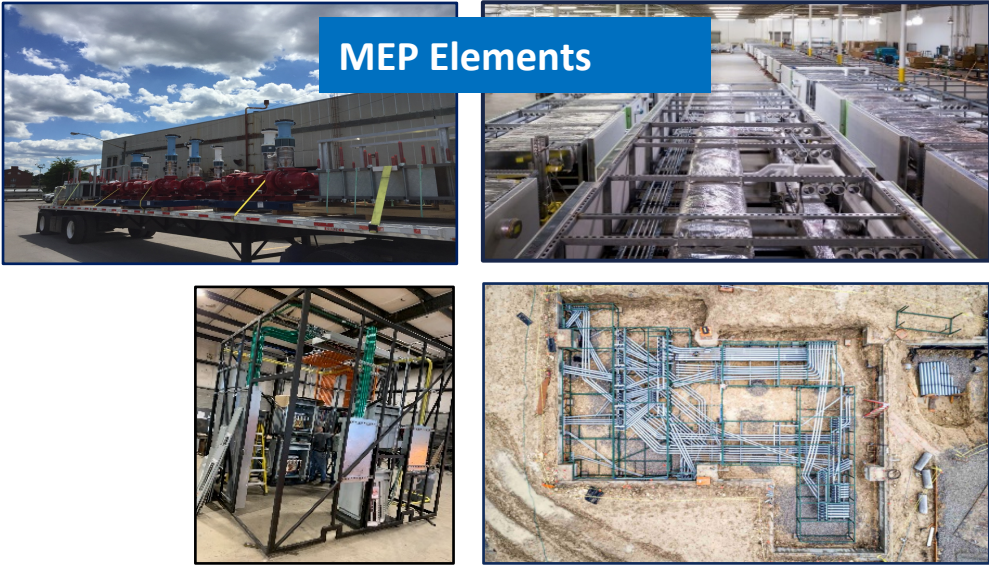


# Typical Prefabricated or Modular Systems

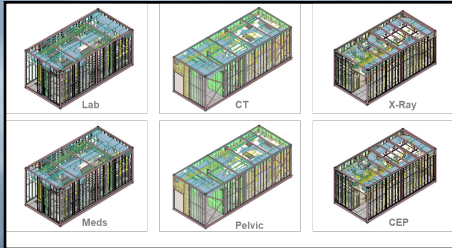
Patient Room Modules



MEP Elements



Exterior Panels



UBER FSERs



Casework

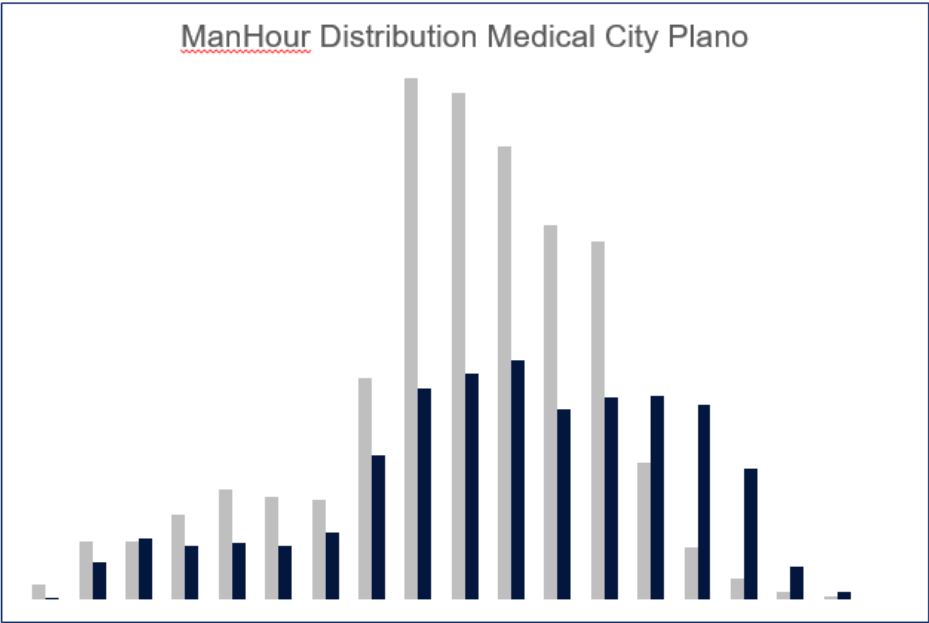


OR Ceilings



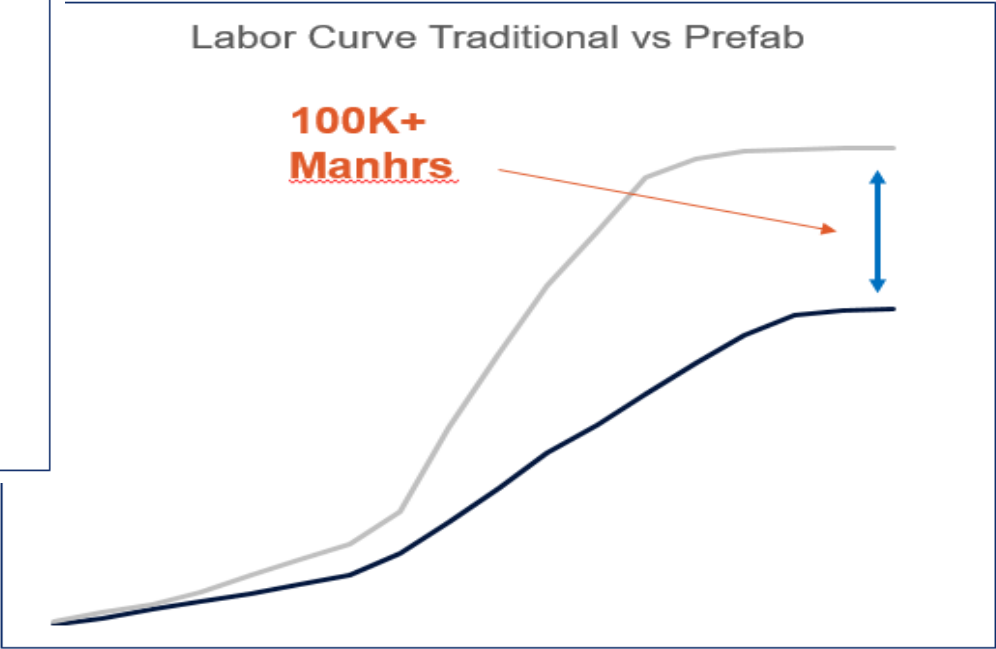


