



CHINATOWN

SENSE OF PLACE SURVEY

SEPTEMBER 10 2021

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01

INTRODUCTION



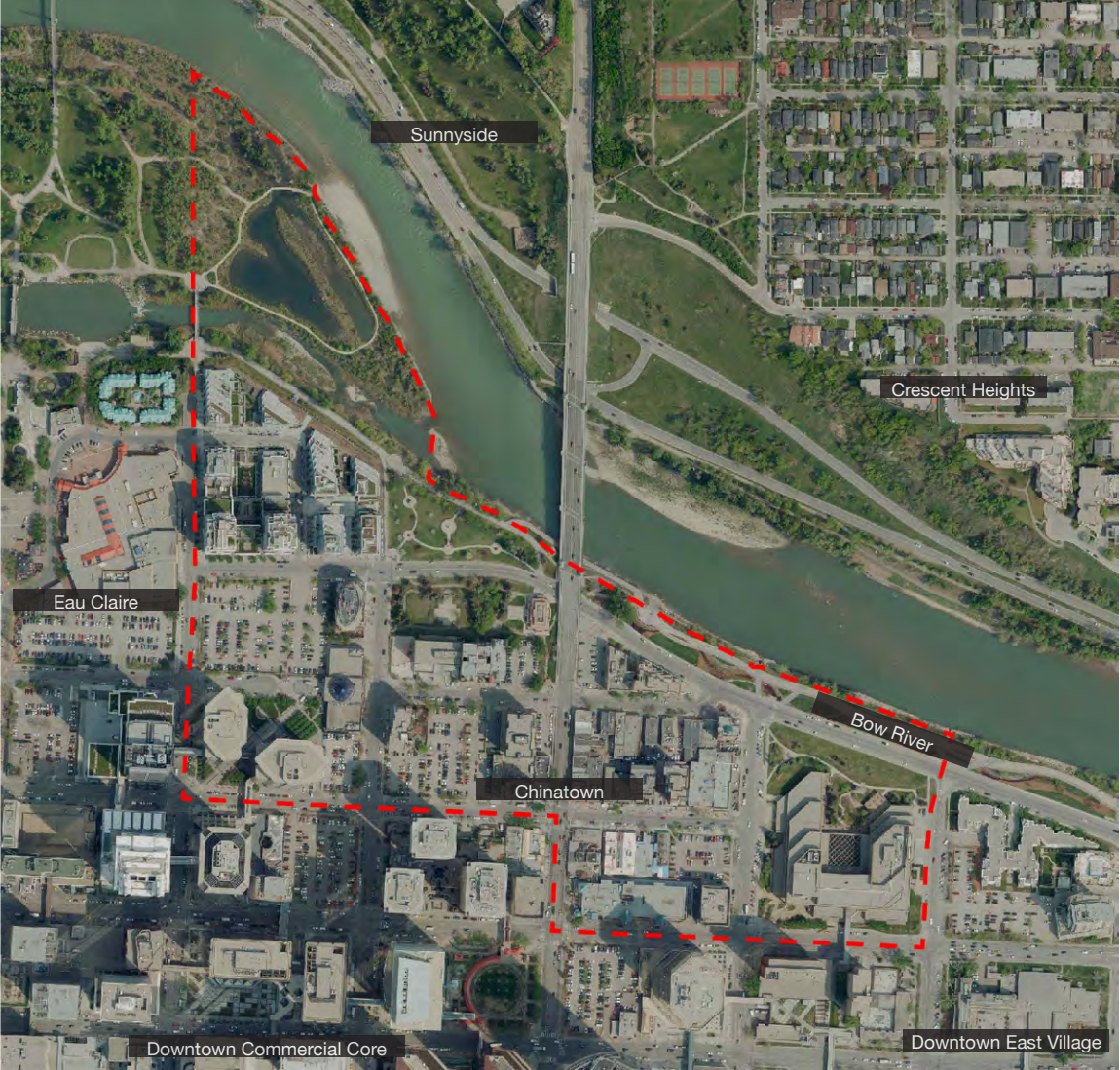
Background

Cities are made up of multiple diverse areas that are rooted in the past. These areas evolve over time and in many cases retain their origins that are reflected in its local culture and built form. Chinatown in Calgary is one of those areas with strong historical roots and a long-lasting culture. Nevertheless, no area of the city is permanently frozen in time.

