

From: ["Mochrie, Paul" <Paul.Mochrie@vancouver.ca>](mailto:Paul.Mochrie@vancouver.ca)

To: ["Direct to Mayor and Council - DL"](#)

Date: 12/1/2021 6:45:07 PM

Subject: [Progress update on Tiny Home and Shelter Motion](#)

Attachments: ACCS - GM - Memo (Council) - Tiny Home and Shelter Motion Progress Update RTS 14151 (2021-12-01).pdf

Dear Mayor and Council,

The attached memo from General Manager of Arts, Culture, and Community Services Sandra Singh provides a progress update on the Tiny Home and Shelter Motion - RTS 14151. Key points include:

- Staff across departments have been working collaboratively to advance Council's objectives to develop a Tiny Home or Shelter pilot project.
- The memo provides a summary of what was learned from a Market Sounding and next steps to implement a proposed model for a Tiny Shelter Pilot Project.
- Staff will report to Council in February with the site for the pilot, funding partnerships with senior government, and a detailed budget and implementation plan.
- If approved by Council in February, the goal will be to finalize and operationalize the tiny shelters pilot by September 2022.

Should you have any questions, please contact Sandra directly, at sandra.singh@vancouver.ca and she will ensure they are responded to through the weekly Council questions process.

Best,
Paul

Paul Mochrie (he/him)
City Manager
City of Vancouver
paul.mochrie@vancouver.ca



The City of Vancouver acknowledges that it is situated on the unceded traditional territories of the x^wməθk^wəyəm (Musqueam), Sḵwəxwú7mesh (Squamish), and səliłwətał (Tsleil-Waututh) Nations.

MEMORANDUM

December 1, 2021

TO: Mayor & Council

CC: Paul Mochrie, City Manager
Karen Levitt, Deputy City Manager
Lynda Graves, Administration Services Manager, City Manager's Office
Maria Pontikis, Director, Civic Engagement and Communications
Katrina Leckovic, City Clerk
Anita Zaenker, Chief of Staff, Mayor's Office
Neil Monckton, Chief of Staff, Mayor's Office
Alvin Singh, Communications Director, Mayor's Office
Andrea Law, General Manager, Development, Buildings & Licensing
Celine Mauboules, Managing Director, Homelessness Services & Affordable Housing Programs
Dan Garrison, Assistant Director, Housing Policy & Regulation

FROM: Sandra Singh, General Manager, Arts, Culture and Community Services

SUBJECT: Progress Update: Motion "A Closer Look at Tiny Homes & Shelters"

RTS #: 014151

PURPOSE

This memo provides an update on work arising from the Council motion "A Closer Look at Tiny Homes & Shelters" approved in October 2020. It provides a summary of what was learned from the Market Sounding and outlines next steps to implement a proposed model for a Tiny Shelter Pilot Project.

BACKGROUND

On October 15, 2020, Council passed a motion "A Closer Look at Tiny Homes and Shelters," directing the Chief Building Official (CBO) and General Manager of Planning, Urban Design, and Sustainability to report back with analysis for potential implementation of Tiny Homes and Shelters as one of the approaches to providing transitional housing for people experiencing unsheltered homelessness. Specifically, staff were asked to report on:

- An analysis of the potential implementation of tiny homes and shelters;
- Possible changes to the Building By-law and the Zoning and Development By-law to support tiny homes and shelters, including any legal and public engagement considerations;

- A possible partnership with a non-profit or faith-based organization, to establish a Tiny Home Village (THV) demonstration project as a means to address chronic homelessness, as well as contribute to the broader housing mix; and
- The feasibility of a 100 Tiny Homes (Accessory Dwelling Unit) for private properties Pilot Project.

At the time of the motion, staff who would normally work on such a direction were focused on implementing direction from Council on the previously passed Motion “Emergency COVID-19 Relief for Unsheltered Vancouver Residents” directing staff to work on urgent responses for creation of new shelter and housing in partnership with senior government. Their focus in late 2020 was on planning for Rapid Housing Initiative proposals and planning for potential shelter activations. Throughout early 2021 and into the spring, they were focused on creation of two new shelters, response to Strathcona encampment, supporting the TMH development at Vernon.