# Off-Site Manhour Tracking – Medical Center Plano



Traditional

Prefab



4-Story  
Horizontal  
Expansion

37%  
Labor shifted offsite\*

2.4%  
Mech/Plumb

5.9%  
Exterior Skin

4.8%  
Other

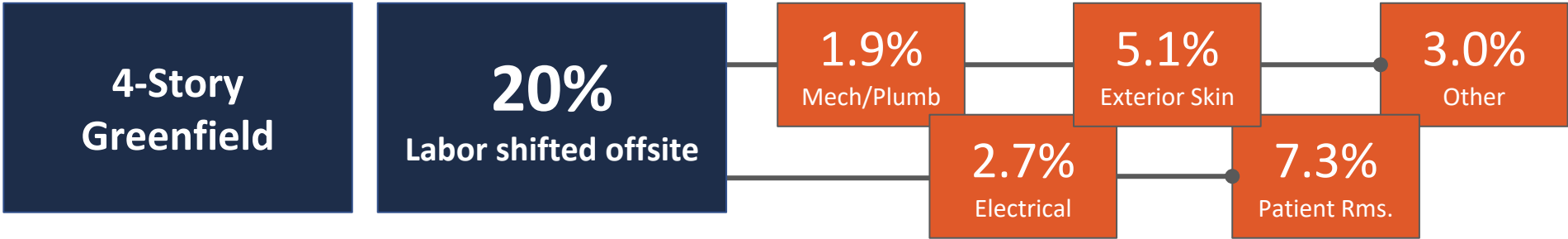
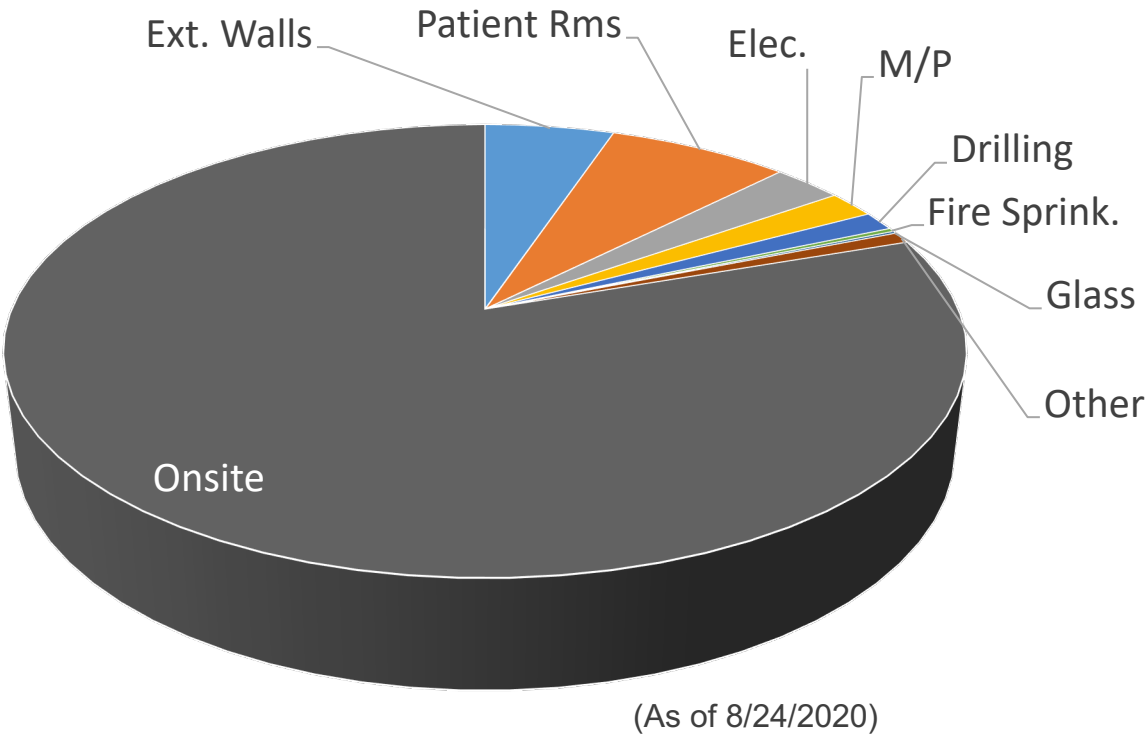
3.3%  
Electrical

