



# How low can you go? The Architecture 2030 Design Charrette

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# Class summary

*How can we facilitate a discussion between stakeholders and how can we get everyone on board with high-performance targets like Architecture 2030?*

# Key learning objectives

At the end of this class, you will be able to:

- *Understand how conceptual analysis tools can help inform early design decisions for building energy performance.*
- *Use conceptual analysis tools to achieve Architecture 2030 targets for a variety of project types.*
- *Test actual sustainable building design strategies with software workflows.*
- *Reduce building energy cost and meet performance goals.*

# Class Demographics

williams + paddon

MARTIN/MARTIN  
CONSULTING ENGINEERS

CALLISON RTKL

MOODY•NOLAN

SMPC Architects  
PRINCIPALS OF DESIGN.

BYU

J2  
ENVIROMENTAL, ENGINEERING, AND CONSTRUCTION SERVICES

Barr & Barr

HDR

Gensler

HKS

DLR Group

LafargeHolcim

Rogers-O'Brien  
CONSTRUCTION

POPULOUS®

nbbj

AYERS  
SAINT  
GROSS

MKK

SMMA

OVERLAND

jestico + whiles

Silman

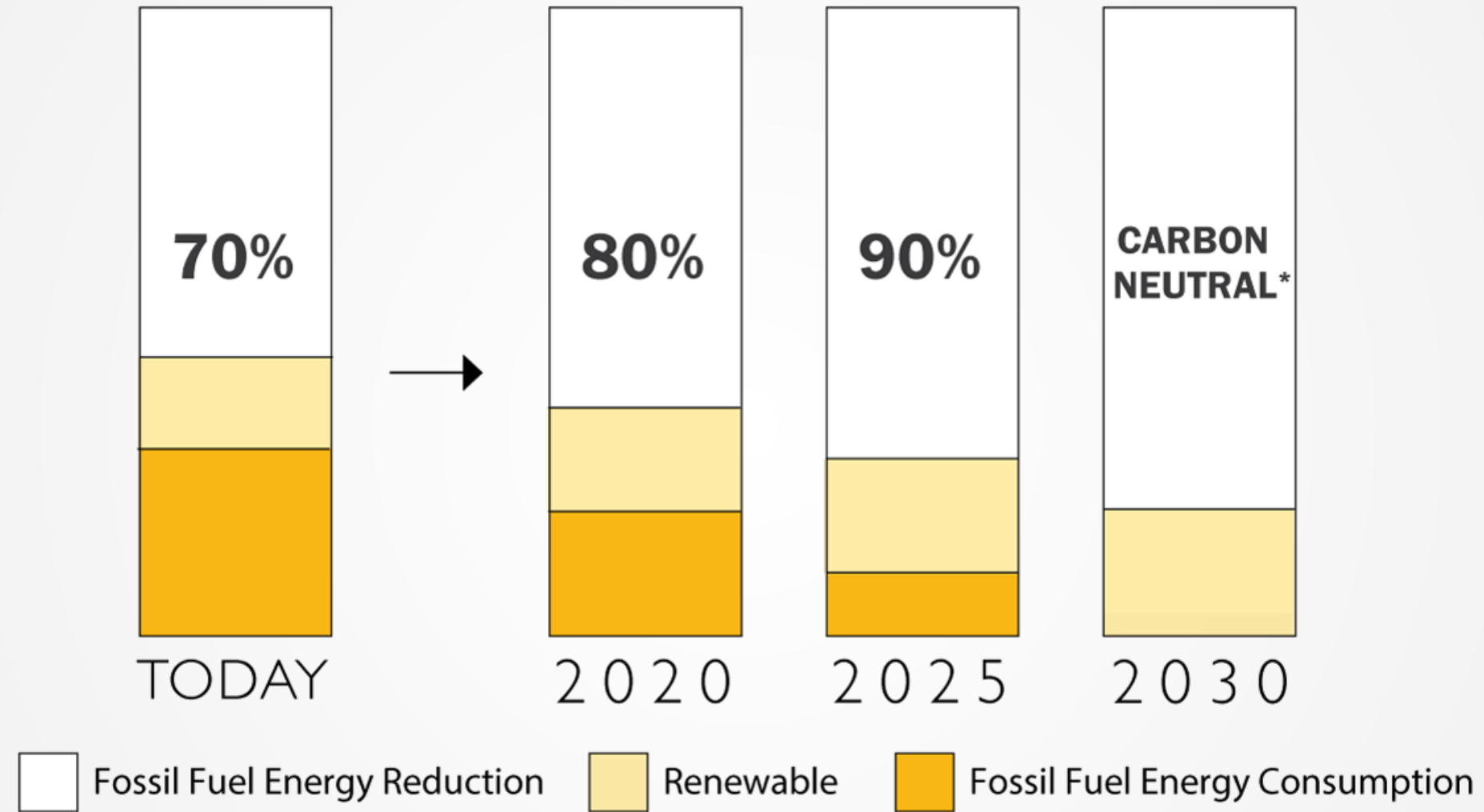
# Agenda

- Introductions
- Architecture 2030
- Design Exercise
- Digital Tools

# The Architecture 2030 Challenge



# The 2030 Challenge



## The 2030 Challenge

Source: ©2015 2030, Inc. / Architecture 2030. All Rights Reserved.

\*Using no fossil fuel GHG-emitting energy to operate.

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# 2030 Implementation Guidelines

*Establish energy-efficiency as a central tenet of your firm's design philosophy.*

# 2030 Implementation Guidelines

*Require that all employees become educated in the design of energy-efficient buildings.*

# 2030 Implementation Guidelines

*Engage clients in discussions relating to energy efficiency.*

# 2030 Implementation Guidelines

*Approach every project with an energy focus and review the project for further energy reductions at every stage of development.*

