

# **FormIt Pro Product Briefing:** current value and future investment

**Heather Lech, AIA**

Product Manager | Autodesk, Inc

# Safe Harbor Statement

We may make forward-looking statements regarding planned or future development efforts for our existing or new products and services and statements regarding our strategic priorities. These statements are not intended to be a promise or guarantee of business results, future availability of products, services or features but merely reflect our current plans and are based on factors currently known to us. These planned and future development efforts may change without notice. Purchasing and investment decisions should not be made based upon reliance on these statements.

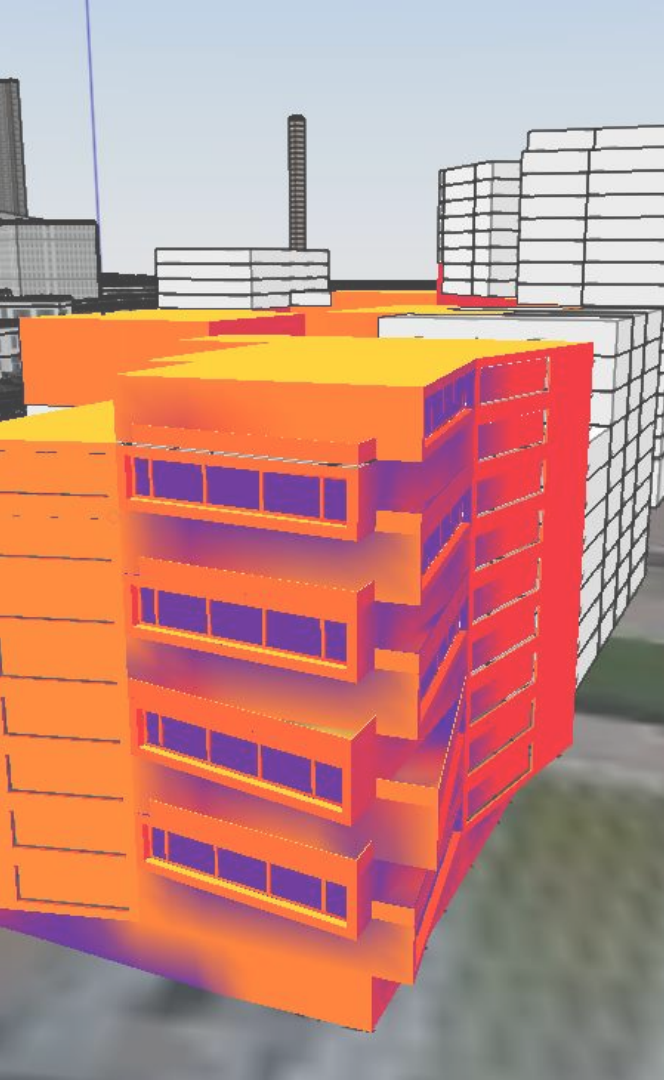
A discussion of factors that may affect future results is contained in our most recent Form 10-K and Form 10-Q filings available at [www.sec.gov](http://www.sec.gov), including descriptions of the risk factors that may impact us and the forward-looking statements made in these presentations. Autodesk assumes no obligation to update these forward-looking statements to reflect events that occur or circumstances that exist or change after the date on which they were made. **If this presentation is reviewed after the date the statements are made, these statements may no longer contain current or accurate information.**

**This presentation also contains information, opinions and data supplied by third parties and Autodesk assumes no responsibility for the accuracy or completeness of such information,** opinions or data, and shall not be liable for any decisions made based upon reliance on any such information, opinions or data.

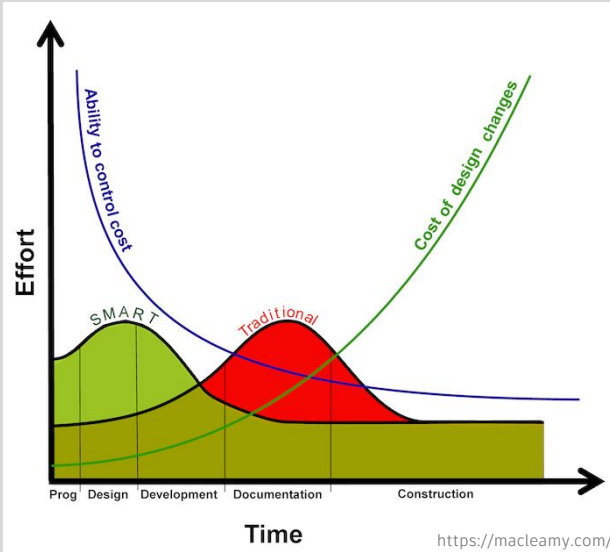
**Autodesk's partners frequently compete against each other in the marketplace, and it is critically important that all participants in this meeting observe all requirements of antitrust laws and other laws regarding unfair competition.** Autodesk's long insistence upon full compliance with all legal requirements in the antitrust field has not been based solely on the desire to stay within the bounds of the law, but also on the conviction that the preservation of a free and vigorous competitive economy is essential to the welfare of our business and that of our partners, the markets they serve, and the countries in which they operate. It is against the policy of Autodesk to sponsor, encourage or tolerate any discussion or communication among any of its partners concerning past, present or future prices, pricing policies, bids, discounts, promotions, terms or conditions of sale, choice of customers, territorial markets, quotas, inventory, allocation of markets, products or services, boycotts and refusals to deal, or any proprietary or confidential information. Communication of this type should not occur, whether written, oral, formal, informal, or "off the record." All discussion at this meeting should be strictly limited to presentation topics.



Why is early stage design  
important?

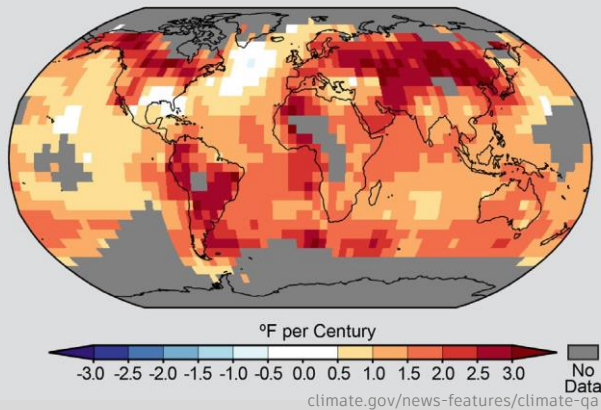


**Decisions**  
made in early stage design  
**greatly influence**  
**cost and environmental impact**  
of buildings  
**throughout their lifecycle.**



The MacCleamy curve

**Decisions**  
made in early stage design  
**greatly influence**  
**cost and environmental impact**  
of buildings  
**throughout their lifecycle.**

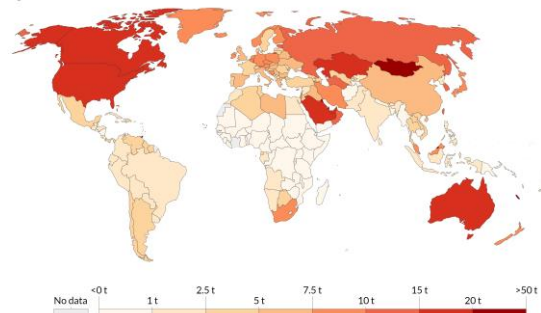


Warming trend 1900-2012

#### Per capita CO<sub>2</sub> emissions

Carbon dioxide (CO<sub>2</sub>) emissions from the burning of fossil fuels for energy and cement production. Land use change is not included.