There are constant forces and pressures for change and redevelopment. The key question is how to accommodate change while retaining the character and sense of place in this historic area of Calgary. With the Tomorrow’s Chinatown Project Team, The City of Calgary has implemented an innovative planning approach. The intent is to develop a two-plan strategy that addresses the cultural and the land use and development challenges for the future of Chinatown. This research project contributes to that innovative approach by incorporating a research component that aims to answer some key questions that are explained in the next section. Tomorrow’s Chinatown Project strategy focuses on four main goals*:

- *Outline a common vision for community character, cultural preservation and evolution—providing a level of certainty around the future of Chinatown*
- *Consider the built environment through a cultural lens and explore future opportunities for public and private investment and redevelopment*
- *Support successful integration of the Green Line LRT station*
- *Identify specific actions that the community and other stakeholders can undertake together– to help strengthen Chinatown’s vibrancy and cultural identity into the future*

(* City of Calgary Tomorrow’s Chinatown website, 2019)



Project Boundary - - - - -

Objectives

This research project had two main objectives. First to focus on identifying key elements of the built environment that contribute to the sense of place and identity of Chinatown. Drawing on the public’s input we weighted each of these elements level of impact on peoples’ perception of identity. A second objective of this project was to develop an online, immersive and visual engagement process that would facilitate conversations with the public. The findings from this study will help in the future drafting of urban design recommendations for improvement of the public realm and architectural guidelines for future development applications. These guidelines will contribute to more appropriate design proposals from developers, could gather community support, and provide certainty in the approval and permit process.

The final recommendations took into consideration the eight Guiding Principles for development in Chinatown approved by Council on December 6, 2016. Each recommendation was then cross-referenced with the principles to map out how they aligned. The eight principles are:

1. All new developments reinforce the distinct cultural and historical character of Chinatown.
2. Chinatown is a residential, mixed-use community.
3. All developments enhance the pedestrian experience.
4. Chinatown is a community for all, and provides housing for residents of all ages and incomes.
5. There are a variety of options for getting to Chinatown.
6. Chinatown has a variety of public and private gathering spaces.
7. Chinatown is safe, clean and vibrant, day or night.
8. Commercial activity in Chinatown supports the residential and cultural community.

Approach

The character, identity and sense of place of Chinatown has different meanings to different people. Recognizing this we must design an engagement process that is as broad and inclusive as possible while at the same time focusing the public's input on the project's objectives.

A carefully designed visual preference survey was designed to gather the essence of a sense of place and identity as perceived by members of the community. A visual preference survey uses graphic images to gather the opinion of the public in regards to their preferred built form. These kinds of surveys help the respondent to have a clear idea of the built form in question and allow for a more accurate assessment of the public's preferences. The diagram below illustrates our approach and methodology.

