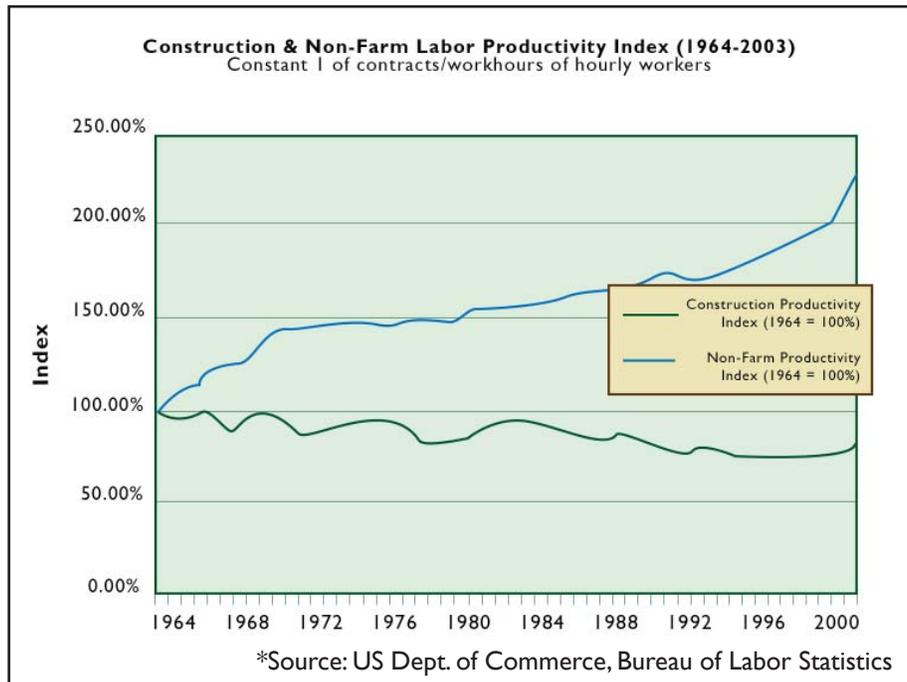


**Since 1964, non-farm industries' average productivity more than doubled.**

**Productivity in the construction industry fell by 50%.**



## Why?

- The traditional Design-Bid-Build Model creates a schedule that does not have the flexibility to deal with potential roadblocks.
- Subcontractors, General Contractors and Architects are paid based on their own success at their job, not the overall success of the project.
- The construction team is unable to provide any insight during the design stage.
- Bids reward risky estimates, ending in 72% of projects being completed over budget and 70% being completed late.\*

# An Alternative Solution to a Traditional Problem

## Integrated Project Delivery

- All parties have the same goal: a successful final project
- Claims and internal conflict are avoided, saving time and money
- Working with one team provides transparency and communication for all involved parties
- Provides flexibility to avoid potential roadblocks and work around issues to stay on schedule
- Waste is eliminated, lowering costs

### CASE STUDY- Autodesk AEC Headquarters - Tocci Building Companies



#### Expected Costs:

Design- \$1,231,000  
Construction- \$12,223,000

#### Expected Project Time:

9 Months

#### Actual Costs:

Design- \$1,221,000  
Construction- \$12,117,000

#### Actual Project Time:

9 Months

This project was completed under a joint contract. The contract established an Incentive Compensation Layer (ICL) in which the architects' and builders' anticipated profit was put at risk. The ICL could adjust from minus 20% to plus 20% depending on whether project goals were met or exceeded. Distinct roles and responsibilities were delineated in contract language and in a "responsibility matrix." Major subcontractors were also brought in to the agreement, worked at cost, and shared in the incentive program. The parties waived all claims against each other except those arising from fraud, willful misconduct or gross negligence. Disputes were to be resolved by mediation or, if necessary, arbitration.

### CASE STUDY- SSM Cardinal Glennon Children's Medical Center - Alberici Constructors, Inc.



#### Expected Costs:

\$45,572,449

#### Expected Project Time:

13 Months

#### Actual Costs:

\$45,572,449

#### Actual Project Time:

12 Months

This was the first IPD experience for owner, architect, MEP engineer and builder. The decision to use IPD was made after architect, engineer, and builder were on board and design work had begun. An Integrated Form of Agreement (IFOA) was negotiated by the team with assistance from SSM's attorney. It is planned to be a model document for all future SSM work. All books with regard to the project were open. Lean partners included MEP, wall and ceiling framing and finish, and fire protection subcontractors. Tom Van Landingham, Christner's principal in charge, said "financial incentives are absolutely the key to the success we had."

About \$400,000 was saved out of the approximately \$1 million contingency. The incentive pool was distributed as follows: **40% to owner, 20% to design team 40% to builder and lean partners.**

#### Source for Case Studies:

"Integrated Project Delivery: Case Studies." Aia.org. The American Institute Of Architects, Jan. 2010. Web.

### **Traditional Project Delivery**

Fragmented, assembled on “just-as-needed” or “minimum-necessary” basis, strongly hierarchical, controlled

Linear, distinct, segregated; knowledge gathered “just-as-needed”; information hoarded; silos of knowledge and expertise

Individually managed, transferred to the greatest extent possible

Individually pursued; minimum effort for maximum return; (usually) first-cost based

Paper-based, 2 dimensional; analog

Encourage unilateral effort; allocate and transfer risk; no sharing

**teams**

**process**

**risk**

**compensation/  
reward**

**communicatitons/  
technology**

**agreements**

### **Integrated Project Delivery**

An integrated team entity composed key project stakeholders, assembled early in the process, open, collaborative

Concurrent and multi-level; early contributions of knowledge and expertise; information openly shared; stakeholder trust and respect

Collectively managed, appropriately shared

Team success tied to project success; value-based

Digitally based, virtual; Building Information Modeling (3, 4 and 5 dimensional)

Encourage, foster, promote and support multi-lateral open sharing and collaboration; risk sharing

\*Taken from “Integrated Project Delivery:A Guide” by The American Institute of Architects (2007)



Photo: Cathedral Hill Hospital, an IPD Project started in 2007