Our World  
in Data



Source: Our World in Data based on the Global Carbon Project; Garginder & UN  
Note: CO<sub>2</sub> emissions are measured on a production basis, meaning they do not correct for emissions embedded in traded goods.  
OurWorldInData.org/co2-and-other-greenhouse-gas-emissions/ • CC BY

ourworldindata.org/co2-emissions

CO<sub>2</sub> emissions per capita 2019

## Stakes are high:

- Global warming
- Population growth



Australian Academy of Science

10B population by 2060  
1/2 → 2/3 in cities

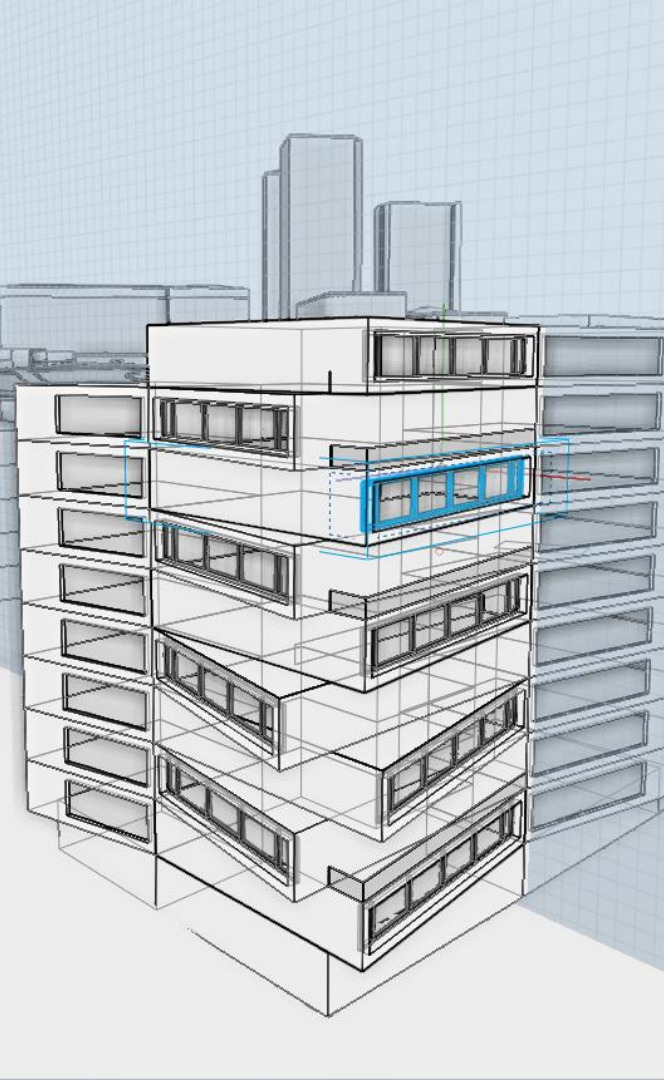


13K buildings/day

## Stakes are high:

- Global warming
- Population growth





## Stakes are high:

- Global warming
- Population growth

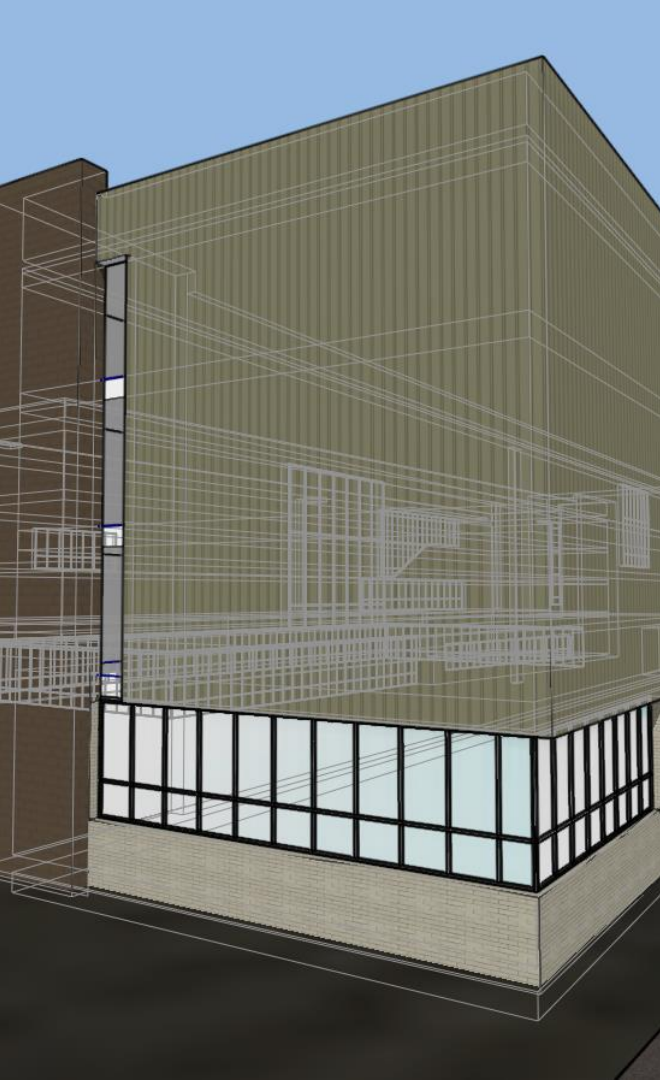
All while navigating...

- Smaller budgets
- Accelerated timelines





**Software**  
can help you  
**design better buildings.**



AUTODESK® FORMIT® PRO

We **support architects**  
by combining  
**intelligent automation** and  
**informed analysis**  
with **fluid 3D sketching**  
so you can  
**design better buildings.**



How does FormIt Pro  
support architects?