Methodology

1. Literature Review + Background + Best Practices

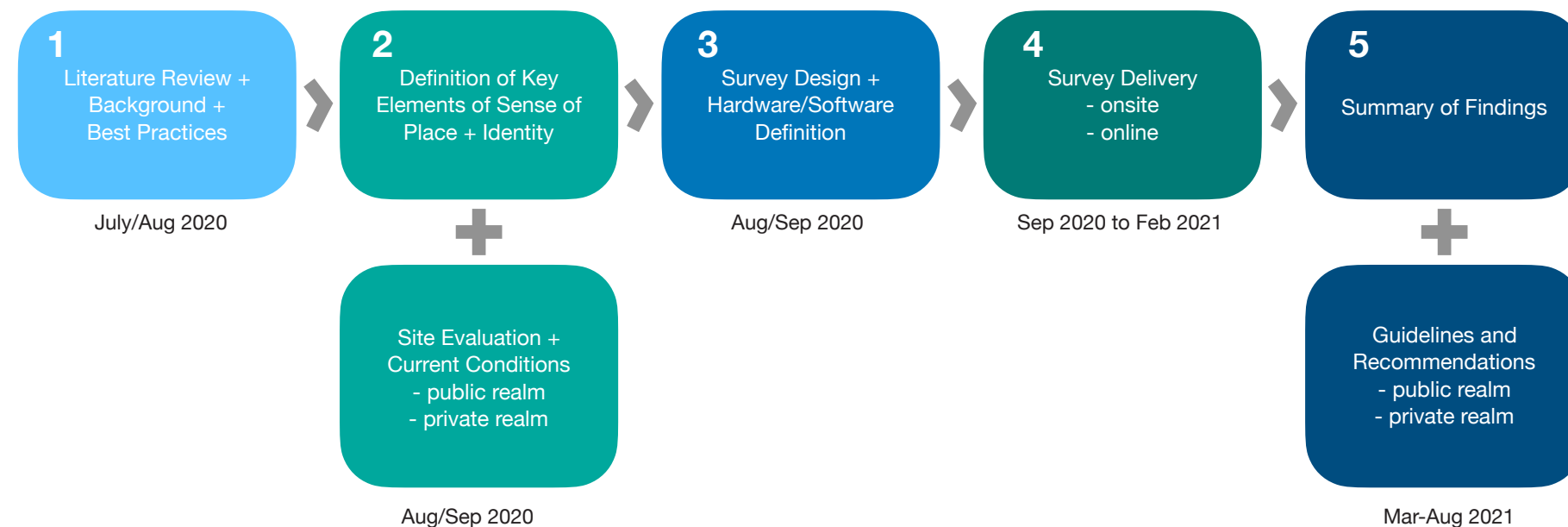
At the beginning of the project we reviewed the existing literature and best practices associated with other sense of place and identity studies. This step helped us set the background and confirm our approach to surveying. This phase included:

- Literature review of sense of place, identity and key elements of the built environment.
- Literature review and best practices for visual preference surveying using immersive technology (virtual reality and 360° video and photography).

2. Definition of Key Elements of Sense of Place + Identity

Once we had completed the literature review it was important to cross reference our findings with the current conditions of Chinatown in order to identify which elements are present on site. This will help define the elements of the built environment that will be the subject of our survey. This phase included:

- Mapping current conditions of the public realm and the private realm (buildings, parking lots and other structures inside the property line).
- Historical evolution research to uncover built form conditions (buildings, street design, land uses) that were present in the past and lost through time. We researched historical street photos as well as Fire Insurance maps and historical aerial photographs from the University of Calgary and Glenbow Library and Archives as well as the work completed by other research teams collaborating in the Chinatown Cultural Plan and Local Area Plan, including the Chinatown Historical Context Paper.
- Categorization of key elements of the public realm (scale, texture/ material, colour, signage, urban furniture, land use).





Methodology (cont.)

3. Survey Design + Hardware/Software Definition)

We attended a day long internal workshop with the City of Calgary Tomorrow’s Chinatown Project Team and the Chinatown Cultural Plan Consulting Team to determine and define the engagement plan.

Based on the results of this workshop and in consultation with the City of Calgary’s Tomorrow’s Chinatown Project Team we designed the survey and selected the technology most appropriate for the survey delivery. The intent was to reach a broad audience that included residents, visitors and different age groups. This phase included:

- Design of questions and visual aids that will form the survey.
- Selection and development of hardware/software media using 360° photography and video (similar to Google Street View). We used photo-editing software to add, highlight and illustrate key elements of the public realm that are the subject of the questionnaire.
- Photography of current conditions using 360° photography and editing to highlight and showcase specific elements of the public realm and built form.

4. Survey Delivery

Due to Covid-19 pandemic restrictions the survey needed to be delivered online during the fall of 2020. We included different stakeholder groups identified in consultation with the City of Calgary’s Tomorrow’s Chinatown Project Team. There were eight focus groups session. Two sessions for seniors, one session in Cantonese, one session in Mandarin and four open sessions in English. After the focus groups were held another session was open to the public. It offered the same questions and images for feedback. This mixed outreach was designed to capture as many participants’ opinions as possible.

The focus groups and online survey were advertised by the City’s team using e-mail, social media and the project’s engagement Website. The focus groups were hosted between November 16 and November 26, 2020. The online survey was open to the public from December 1, 2020 to January 30, 2021.

This phase included:

- Delivery of survey using immersive visualization technology in online focus groups and an online open survey.
- Compilation of data gathered.

