

Presentation to the Audit Committee  
on July 7, 2023  
Agenda Item AU2.7

**AUDITOR  
GENERAL**  

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**TORONTO**

# **City of Toronto's Modular Housing Initiative: The Need to Balance Fast Delivery with Stronger Management of Contracts and Costs**

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# Presentation Overview

- Why this Audit Matters
- Background
- Audit Objectives
- Key Audit Findings by Area
- Closing Remarks

# Why This Audit Matters

- **Modular housing** is an innovative opportunity for the City to **respond rapidly to Toronto's urgent homelessness crisis**, to:
  - reduce pressure on its shelter system, and
  - provide people experiencing homelessness with **permanent, safe, and affordable homes**
- **Strong oversight and management** of the Modular Housing Initiative is **critical** to ensure the projects are on time and on budget

# Background - What is Modular Housing?

Site Prep &  
Foundation Work



On Site  
Construction



Occupancy

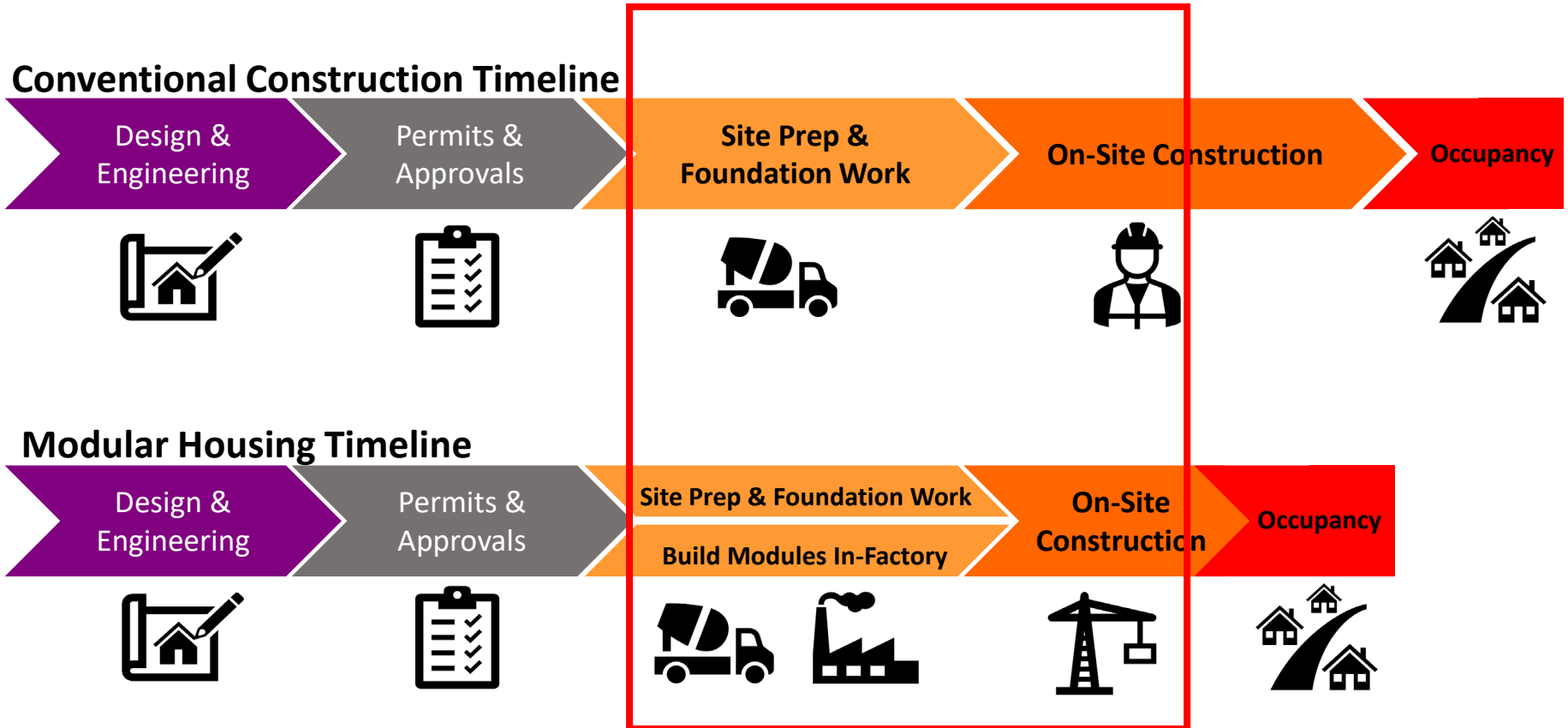


Build Modules In-Factory

Completion

# Modular Housing versus Conventional Construction

## Comparison Timeline





# Audit Objectives


1. Procurement was in compliance with appropriate purchasing policies and procured in an open, fair, competitive, and transparent manner
2. City is effectively managing its modular housing contracts and costs, ensuring contract requirements are met
3. Does modular housing result in faster delivery and lower cost to build housing than traditional construction?