Staff were able to turn their attention to advancing this motion in the mid-Spring of 2021 and in July 2021, a memo was submitted to Council that outlined the findings of the initial review and next steps developed by staff to assess the feasibility of creating a Tiny Home pilot project, as well as options for zoning and permitting changes that would be necessary to pilot a Tiny Home pilot project.

In August 2021, a Market Sounding was completed by staff to seek industry recommendations and generate creative partnerships and opportunities to deliver Tiny Homes or Tiny Shelters. The Market Sounding process also increased staffs’ knowledge regarding recommended design/build concepts, costs, partnerships and operating models.

DISCUSSION

Market Sounding Summary

A Market Sounding was completed on August 31, 2021. The request was for feedback from developers, builders and service providers about the implementation of a tiny home/shelter project. Respondents were asked to provide information pertaining to five key elements:

1. Site selection and possible project partnerships;
2. Operating model and budget;
3. Regulations and permitting;
4. Unit Design and safety; and
5. Construction and site activation.

Four responses were received from a variety of developers and builders, both locally and across North America. Respondents to the Market Sounding included:

- **DignityMoves:** Non profit developer that develops tiny shelter villages, often working with BOSS Cubez to develop the units. They are based in California. <https://dignitymoves.org/>
- **Hewing Haus:** A design build company that develops laneway and tiny homes. They are based in Vancouver. <http://hewinghaus.com/>
- **Lanefab Design/Build:** A design build company that develops custom homes and laneway houses. They are based in Vancouver. <http://www.lanefab.com/tinytownhouse>
- **Pallet SPC:** A design-build company specifically for tiny shelters. They are based in Washington State. <https://palletshelter.com/>

The high level findings and summary of recommendations from the respondents are discussed below:

1. Tiny Shelters with High Levels of Support

- The Market Sounding responses advised that in order to support individuals experiencing homelessness who have high support needs, a Tiny Shelter model with wrap around supports is advisable.
- Market sounding respondents advised that a tiny home model for people with extensive and deeper support needs is not recommended and that a Tiny Home model, with self-contained units, is more appropriate as a lower support model for people who can live independently.

2. Scattered-site vs. Congregate Site

- The majority of respondents recommended a congregate site with a larger number of units at one location. This was recommended in order to reduce costs and to be more efficient for the operator to support guests. The respondents also spoke to the importance of experienced non-profit operators being central to the success of this model.
- Scattered sites with under 10 units were only recommended when they are co-located with existing facilities. This would allow the existing operator to utilize their staff resources and services in an efficient and beneficial way.

3. Fire Safety and Sprinklers

Respondents recommended the following fire safety features for tiny shelter units:

- 6 to 10 feet separation between units;
- Hard wired smoke detector;
- Carbon monoxide detector;
- Keypad doors with override codes;
- Fire extinguishers in each unit;
- Emergency egress door;
- Non-combustible materials on the main interior living surfaces; and
- Option of staff monitoring with a fire annunciator panel.

Market sounding respondents advised that sprinklers were not recommended as a safety feature as the options above are considered sufficient to address life safety issues. If sprinklers are required, respondents advised that it would significantly increase the cost of the project, and impact not only the timelines, but also potential suitable site options.

Impact of requiring sprinklers include:

- Unit costs would increase as a result of the additional mechanical requirements;
- Site costs would increase as a result of the additional site servicing requirements;
- Site development requirements and site servicing would be increased, which would limit the site options;
- Of the Market Sounding respondents with pre-designed units, none of them have sprinklers in the units. The timeline would be extended and more costly as the project would require custom designed units.

4. Site Activation Timeline

Market Sounding respondents provided a range of timelines from 12 weeks to 6 months, including time for design, development, shipping and installation. Shorter timelines came from companies with units that are pre-designed and already in production. Longer timelines are from companies providing a custom designed solution that is not yet in production. The timelines provided assume a site has been selected, relative ease of servicing the site, and necessary City approvals.