5. Summary of Findings + Guidelines/Recommendations

The summary of findings from the data gathered through the surveying was structured by each key element of the built environment providing not only input on the kinds of elements that help define and strengthen the sense of place and identity, but also the weight of importance the public attaches to each of these elements. This was supplemented with a series of guidelines and recommendations for each of the key elements that could serve as the starting structure for more developed urban design and architectural guidelines to be included in the Local Area Plan.

Precedents are provided for each of the recommendations. These were gathered from revitalization projects in other Chinatowns across the globe and recent heritage redevelopment projects in China.

The recommendations align and build upon the *Guiding Principles for Development of Chinatown* accepted by City Council on December 2016. Our findings could help clarify and expand the meaning behind the principles. Specific guidelines could be recommended for the implementation/application of the principles in the decision making process for the culturally-based Local Area Plan.

6. Research Documentation and Discussion

The methodology, process, and findings of this research project have been documented in this report as a record for future use of these methods and technologies in other City of Calgary projects when applicable. It can also serve as a resource for future City of Calgary public engagement processes.

As an academic research group, part of our mission is to share the work and knowledge we gather project-by-project with the public, planning professionals and other academics. The knowledge dissemination and mobilization for this project included a discussion paper that was presented at the international conference of the Council of Educators in Landscape Architecture 2021. Other presentations/discussion events with the City of Calgary as well as other interest groups in our community will be scheduled after the conclusion of the project. We will also aim at presenting this work at a national or international planning conference, including the Canadian Institute of Planners annual conference in 2021.



Presentation title and cover at the Council of Educators in Landscape Architecture 100+1|Resilience Conference 2021. Source: The Urban Lab, University of Calgary.



02 LITERATURE REVIEW



Chinatown and Sense of Place

On Sense of Place

Urban designers, geographers, sociologists, architects and many others have studied the concept of sense of place and have helped to define it as the relationship between a place and its people. It is the product of cultural processes over time within a site. These cultural processes are affected by economic conditions, social interactions and environmental conditions. These processes are then reflected on the built environment generation after generation (Norberg-Schulz 1979; Sandalack 2005).

In this chronological process not all phases of development reflect or protect the past. In many cases new development erases what was before and interrupts the continuity of a place’s heritage. The continuity of the different historical layers strengthens the sense of place. The relationships between the different eras of development, when grounded in a places’ heritage, fosters that relationship between a place and its people (Relph 1976; Trancik 1986).

For these reasons it is important to find a way to protect and foster Chinatown’s sense of place.

This people-place relationship is what uniquely defines Calgary’s Chinatown. Therefore people’s perception of what constitutes the essence of place for Calgary’s Chinatown needs to be understood. The survey helps us understand what are the elements of the built environment people consider to be of importance. The findings from the survey guided us to draft the recommendations.

Chinatown’s Evolving Sense of Place

Chinatown as a place was not always populated by Chinese architecture. North American Chinatowns contain several historical buildings, however, their built form elements (windows, frames, and facades) were built prior to the influx of Chinese immigrants and originally did not reflect Chinese culture. What distinguished Chinatowns as a place was the notable higher concentration of Chinese people among the streets, the Chinese storefronts, signs, and placards. The way these businesses and stores operated was by offering their goods on the street and with their goods in the space between the store and the sidewalk. Sometimes their windows were full of baskets filled with their goods. The use of the public realm in Chinatown was not always restricted to the streets and sidewalks, but the laneways as well, with a high intensity of use (Lai 1991, 1988; Li 2014).

Understanding how the expression of Chinese culture in the built form of North American’s Chinatowns is not a replica of China itself is important. This knowledge can serve as a guide to draft recommendations and guidelines for future development. Calgary’s Chinatown has a sense of place that is not based on its ability to be a close resemblance to China but to express the long tradition of Chinese-Canadian culture within the City of Calgary. Future development in Chinatown can look at its past and to traditional Chinese built form as a form of inspiration for urban and architectural design. The streets, sidewalks, plazas, parks and the buildings that contain them all have visual elements that contribute to the sense of place unique to this community.