# Summary Status of Modular Housing Initiative

Location	Units	Adjusted Budget*	Final Costs / Forecast Costs	Variance	Variance %	Occupancy Date
<b>Phase One</b>						
11 Macey Avenue	56	\$ 10,640	\$ 12,233	\$ 1,593	15%	December 19, 2020 January 28, 2021
321 Dovercourt Road	44	\$ 8,360	\$ 9,836	\$ 1,476	18%	
<b>Sub-total</b>	100	\$ 19,000	\$ 22,069	\$ 3,069	16%	
<b>Phase Two</b>						
540 Cedarvale Avenue	59	\$ 11,210	\$ 20,058	\$ 8,848	79%	November 15, 2022 Expected in July 2023 TBD
39 Dundalk Drive	57	\$ 10,830	\$ 21,734	\$ 10,904	101%	
175 Cummer Avenue	59	\$ 11,210	\$ 21,526	\$ 10,316	92%	
<b>Sub-total</b>	175	\$ 33,250	\$ 63,318	\$ 30,068	91%	
<b>Total</b>	<b>275</b>	<b>\$ 52,250</b>	<b>\$ 85,387</b>	<b>\$ 33,137</b>	<b>63%</b>	

**\$33M (63%) over** adjusted budget overall versus actual/forecast project costs, and expected to increase further

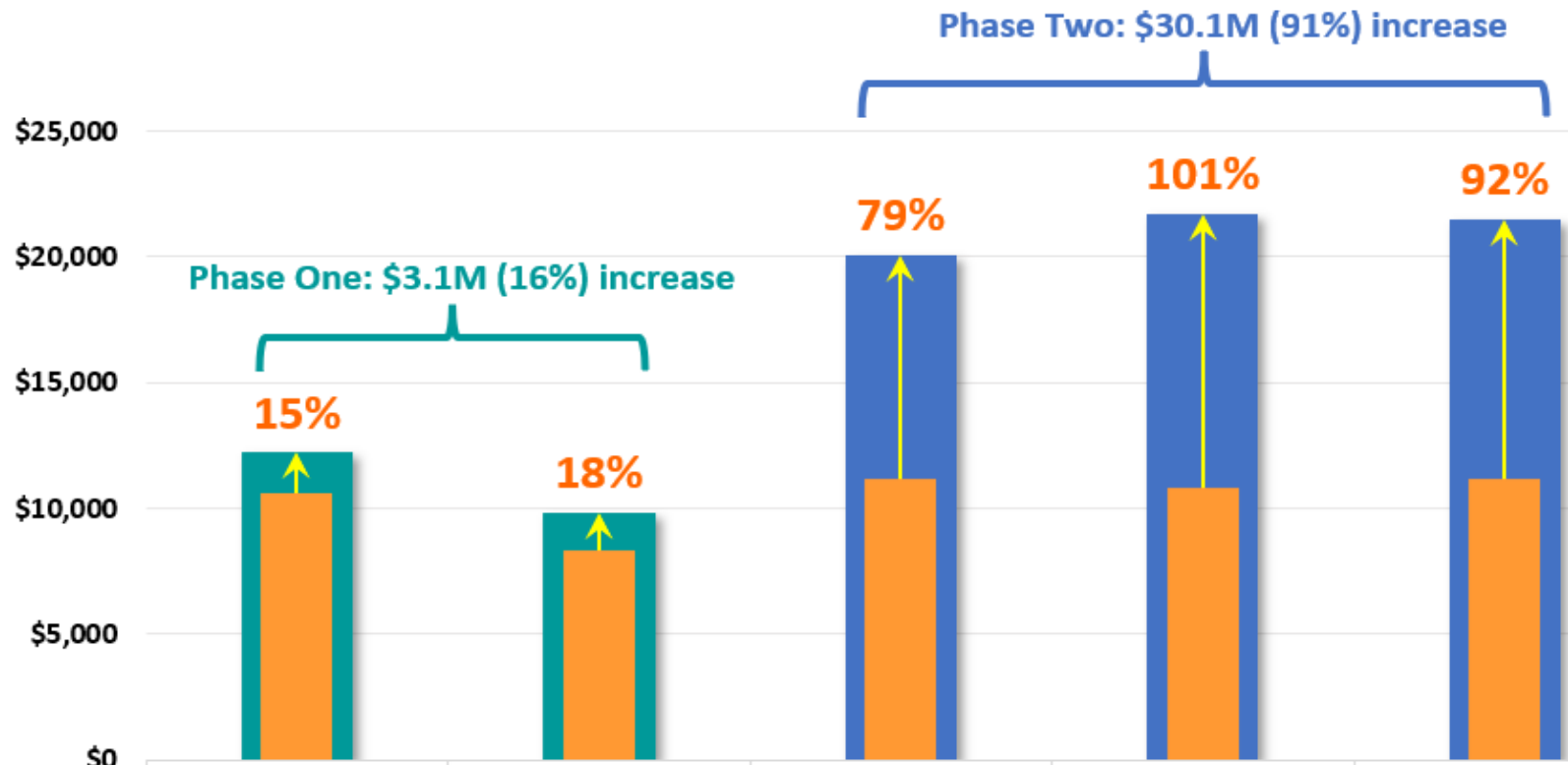
# Key Audit Findings and Recommendations