# A fluid 3D sketching environment with...

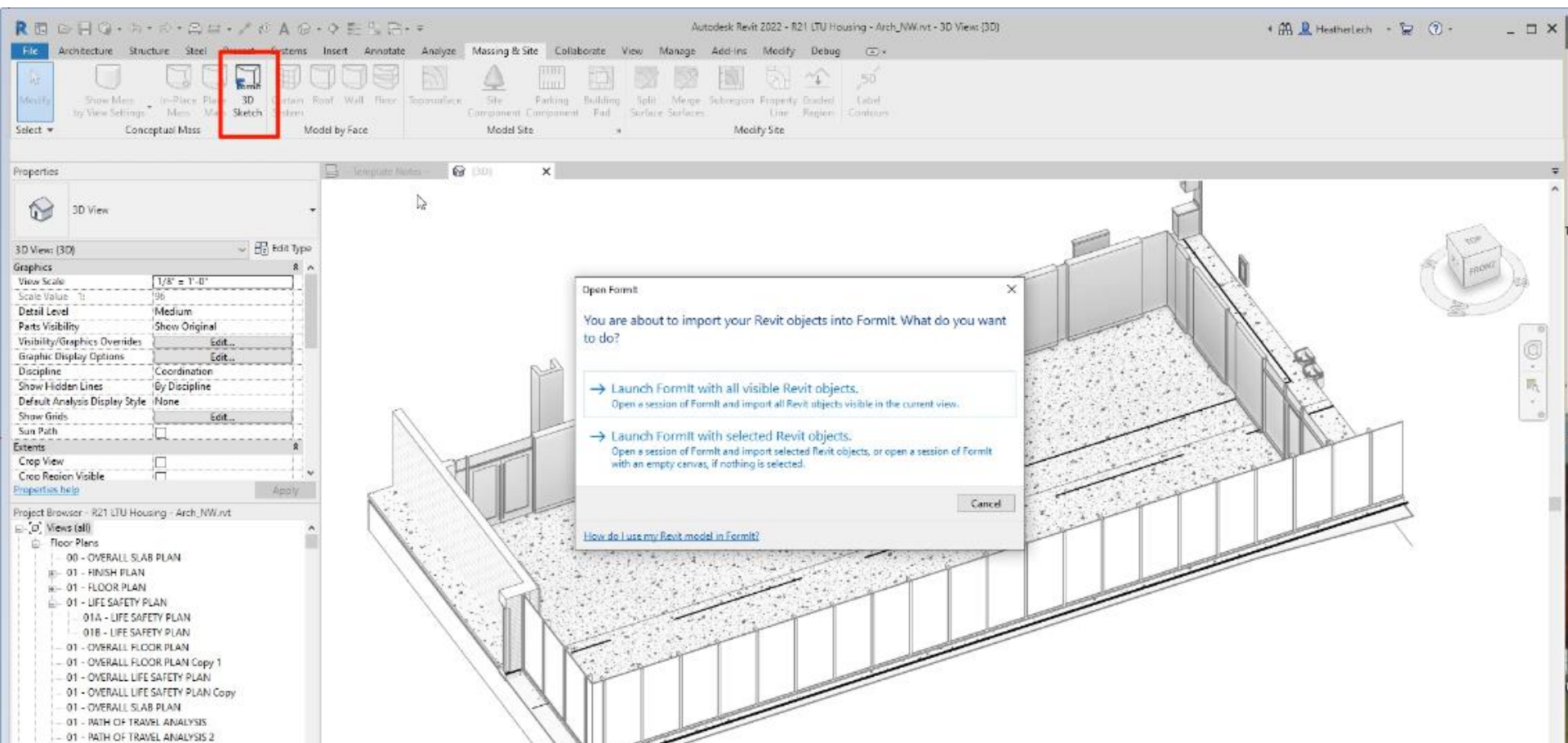
Seamless connection from Concept to BIM  
Informed design exploration  
Collaborative data sharing