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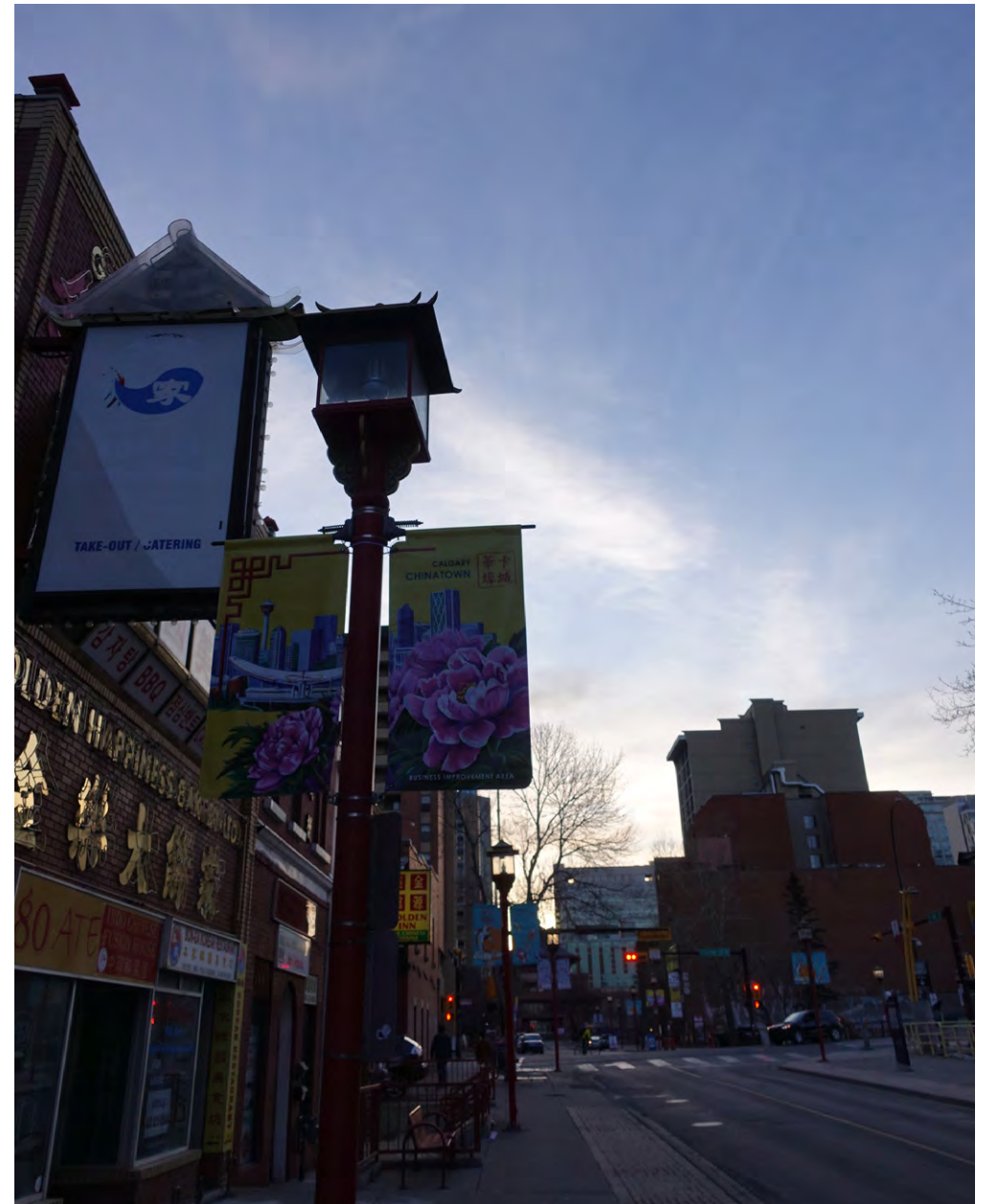
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Historical Evolution

A Brief Background

The history of Chinatown in Calgary goes back to the very beginnings of our city but not where it is today. It saw two previous locations before establishing its current permanent geography. The nature of the two initial Chinatowns started as a conglomeration of different commercial offerings that included laundries, grocery stores, restaurants, and tailors. They tended to be grouped along one or two streets, just a couple of blocks. These nodes were the foundation of a community. In the map below the two previous locations of Chinatown show these commercial streets. It is important to note that all versions of Chinatown have depended deeply on its commercial streets and the businesses that support them. Today's Chinatown and its future is also dependent on the success of its businesses.