In summary, the Market Sounding responses point staff towards developing a tiny shelter pilot vs. a tiny home pilot. This model is best operationalized at a congregate site with congregate bathrooms, showers and the 24/7 support services a typical shelter would provide. Design examples are provided in Attachment A, and a more fulsome discussion of the proposed model and rationale follows below.

Planned Proposal: Tiny Shelter Pilot

After analysis of the information from experienced implementers, staff are working on a proposal to Council for the implementation of a tiny shelter pilot project that serves individuals experiencing unsheltered homelessness. The goal would be to create a low-barrier shelter that quickly provides people with shelter and wrap-around supports as an emergency response while permanent housing options are being pursued.

The Tiny Shelters

In the emerging pilot proposal, each tiny shelter unit will be one room with space for one to two people to sleep, store belongings, and possibly a place to sit. The tiny shelters will not have a kitchen or washroom, but these amenities will be provide on-site.



Image 1 & 2: Pallet units at LA's Chandler Street Tiny Home Village

Options for Site Design

Three options are presented for designing the site and services. The option chosen will be dependent on the capacity at the specific site and the capacity of the operator.

Option A (preferred option)

10 units at an existing shelter parking lot, all services shared

The tiny shelter pilot site is located with an existing shelter that has the facility and staffing capacity to increase their bed count. The Tiny Shelters will share all services

with the existing shelter. This includes accessing the washrooms, showers, laundry, staff support, meals and laundry inside of the shelter.

Option B

10 units at an existing shelter parking lot, some services shared

If the shelter does not have the capacity to increase their bed count because they already have the maximum amount of people allowed to use their bathrooms and showers, then the site will have Tiny Shelters outside along with a bathroom/shower trailer. Other services will be shared with the existing shelter, including the laundry, staff support, meals and laundry. Dependent on staff’s ability to monitor the external washrooms and showers, a staff or paid peer monitoring position may be created to support safety and security.

Option C

10 units at a City or church parking lot, no services shared (self-sufficient)

If a shelter parking lot is not available, we could create a self-sufficient Tiny Shelter model on an available parking lot. The Tiny Shelter units and services will be available outside on the parking lot, including space for staff, meals, washrooms, showers, laundry and staff support.

The table below outlines the site requirements for each of the three options:

Table 1: Summary of Site Requirements for Each Option

	OPTION A (preferred option)	OPTION B	OPTION C
WASHROOMS & SHOWERS	In existing shelter	At the tiny site	At the tiny site
LAUNDRY	In existing shelter	In existing shelter	At the tiny site
INDOOR & OUTDOOR AMENITY AREAS	In existing shelter	In existing shelter	At the tiny site
KITCHEN	In existing shelter	In existing shelter	At the tiny site
INTAKE, CASE MANAGER, STAFF OFFICE	In existing shelter	In existing shelter	At the tiny site
ADMIN SUPPORT	In existing shelter	In existing shelter	At the tiny site

Number of Units at the Location

As recommended by the Market Sounding, staff will be proposing that the tiny shelter pilot project have all units grouped together at one location. The pilot project will start with a small number of congregate units in order to minimize additional pressure on the existing shelter, while still adding needed capacity. By co-locating the tiny shelters pilot, economies of scale are

achieved as the overall cost of management and provision of support services make this project more affordable than if piloted at a stand-alone site.

Proposed Operating Model

The proposed model is to create a Tiny Shelter pilot site, adjacent to an existing shelter. For example, there could be a parking lot or laneway on site that would work well for this use. This model will operate like a typical shelter in every way with wrap-around supports including: three meals a day, showers, laundry, case management, and 24 hour staffing and would be an extension of the existing shelter.

Benefits of this Model

The benefits of this model include:

- The ability to quickly create and mobilize tiny shelter units to support people experiencing unsheltered homelessness that may not access traditional shelters.
- Making use of parking lots or land that are not adequate for longer term housing.
- Increasing the capacity of current shelters that are full and turning people away.
- Co-locating the shelter pilot with an existing shelter to utilize existing resources of an experienced operator, services and staffing capabilities that are already in place.
- Maximizing on economies of scale, keeping capital and operating budgets lower by co-locating the tiny shelter pilot project with an existing shelter to benefit from existing systems and infrastructure already in place.
- Providing an existing shelter with private tiny shelter units thereby serving needs of individuals seeking more privacy or couples, for example, not currently accessing congregate shelter settings.