# Design Exercise



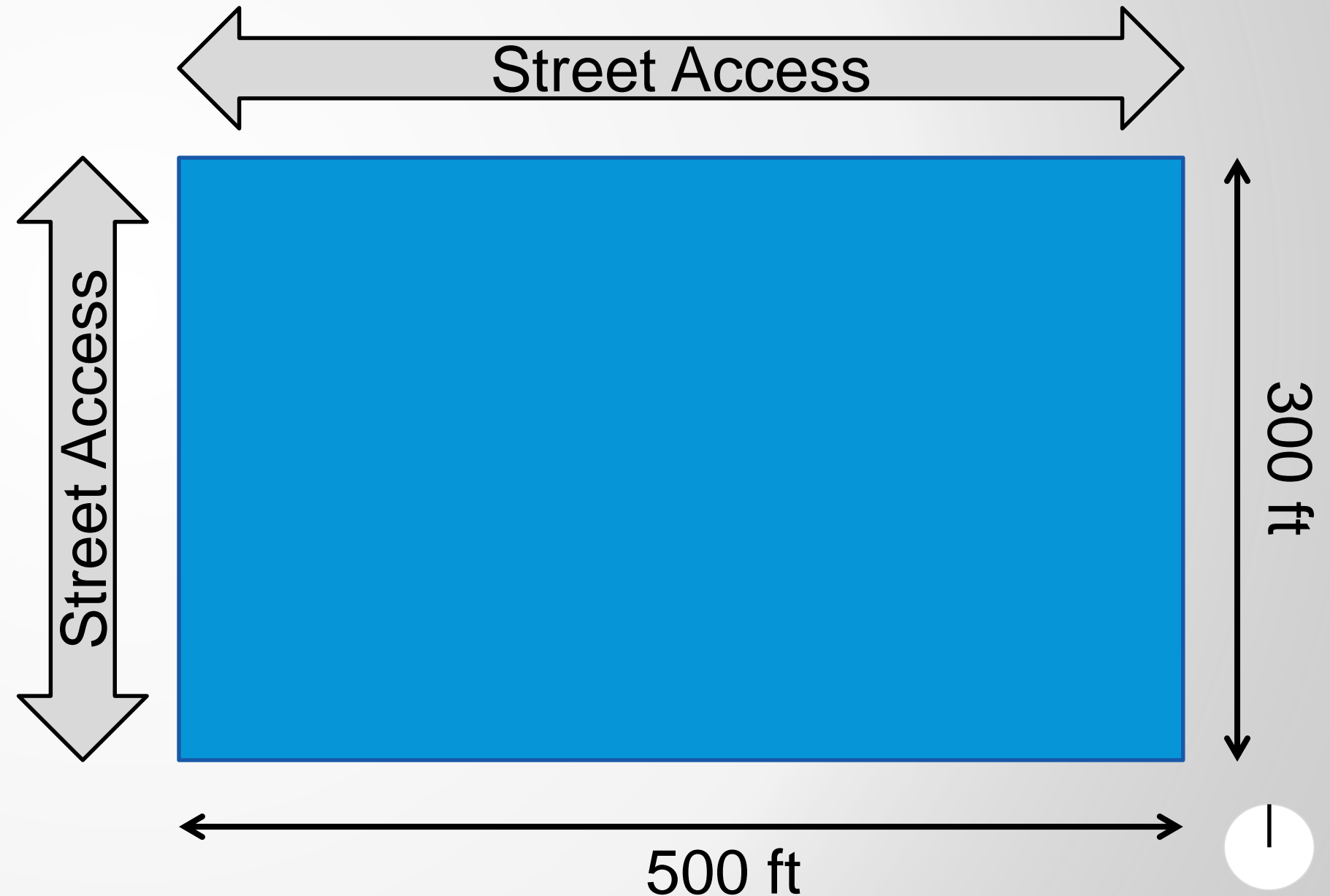
# Design Scenario

Building Type: ***School***

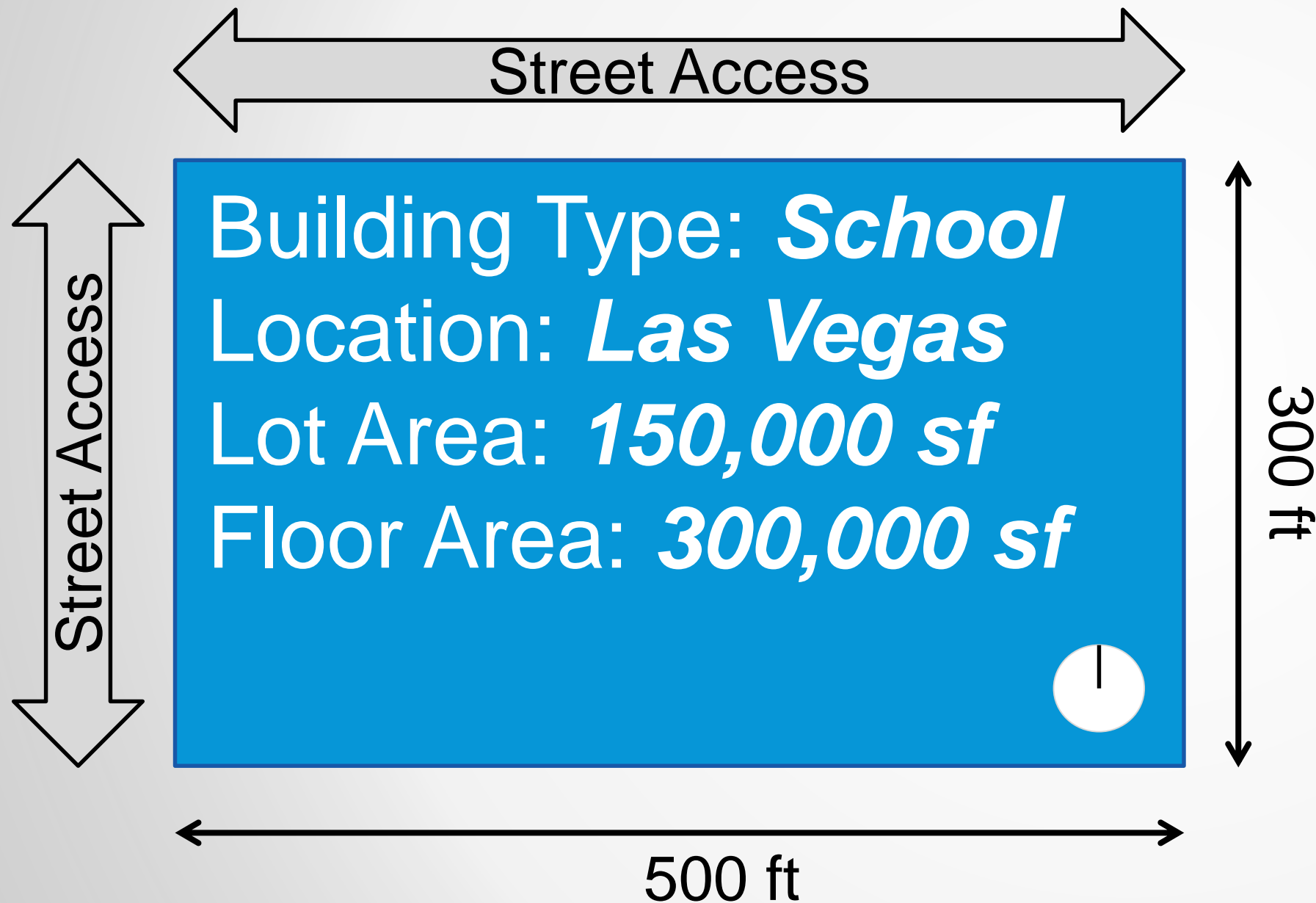
Location: ***Las Vegas***

Lot Area: ***150,000 sf***

Floor Area: ***300,000 sf***

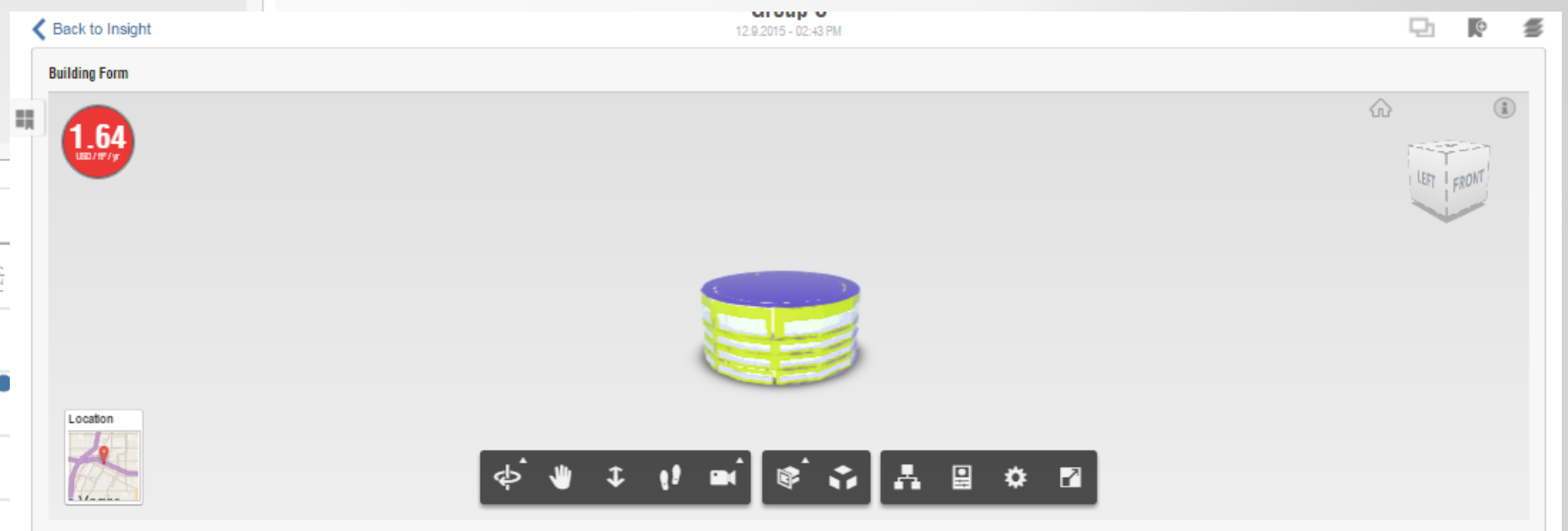