The Chinatown Historical Context Paper was drafted as part of the Chinatown Heritage Project, which is a great resource that details the community's past.

The three locations of Chinatown.
Source: Lai (1988, p. 88).



Morphology of Chinatown

Analysis of change over time through the use of aerial photos helps us understand the processes that create the current built form. Today's Chinatown is the result of a series of changes from its original form. The following series of historical aerial photos will highlight the main changes over time. It will showcase how it transformed from a single detached-home with some neighbourhood commercial properties to a medium density residential-commercial adjacent to the core of Calgary's business district.

These aerial photos were collected from the University of Calgary's Historical Photographs collection and the City of Calgary's open source mapping tool at: <https://maps.calgary.ca/CalgaryImagery/Imagery/>

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Chinatown in 1910
Mostly a single detached housing community with some commercial properties along 2nd Ave SW/SE and Centre Street.



Chinatown in 1948

Changes to Calgary's downtown business district are starting to happen closer to Chinatown. In the north-west area the new bus depot is built. There are additional commercial buildings on 3rd Ave SE and Centre Street.



Chinatown in 1975

Most single family homes have been demolished. Some making space for large surface parking and also additional commercial buildings on 2nd Ave SE and 3rd Ave SE.



Chinatown in 1979

Very few single family homes remain. There is a significant increase of surface parking and some mid-high rise buildings have been built along Centre Street. The federal Harry Hays Building is built, erasing the previous block's structure and fine grain land subdivision. This new federal building did not consider Chinatown's sense of place.