AUTODESK® FORMIT® PRO

Seamless Connection  
from Concept → BIM



F+R for design iteration



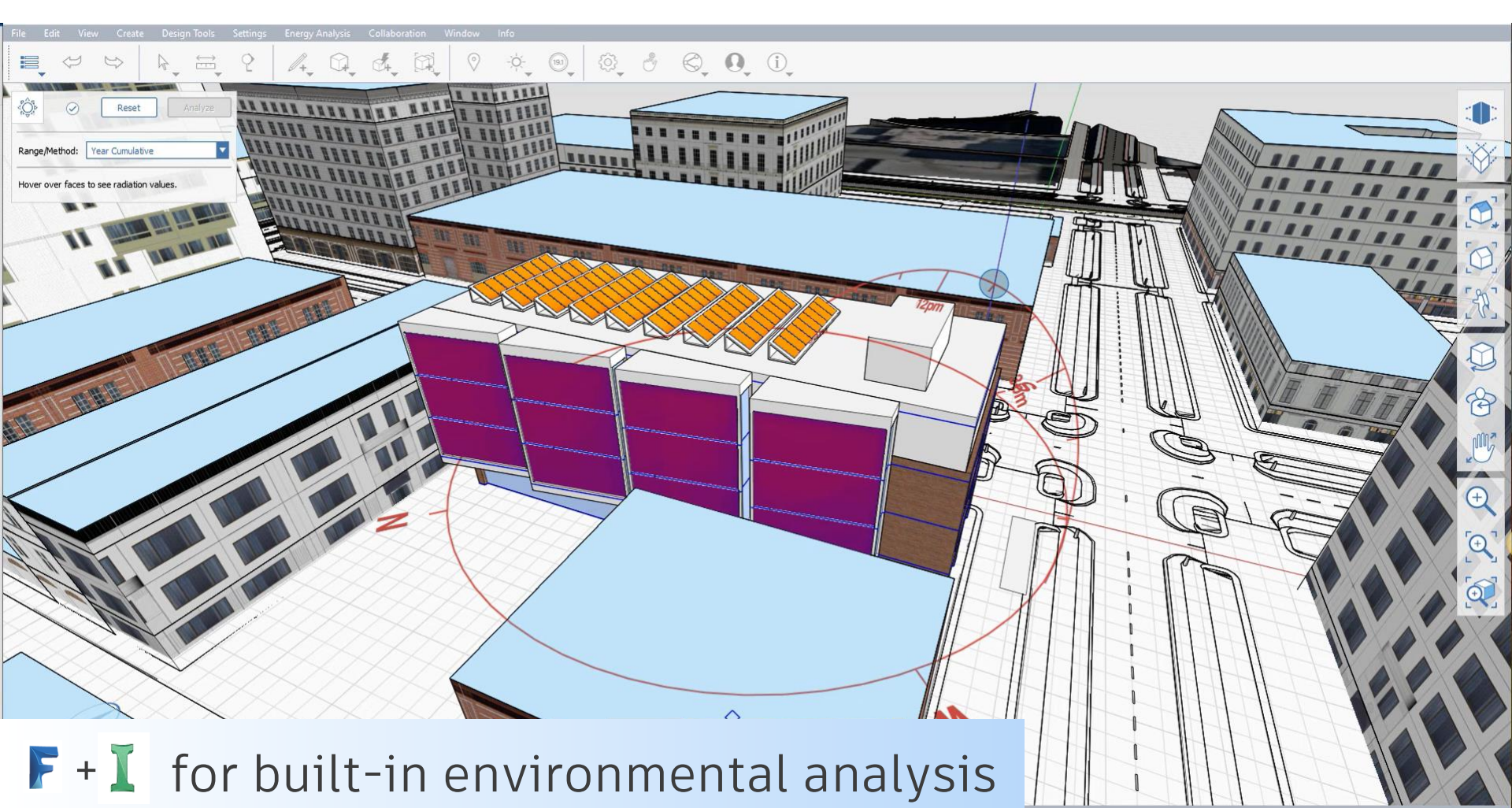


AUTODESK® FORMIT® PRO

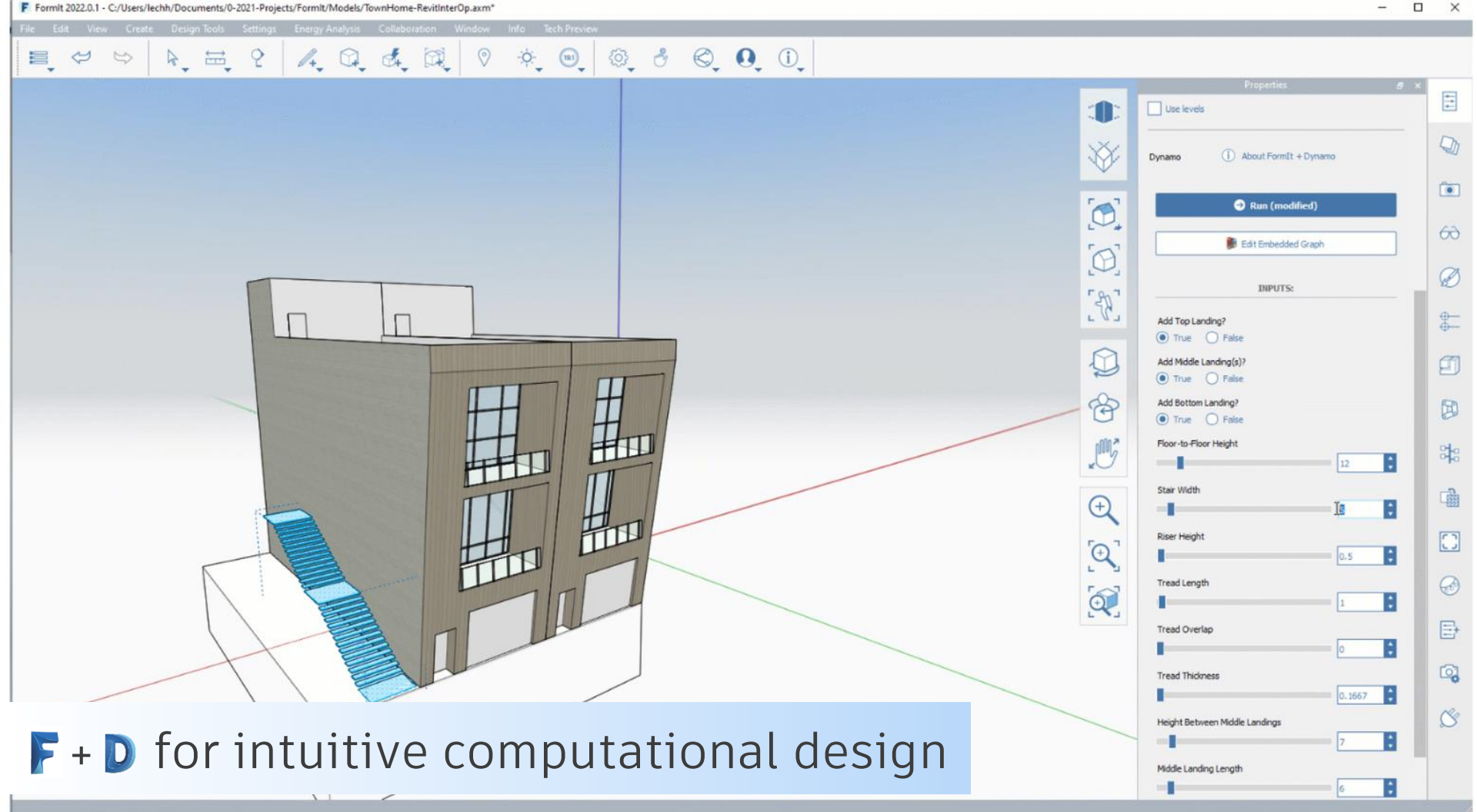
# Informed Design

Environmental Analysis  
Computational Analysis

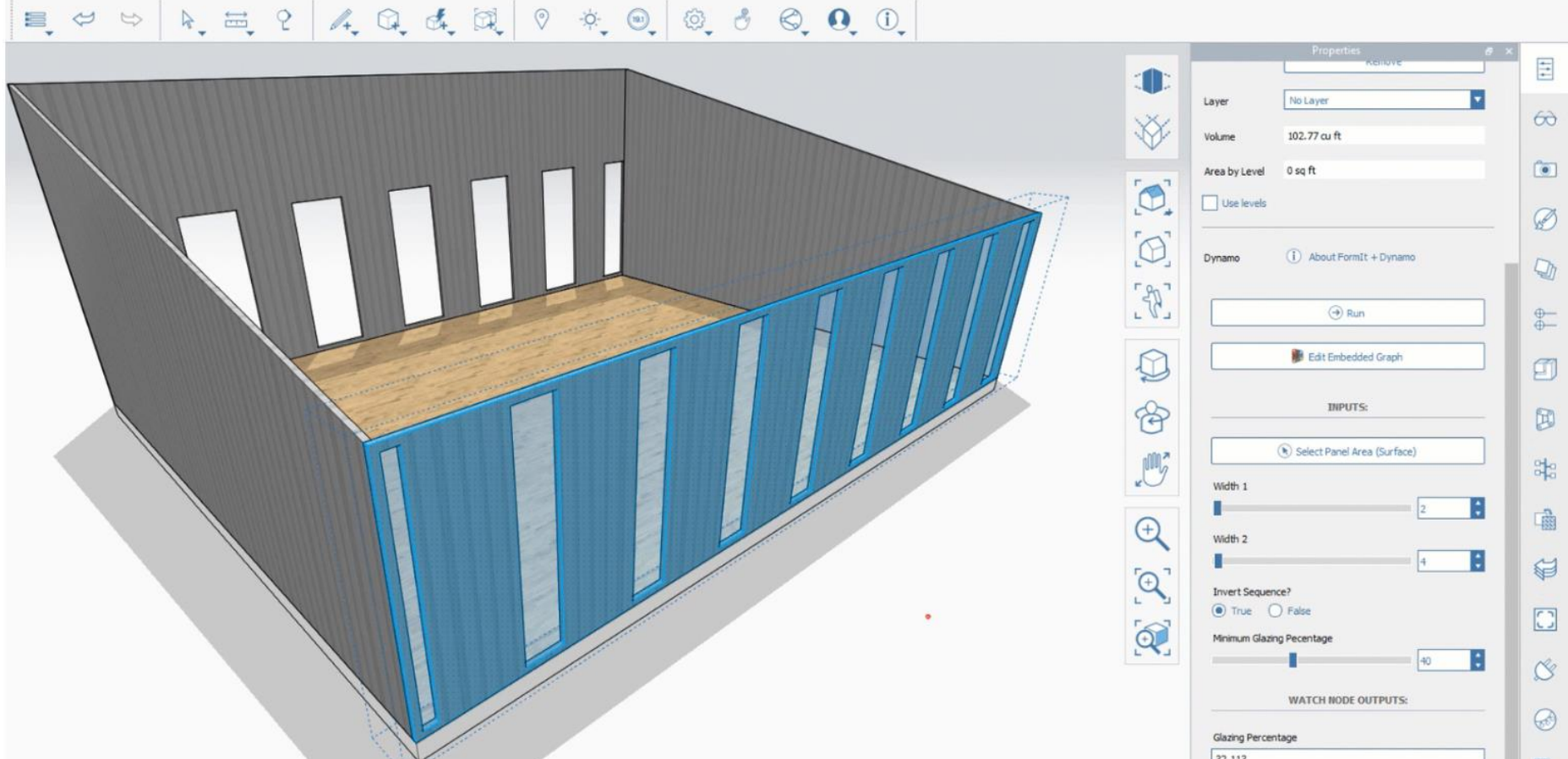




**F + I** for built-in environmental analysis



**F + D** for intuitive computational design



**F + D** for customized computational analysis




AUTODESK® FORMIT® PRO

# Collaborative Data sharing



**Markups**


Filter ▾ Sort ▾