20.6%  
Patient Rms.

\*Based on total project manhours



# Off-Site Manhour Tracking – Davie Hospital



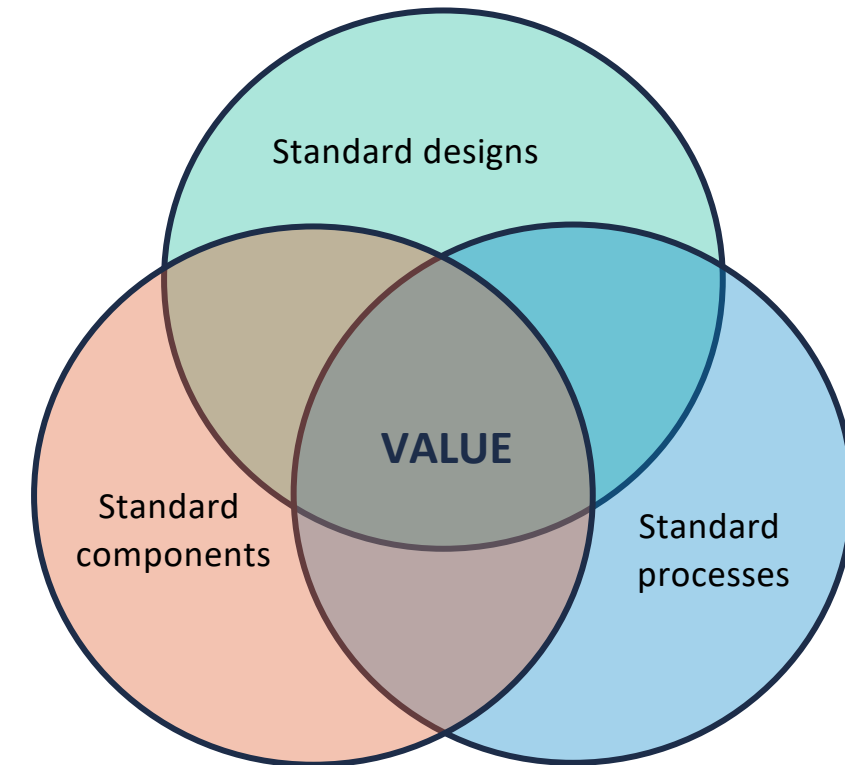
# HCA Design & Construction Scale = Value

HCA's scale creates value through standardization

1. Standard designs
  - +
  2. Standard parts / components
  - +
  3. Standard processes
- 

**VALUE**

Schedule reduction / Speed to market



# Capital Deployment Operational Goal

Working with our Partners, our primary focus is to employ innovative approaches *to improve speed to market 15% by 2022 for acute care projects* (as compared to historical benchmarks) without added premium costs or compromising safety and quality.