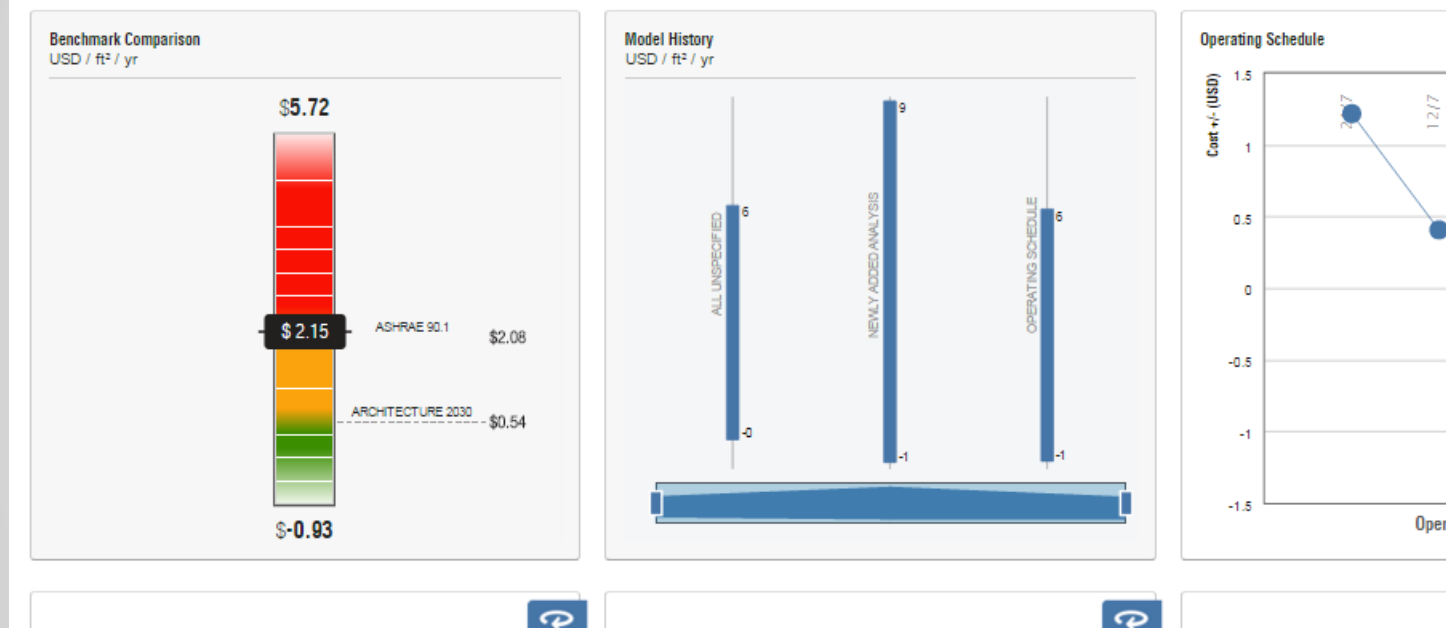
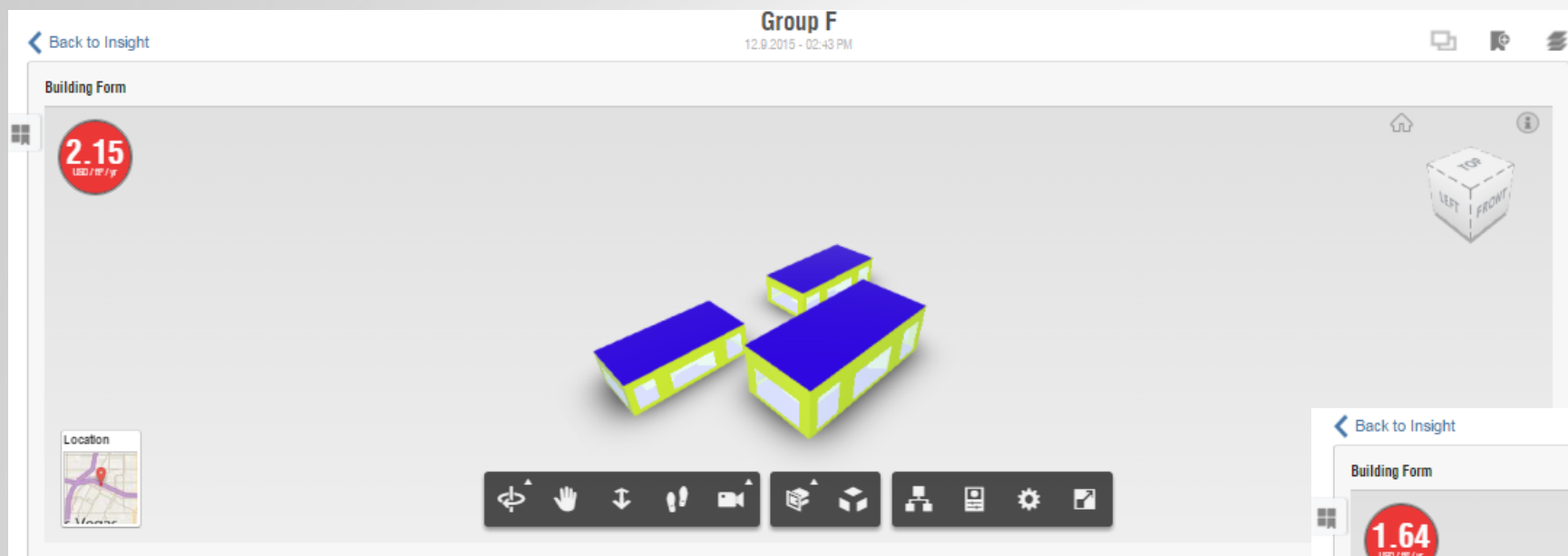


# Design Scenario



- *Form*
- *Orientation*
- *Envelope*
- *Systems*

**While the groups were working...**



# Closing thoughts



## 2030 Implementation Guidelines

*Require that all employees become educated in the design of energy-efficient buildings.*

*Access to information and tools*

# 2030 Implementation Guidelines

*Engage clients in discussions relating to energy efficiency.*

*Share early findings*

# 2030 Implementation Guidelines

*Approach every project with an energy focus and review the project for further energy reductions at every stage of development.*

*Analysis early and often*

# Questions

***[insight360.autodesk.com](http://insight360.autodesk.com)***