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- A. Better Project Planning Before Budget Preparation**
  - B. Strengthening Tracking, Monitoring and Reporting of Project Costs**
  - C. Improving Contract Management and Review of Change Orders**



# A. Better Project Planning Before Budget Preparation

Actual Cost / Forecast Cost versus Adjusted Budget by Site  
(as of March 2023, dollars in thousands)



	Phase One 11 Macey Avenue	Phase One 321 Dovercourt Road	Phase Two 540 Cedarvale Avenue	Phase Two 39 Dundalk Drive	Phase Two 175 Cummer Avenue
Actual/Forecast	\$12,233	\$9,836	\$20,058	\$21,734	\$21,526
Adjusted Budget	\$10,640	\$8,360	\$11,210	\$10,830	\$11,210

# Better Project Planning Before Budget Preparation (Continued)

- Some project planning and due diligence work on project sites not completed until after budget prepared – led to some costly change orders
- Some site preparation and other costs not considered when developing budgets



The above factors contributed to the cost increase between the actual/forecast project costs and adjusted budget.

## B. Strengthening the Tracking, Monitoring and Reporting of Project Costs

- Project budgets and costs were divided across many accounts in the City's financial system
- Not a clear understanding of roles and responsibilities, which contributed to gaps in the monitoring of some project budgets/costs
- Transparency could be improved with reporting to City Council on financial information

# C. Improving Contract Management and Review of Change Orders

## Areas of Improvement

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graph TD; A[Areas of Improvement] --> B[Change order management]; A --> C[Contractor performance monitoring]; A --> D[Work progress inspections]; A --> E[Invoice reviews];
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Change order management

Contractor performance monitoring

Work progress inspections

Invoice reviews

# 20 Recommendations



Implementation of our report recommendations will:

- Strengthen controls over modular housing contracts and costs
- Enhance the quality of reporting to City Council on the Modular Housing Initiative



**Thank You**

**AUDITOR  
GENERAL**  

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**TORONTO**

# Item AU2.7 - Audit of City of Toronto's Modular Housing Initiative



**Staff Presentation to the Audit Committee on  
July 7, 2023**





# The Modular Housing Initiative

- Launched during the onset of the COVID-19 pandemic as a rapid, life-saving and more cost-effective response (as opposed to shelters) to provide people experiencing homelessness with safe, secure and permanent homes.
- In April 2020, Council approved the program to rapidly **create 250 homes** over two phases, with **\$47.5m** in capital funding (including City capital funding and CMHC grants and loans) plus incentives.
- The City's HousingTO 2020-2030 Action Plan has an overall target of approving 1,000 new modular supportive rental homes by 2030.



# Program Results To-Date

- A total of **275 modular homes**, which are within the scope of the audit, are either complete or in development.
- The first two sites completed within 5 months of construction start and have provided 100 homes at:
  - 11 Macey Ave. (Ward 20) complete Dec 2020
  - 321 Dovercourt Rd (Ward 9) complete Jan 2021
- Two projects from Phase 2 are complete or near completion:
  - 540 Cedarvale Ave (Ward 19) complete Nov 2022
  - 39 Dundalk Dr. (Ward 21) to be completed in July 2023.
- The fifth project at 175 Cummer Ave. (Ward 18) has been appealed to the Ontario Land Tribunal.