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**improving everyday life  
for over 180 years**

**\$71B  
Net Sales**

**65  
Brands**

**180+  
Countries**



02/2020

2

# Lean IPD at P&G

## ADAPTING THE APPROACH TO MATCH THE CAPITAL CHALLENGE



International  
Projects



Large New Site  
Construction



Equipment  
Relocations



Annual Site  
Improvements  
/ Small Projects



# Lean IPD at P&G

## ADAPTING THE APPROACH TO MATCH THE CAPITAL CHALLENGE



Be prepared to build Lean capability. Even a step forward is a win.



Design the LIPD scope, tools, and team to optimize program success.



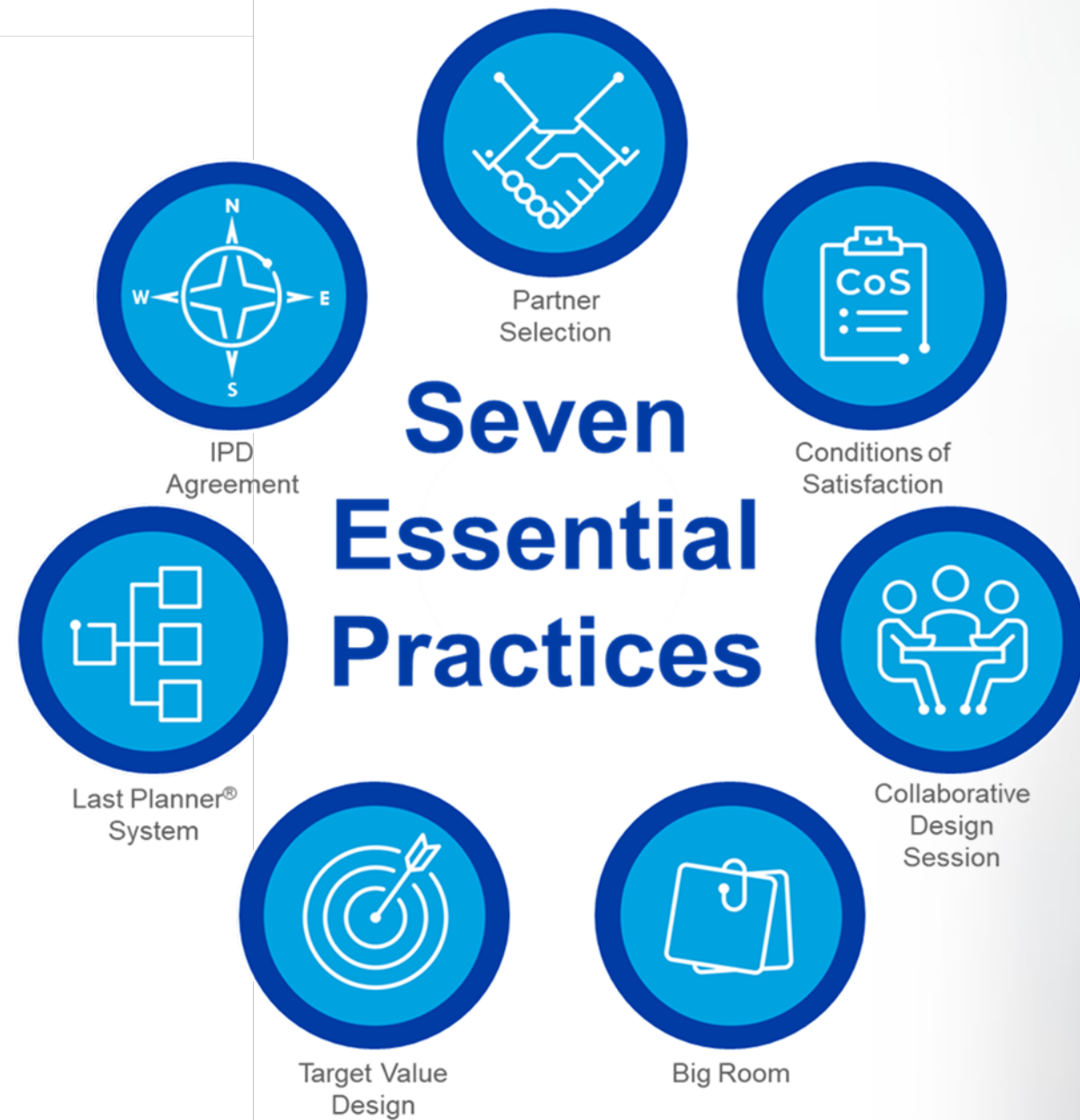
Leverage data to inform should cost and success targets.