**PRIVATE** ▾

**Heather Lech**  
04:58 pm · V1 (current)  
Scene

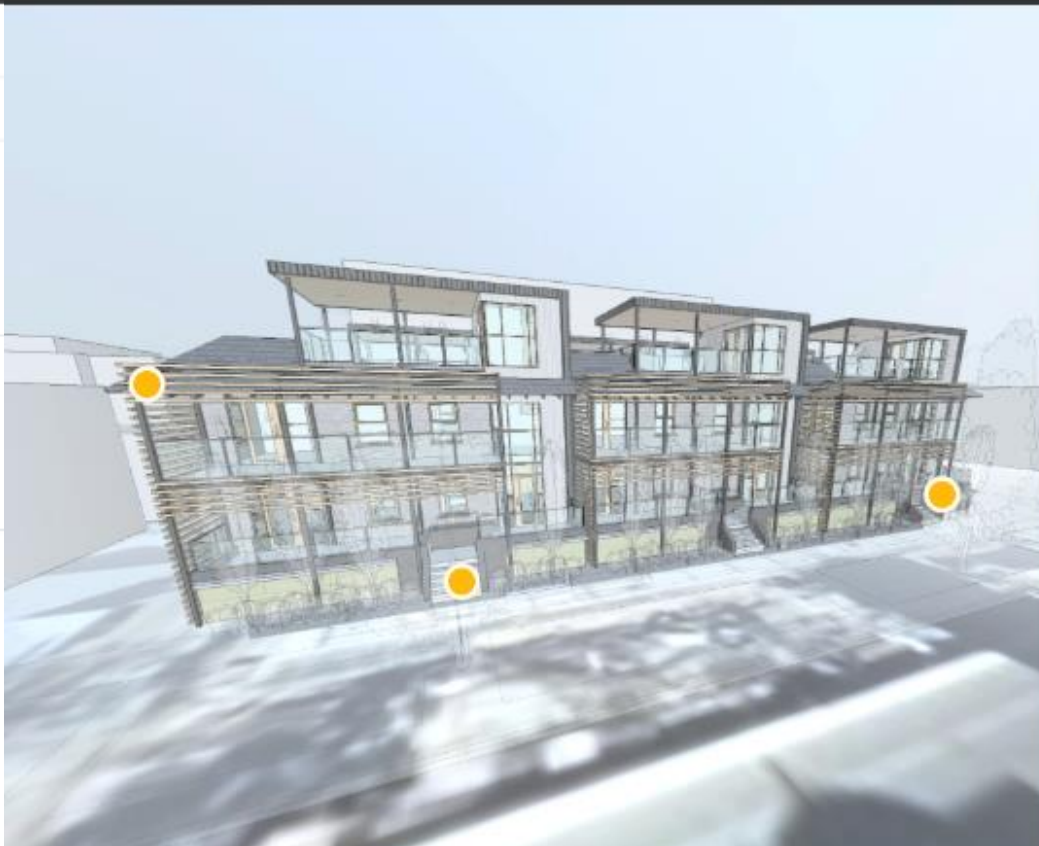
Add attachments



**PUBLISHED**

**Heather Lech**  
04:57 pm · V1 (current)  
Scene

Add attachments



**Layers**

Enter filter term

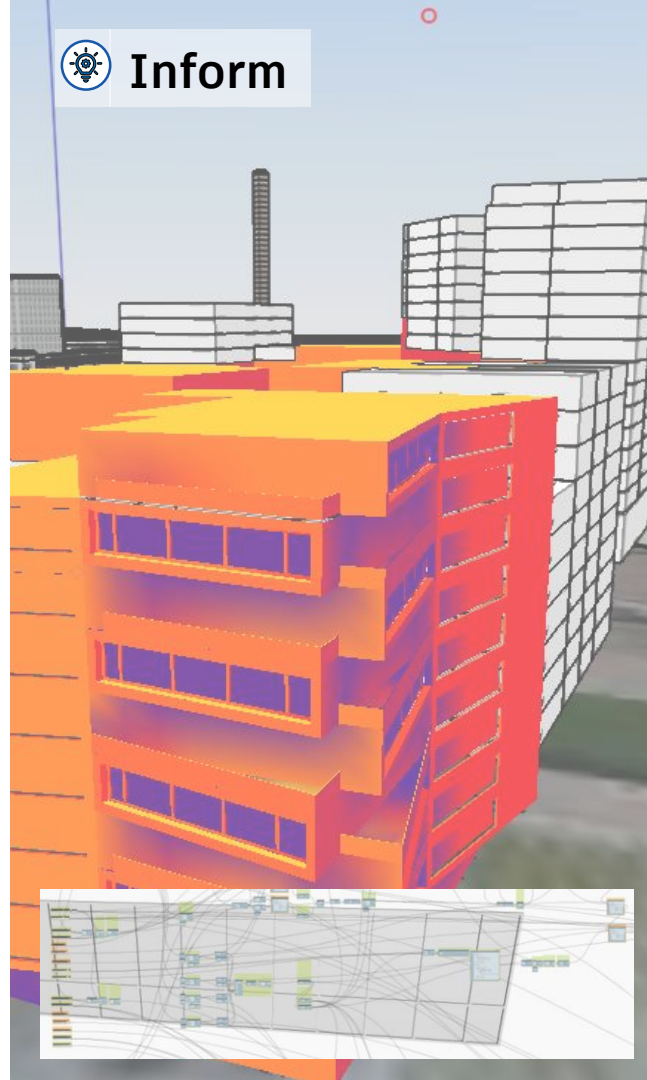
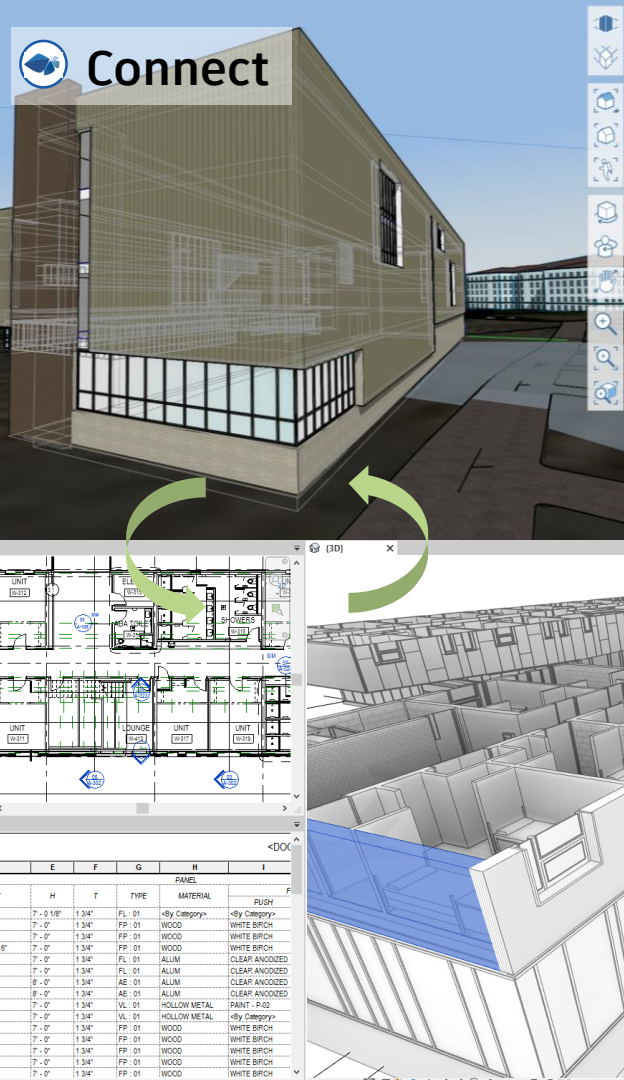
- 00 context - buildings
- 00 road plane
- 00 satellite - original
- 01 existing floor plates
- 01 opt 1 building
- 01 opt 1 structure
- 01 site
- 02 opt 1 furniture
- 03 people
- 04 vegetation
- Layer0
- people