*Phase 1 projects at 321 Dovercourt Rd and 11 Macey Ave. – total of 100 new studio apartments*



*Phase 2 projects at 540 Cedarvale Avenue and 39 Dundalk Dr. (under construction)*

# Key Program Delivery Challenges

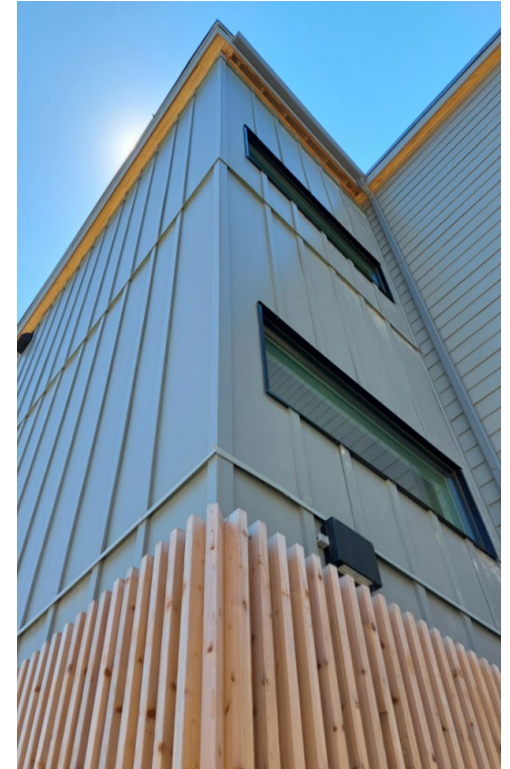
- When launched in April 2020, Toronto was the first jurisdiction in Ontario to take a modular approach to creating supportive housing.
  - Limited local examples for benchmarking and costing were available to inform program budget.
- Over the course of delivering the program, construction costs in Toronto increased significantly (over 20% year-over-year\*).
- Global supply chain shortages resulted in project delays.
- The project at 175 Cummer continues to face increased costs (including transportation and storage costs to move and store modules) due to delays in obtaining zoning approvals.
  - The City requested and received Minister's Zoning Orders (MZO) for seven other supportive housing developments in 2020 and 2021.
  - This is the only site where a requested MZO has not yet been issued by the Province of Ontario.



*\*Based on StatsCan residential construction cost index data from Q4 2020 to Q4 2022*

# Modular Housing Audit Report

- Management thanks the Auditor General for an important and helpful report, with recommendations that will strengthen the delivery of the program, once implemented.
- Management agrees with all 20 recommendations and many have already been implemented or are underway, including as part of preparing to deliver new projects under the federal Rapid Housing Initiative Phase 3.



# Key Management Responses and Actions

## A. Strengthening the Procurement Process

- ✓ Moving forward, all procurement of modular design-builders will be managed by Corporate Real Estate Management Division (CREM); this will ensure all procurement aligns with City policy.

## B. Better Project Planning and Budgeting Needed

- ✓ A stronger due diligence package has been implemented as part of site selection for RHI Phase 3 and will continue to be refined, including but not limited to: interdivisional review of current and planned sub-surface infrastructure on or adjacent to the site; site surveys; civil engineering consultant review of servicing capacity; etc.
- ✓ A number of improvements have already been made as part of the RHI Phase 3 program, including a standard budget template for modular housing, including lessons learned from prior projects, documentation of all assumptions, contingencies and allowances for any remaining unknown project risks.

# Key Management Responses and Actions

## **B. Better Project Planning and Budgeting Needed (continued)**

- ✓ Management agrees with the recommendation to not proceed with manufacturing modular units until zoning is in effect, subject to funding requirements.
  
- ✓ Management has previously shared impacts of federal funding timelines with CMHC, and will continue to emphasize this point using findings of this audit.
  - RHI 3 program has provided municipalities 90 days for site selection and early due diligence, and 18 months for project delivery (an improvement over 30 days and 12 months for earlier rounds).

## **C. Strengthening the tracking, monitoring, and reporting of costs**

- ✓ Management agrees with recommendations and will develop a revised financial management and tracking system by Q1 2024 to improve all financial management related aspects emerging from the modular housing audit.
  
- ✓ As part of RHI Phase 3, Housing Secretariat, PMO and other Divisions are developing shared formal policies and procedures, and reporting templates, for the purpose of tracking program and project costs against budgets.

# Key Management Responses and Actions

## **D. Strengthening the review processes for change orders and invoice payments**

- ✓ Management agrees and has begun procurement of a payment certifier to validate invoices for all ongoing modular housing projects, and for any future projects secured through RHI Phase 3.
- ✓ Management began implementation earlier in 2023 of a new change control process in response to lessons learned and this audit, with implementation by end of 2023.
- ✓ At the time of this report, management has addressed all overcharges identified in the report, with repayment secured against unpaid invoices.

## **E. Establishing formal contract and project management procedures and policies**

- ✓ Management agrees and is in the process of a final review for the existing CCDC14 (design-build) contract for RHI Phase 3. This review considers all recommendations from this report.
- ✓ CREM is completing amendments to its project management processes and playbooks to reflect recommendations of this audit.