The majority of shelters have beds separated by dividers in a large open congregate settings offering little individual privacy. This can be problematic for many, including but not limited to: couples, people requiring a quiet place to sleep, people with pets, gender diverse people who may be transitioning or those with health concerns requiring privacy. The tiny shelter pilot units would serve as a positive alternative for these individuals and would provide additional warmth and safety compared to tents or other structures.

If approved and funded, the Tiny Shelter model will be a quick solution to:

- Increase shelter capacity by utilizing existing shelter services;
- Assemble additional shelter spaces relatively quickly (depending on the site);
- Support the needs of people who don't feel adequately served in traditional shelters and thus remain unsheltered; and
- Potentially move the tiny shelters to different locations as needed.

Pilot Project Location

A Tiny Shelter model is only recommended for sites where development of other longer-term solutions such as housing are not possible. Staff are currently exploring a number of site options to situate a tiny shelter pilot and will report to Council in February 2022 with the final proposal, including location and detailed budget.

FINANCIAL IMPLICATIONS

Funding and Partnerships

Staff are currently exploring a partnership with senior levels of government to provide operational funding and support for the pilot project. Staff have also provisionally allocated \$1.5M in EHT funding for the investment needed to implement the pilot. Staff will report to Council in February with a detailed budget and recommendations to quickly implement the pilot project.

High-level Budget Estimates

The following is a capital budget comparison using high-level, order of magnitude cost estimates provided through the market sounding. The cost per unit is inclusive of a shared portion of common and staff areas. The budget includes estimates for:

- Tiny shelter unit capital costs (design, development, shipping and installation);
- All common and staff areas included at the tiny site;
- Site preparation and servicing;
- Municipal costs and insurance;
- GST; and
- Landscaping.

Table 2: High-level Budget Estimates

	OPTION A	OPTION B	OPTION C
COST PER UNIT	\$28,000	\$35,000 to \$40,000	\$55,000 to \$70,000
TOTAL CAPITAL PROJECT COSTS (10 units)	\$280,000	\$350,000 to \$400,000	\$550,000 to \$700,000

Staff will report to Council in February 2022 with a detailed costing to implement the site specific shelter pilot.

Tiny Shelter Costs Compared to Other Types of Housing

Tiny shelters serve an emergency purpose, a relatively quick response to providing additional shelter spaces as needed. While providing longer term housing remains the more affordable investment for the City in the long term, the tiny shelters serve as a short-term solution that is adaptable, scalable and can be relatively quickly implemented. Staff anticipate that the tiny shelter can play a unique role in responding to homelessness. Please see Attachment B for a capital cost comparison between tiny shelters and other types of housing development that serve a high support needs population.

Regulatory & Bylaw Requirements

Staff explored a number of options to support the implementation of tiny homes. As noted in the July memo to Council, tiny homes are not defined or contemplated in the City’s Zoning and

Development By-laws. The advice from the market sounding also stressed the need for alternate life safety measures given the significant costs associated with sprinklering required by the Vancouver building By-Law.

In discussions with Legal Services, PDS and DBL, staff are exploring two options to quickly implement the tiny shelter pilot:

1. *Define as Social Service Centre*

The first approach would define tiny shelters under the institutional use of, "Social Service Centre" similar to how shelters are currently defined and permitted by the City's land use regulations. This conditional use is permitted in a variety of zoning districts thereby increasing opportunities to create a pilot.

Implementing the pilot through Option A and B above would be relatively straight forward as these sites are located in areas allowing Social Service Centres. Situating the tiny shelter pilot in Option C (e.g, church parking lot) would be more complex and require approval from the Director of Planning.