for collaboration on the Autodesk Cloud



What's next for  
early stage design?

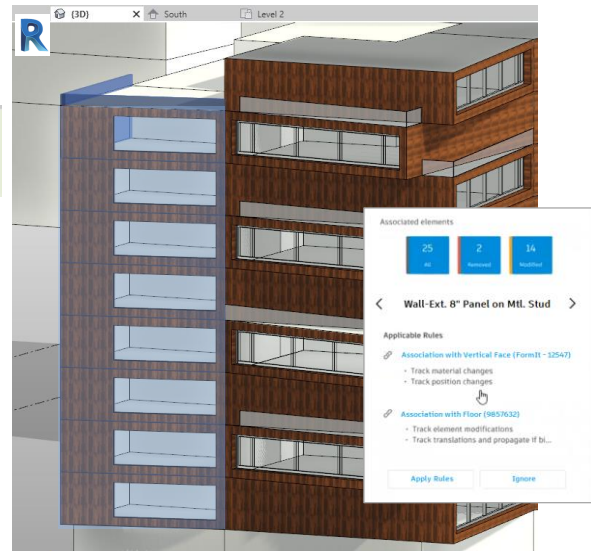
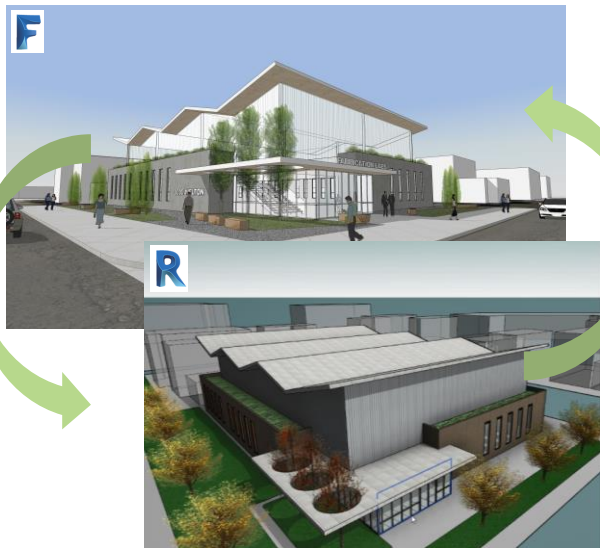






# Connect workflows across the ADSK portfolio

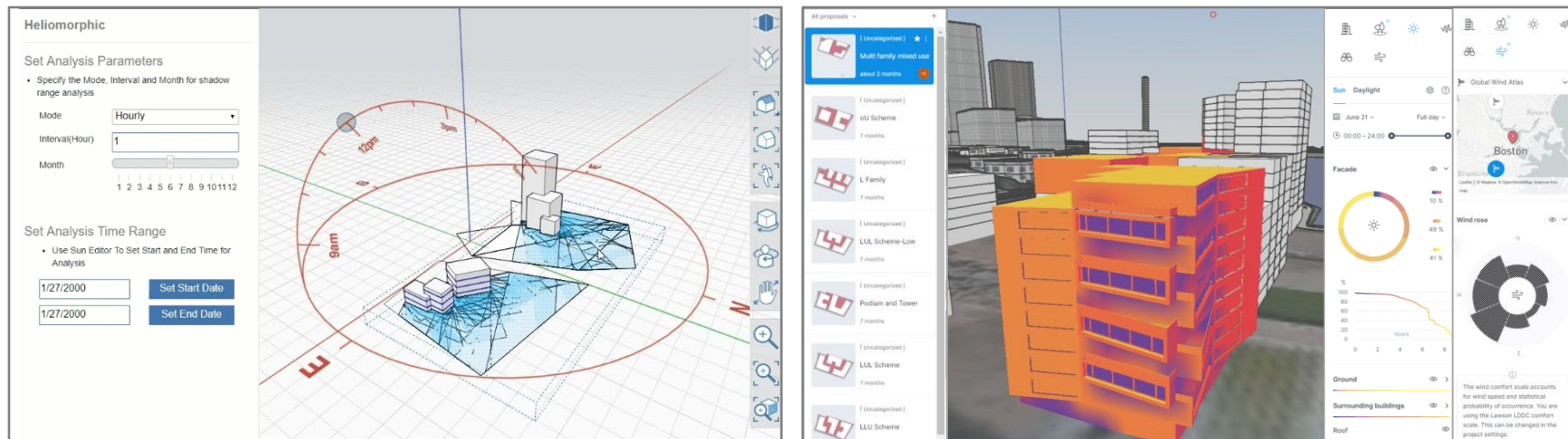
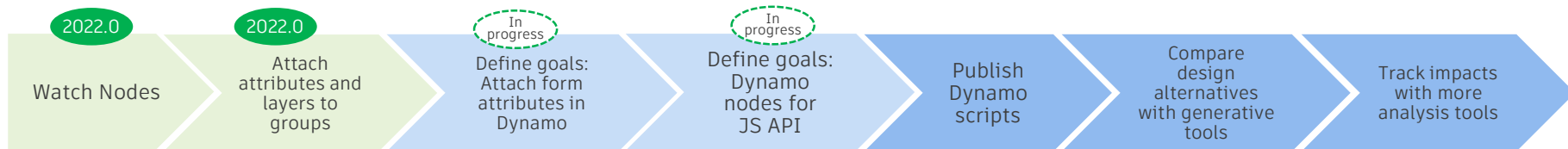
Create a seamless experience between conceptual and detailed design to prevent rework because design is iterative not linear.