Create “programs” of projects into a single LIPD framework.



## Lean IPD at P&G



# Lean IPD at P&G

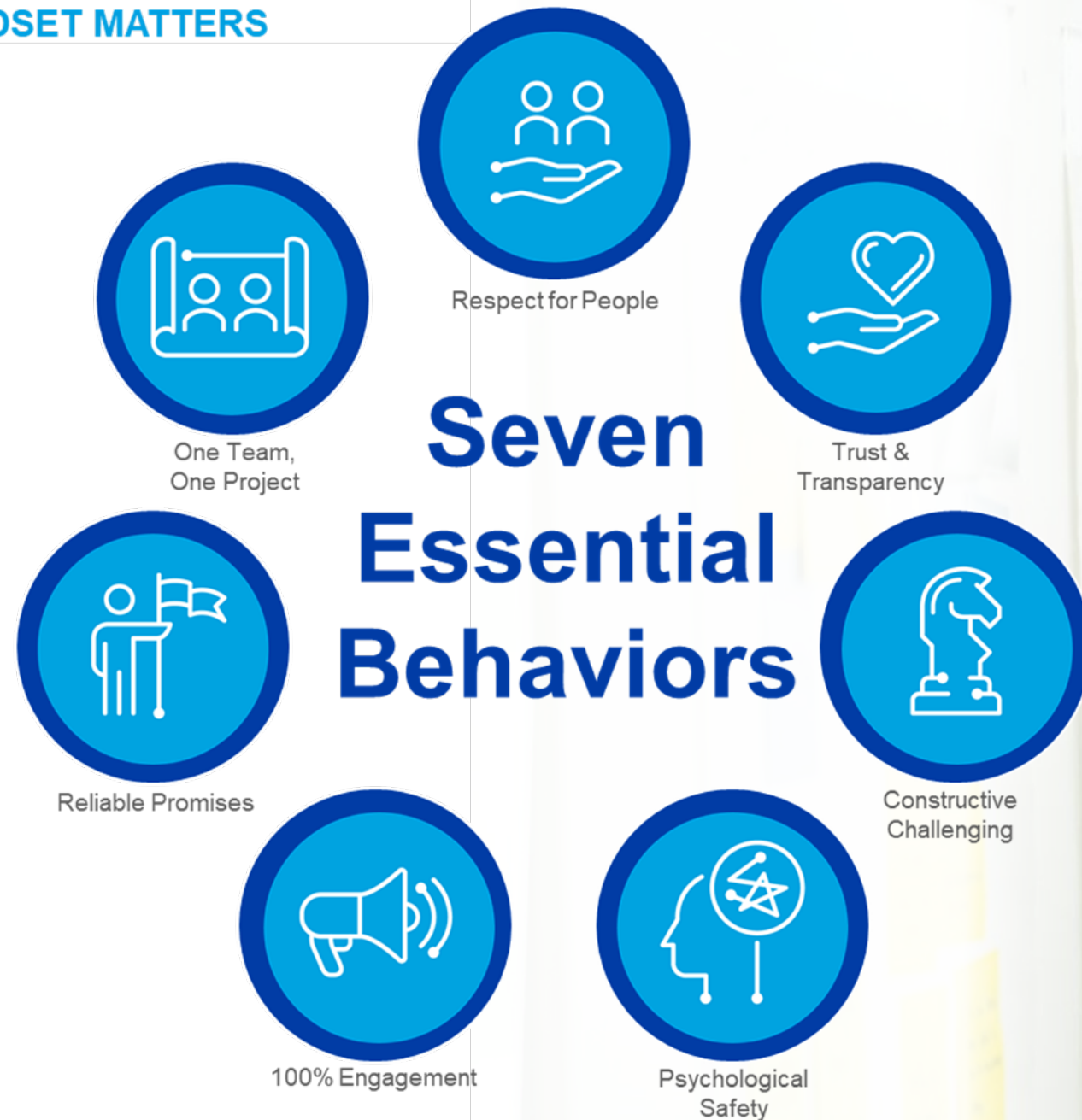
## ADDITIONAL CONSIDERATIONS TO OPTIMIZE EACH OPPORTUNITY





# Lean IPD at P&G

## MINDSET MATTERS





*P&G*

Engineering and Purchases

# Lean IPD

Value from Collaboration & Flow







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**In the spirit of continuous improvement, we would like to remind you to complete this session's survey! We look forward to receiving your feedback.**

# Contact Us

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**Thank you for attending this presentation. Enjoy the rest of the 22<sup>nd</sup> Annual LCI Congress!**