While defining tiny shelters as social service centres would create options to implement the pilot in a variety of zones, compliance with the Vancouver Building By-law however, would continue to pose a challenge based on what we heard through the market sounding. Respondents in the market sounding advised a number of alternate life safety measures in place of sprinklering requirements of the Vancouver Building By-law

2. *Non-Enforcement Resolution*

The second approach would consider adopting a non-enforcement resolution given that the pilot project is time-limited. This approach would adopt a non-enforcement resolution to suspend strict enforcement of City By-laws as a temporary solution for the pilot project. This approach was put forward as a consideration by legal services as it has been utilized by the City previously.

Staff will continue to explore alternatives to sprinklering of tiny shelter pilot units and will report to Council in February with key tiny shelter features and operational considerations to ensure the life safety of tiny shelter pilot residents.

NEXT STEPS

Staff have begun the work to identify suitable site options to co-locate a tiny shelter pilot with the preferred approach of Option A. This effort includes engaging BC Housing to explore an operational funding partnership and continued work on a detailed capital and operating budget.

In February 2022, Staff will report to Council with the recommendation to implement a pilot project, including a site recommendation and budget. If Council approval is received in February, the *Tiny Shelters Pilot* will proceed with the following next steps:

1. Confirm site and operational plan,
2. Procure units, and
3. Finalize regulatory approach and site servicing requirements.

If approved by Council in February, the goal will be to finalize and operationalize the tiny shelters pilot by September 2022. Given the market sounding most conservative estimate for

site activation was 6 months, staff believe the 6 month time frame between February to September 2022 allows for sufficient planning and implementation, given the groundwork has been initiated.

FINAL REMARKS

Staff across departments have been working collaboratively to advance Council's objectives to develop a Tiny Shelter pilot project. This memo with supporting attachments provides further detailed information. Staff will report to Council in February with the site for the pilot, funding partnerships with senior government, and a detailed budget and implementation plan.

If Council has any further questions or needs additional information, please feel free to contact Sandra Singh directly at sandra.singh@vancouver.ca.



Sandra Singh, General Manager
Arts, Culture, and Community Services

sandra.singh@vancouver.ca

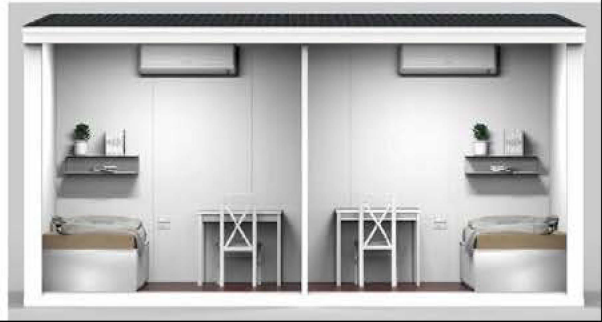
Attachment A: Market Sounding Sample Designs

Attachment B: Cost comparison with other forms of housing

ATTACHMENT A: DESIGN EXAMPLES FROM THE MARKET SOUNDING



Non profit developer working with BOSS Cubes
and are out of California



Lanefab
Design/Build

A design-build company out
of Vancouver





ATTACHMENT B: CAPITAL COST COMPARISON

The table below compares the costs of Tiny Shelter units with other types of housing development. These are estimates only, based on a variety of recent projects.

TYPE OF HOUSING	ESTIMATED CAPITAL COSTS/UNIT Inclusive of common areas & support service areas	SELF-CONTAINED	LIFESPAN
Supportive Housing	\$350,000 to \$400,000	Yes	60 years
Affordable Housing	\$300,000 to \$350,000	Yes	60 years
Permanent Modular Housing	\$290,000	Yes	60 years
Purpose-Built Permanent Shelter	\$180,000	No	60 years
Temporary Modular Housing	\$140,000 to \$160,000	Yes	40 years
Tiny Homes: Self-Contained	\$80,000	Yes	25 years
Temporary Shelter (eg. 875 Terminal)	\$25,000	No	3 years
Tiny Shelter: Option A	\$28,000	No	3 years
Tiny Shelter: Option B	\$35,000	No	3 years
Tiny Shelter: Option C	\$55,000	No	3 years