# Inform design with analysis and compute

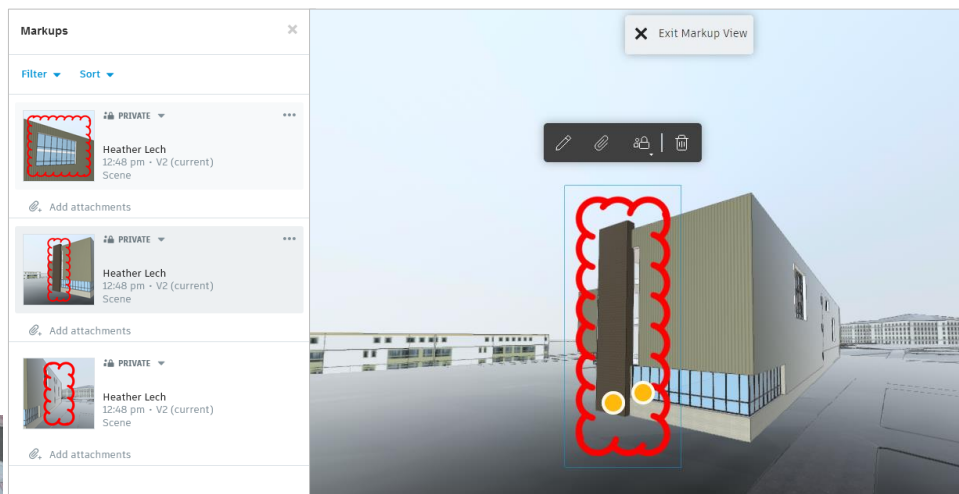
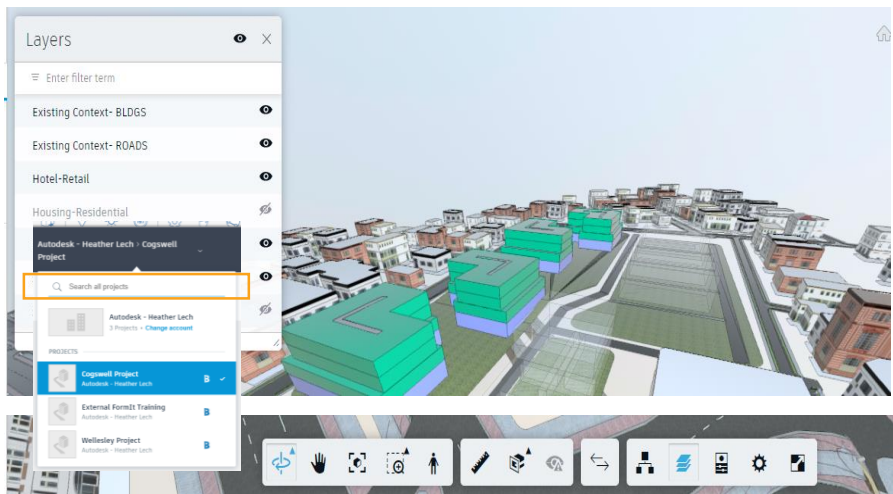
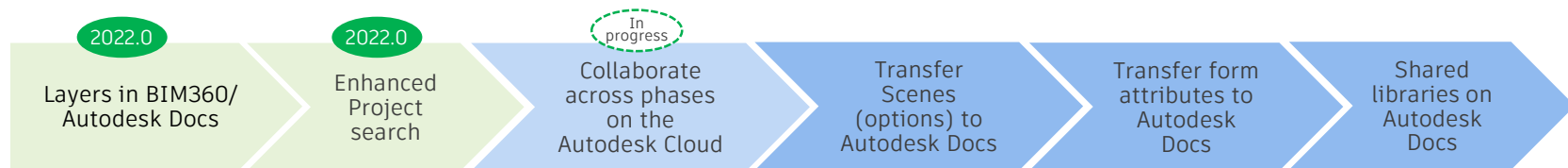
Combine computation and 3D sketching so architects can automate processes and make informed decisions in early stage design.





# Collaborate with shared data on the Cloud

Ensure a single data source starting with early-stage design so teams can collaborate efficiently.





# Improve Performance and Scalability

Enhance performance and scalability so that complex, data-rich projects remain fast and accessible.



Navigation: **4x – 20x** faster

Orbit, pan, zoom, swivel, jetpack mode.



Group Operations: **10x – 15x** faster

Edit/exit Group Edit mode, create Group, Make Unique...



Selection and Preselection: **10x – 30x** faster

Especially with Groups containing lots of geometry

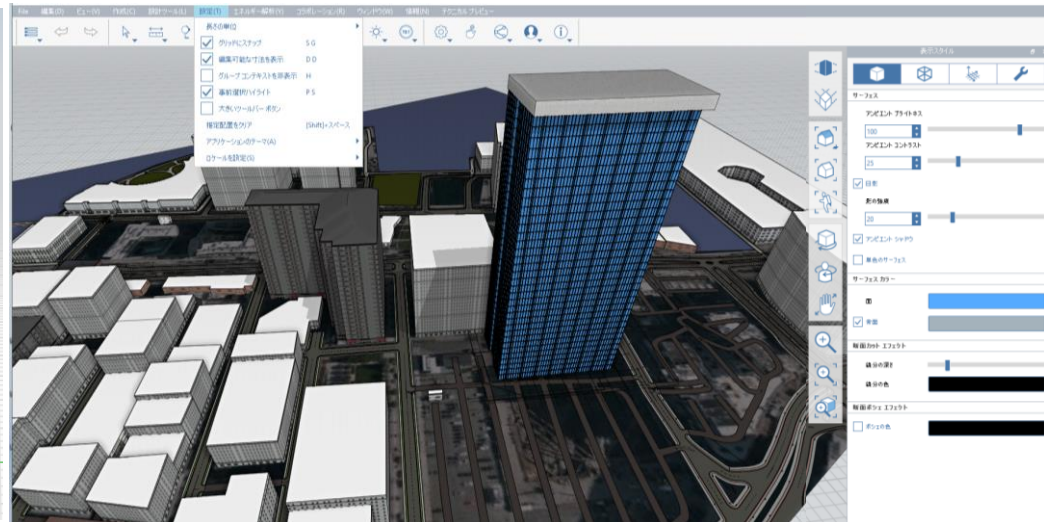
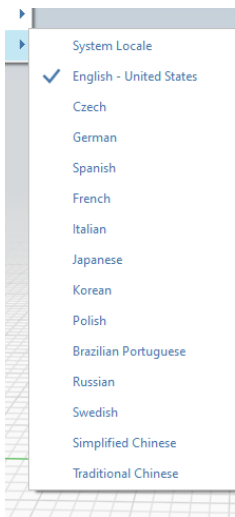


Creation and Editing: **4x – 20x** faster

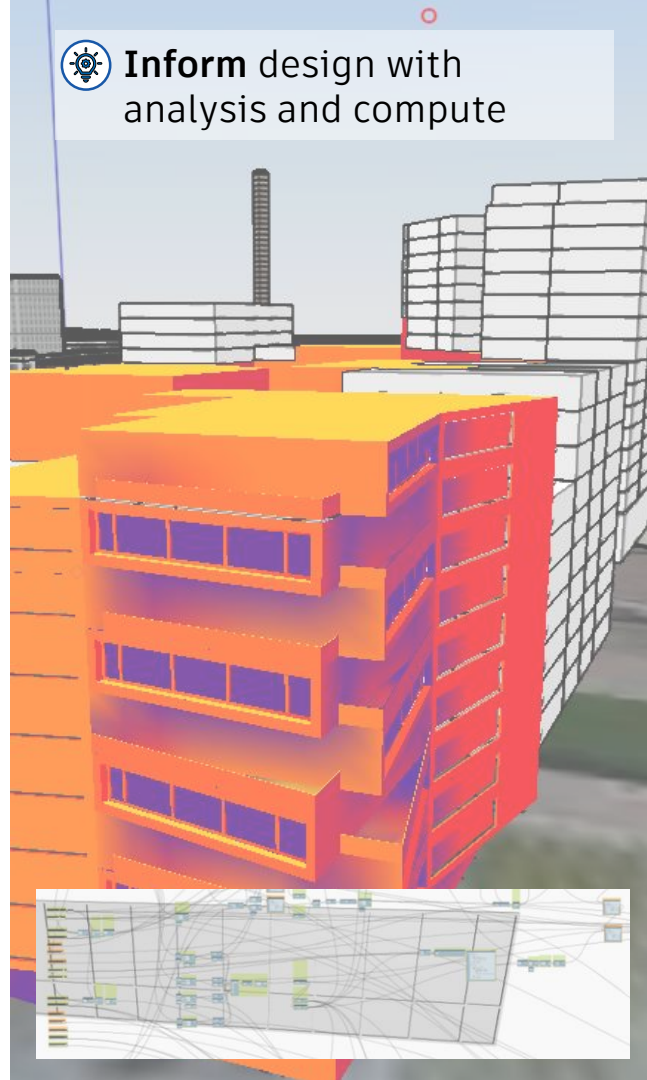
Create/delete geometry, Drag face/note, move, paint...

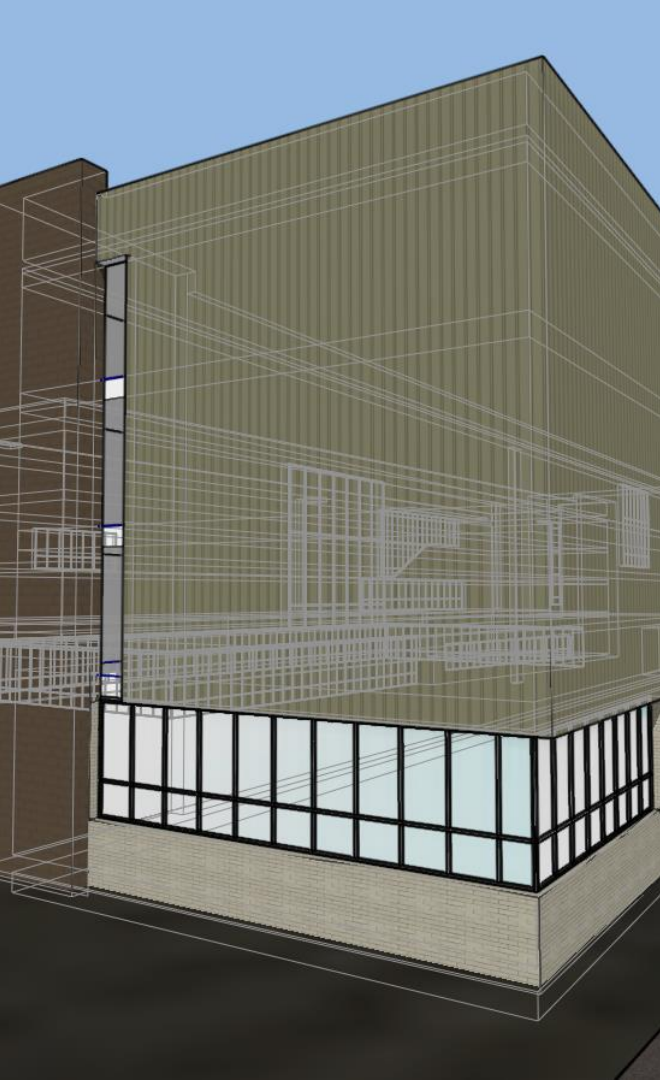


F → R	Formit File Size	Import Time		Performance Improvement
		Formit Converter (Revit 2021)	Import CAD (Revit 2022)	
Model 1	0.25 MB	60 seconds	5.54 seconds	<b>10.8x</b>
Model 2	2 MB	80 seconds	5.19 seconds	<b>15.4x</b>
Model 3	32 MB	2760 seconds	89 seconds	<b>31.0x</b>
Model 4	115 MB	(did not import)	138 seconds	∞
Model 5	230 MB	(did not import)	152 seconds	∞









# AUTODESK® FORMIT® PRO

We **support architects** by combining  
**intelligent automation** and **informed analysis**  
with **fluid 3D sketching** so you can  
**design better buildings.**

**[formit.autodesk.com](https://formit.autodesk.com)**  
[autodesk.com/sustainability](https://autodesk.com/sustainability)

The background is black with four abstract, metallic-looking geometric shapes in the corners. These shapes are composed of flat planes and sharp edges, creating a sense of depth and modernity. They appear to be part of a larger structure, possibly a desk or a piece of furniture, with some surfaces reflecting light.

# AUTODESK UNIVERSITY

Autodesk and the Autodesk logo are registered trademarks or trademarks of Autodesk, Inc., and/or its subsidiaries and/or affiliates in the USA and/or other countries. All other brand names, product names, or trademarks belong to their respective holders. Autodesk reserves the right to alter product offerings, specifications and pricing at any time without notice, and is not responsible for typographical or graphical errors that may appear in this document.

© 2021 Autodesk. All rights reserved.