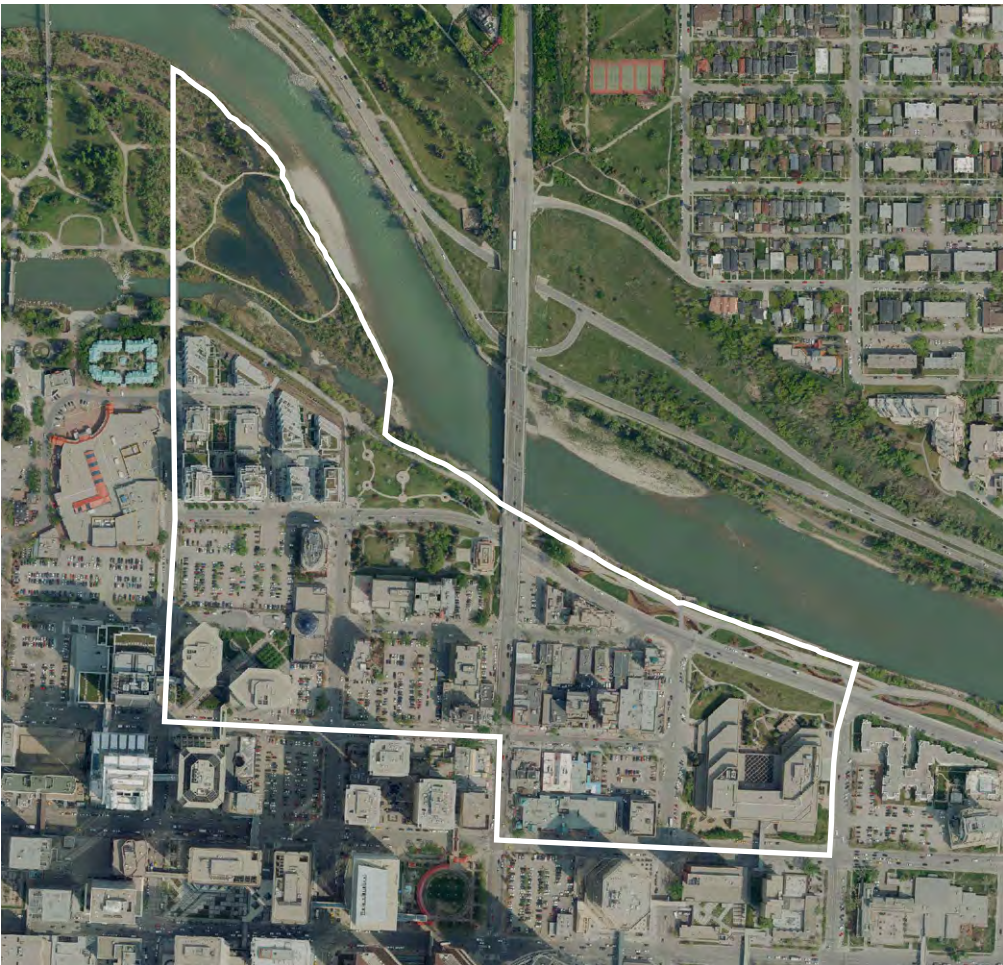
Chinatown in 1995

The Chinese Cultural Centre is built. The Sien Lok Park is developed and there are significant improvements to the river path system. Additional high density buildings are built on 1st Street SW. Many surface parking lots still remain. The Flatiron building on 2nd Ave SE is demolished and redeveloped.



Chinatown in 2010

The site of the old bus depot is on its first stage of redeveloped. The Waterfront Court development (mainly residential) and the Livingston office towers at the edge of the community, both represent a typical high density building type. The surrounding area of downtown sees an increase of high rises. There are new improvements to the riverfront section in Sien Lok Park.



Chinatown in 2019

Waterfront Court is fully redeveloped on the north-west area of Chinatown. Many surface parking lots remain.

Current Built Form

To have a basic understanding of Chinatown’s current built form these series of drawings depict the essential form and function.

As observed historically the commercial streets are the foundation of Chinatown as a community. These are concentrated mainly along Centre Street, 2nd Avenue SE and 3rd Avenue SE.

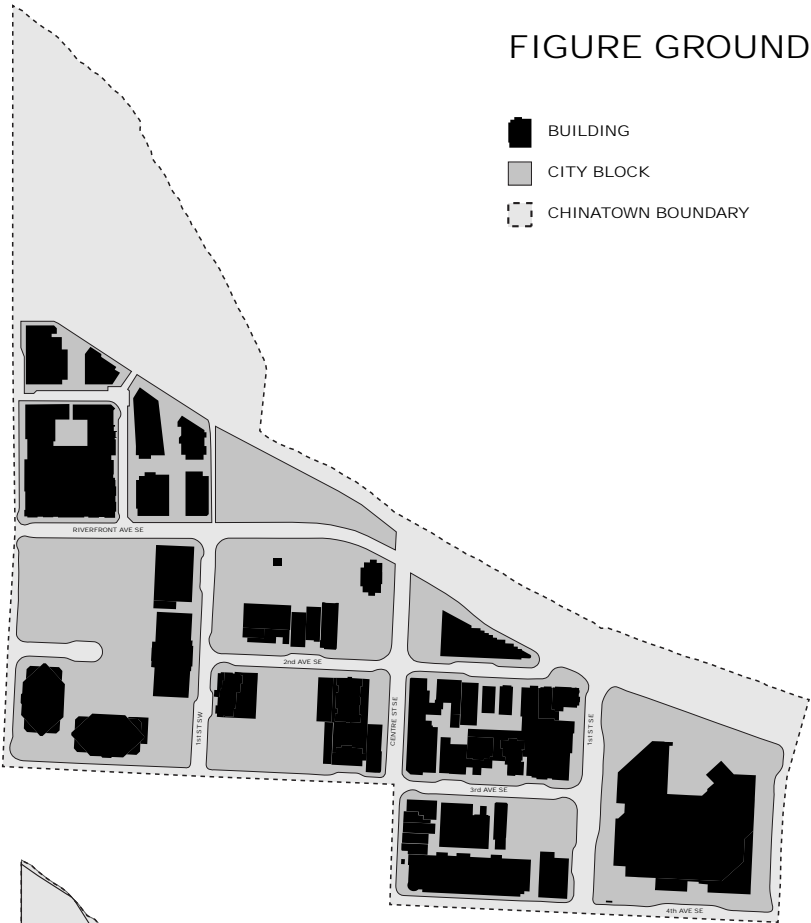
While currently not all of Chinatown’s streets offer ground floor commercial units it is important to strengthen what it is there and provide support for future expansion with additional street-oriented commercial units.

Most of the fine grain land subdivision from the early years of Chinatown is now gone but where it still exists it provides for a rich diversity of buildings and land use mainly along 2nd Avenue SE. Future development should take note of this and find a way to preserve and grow this essential characteristic of Chinatown.

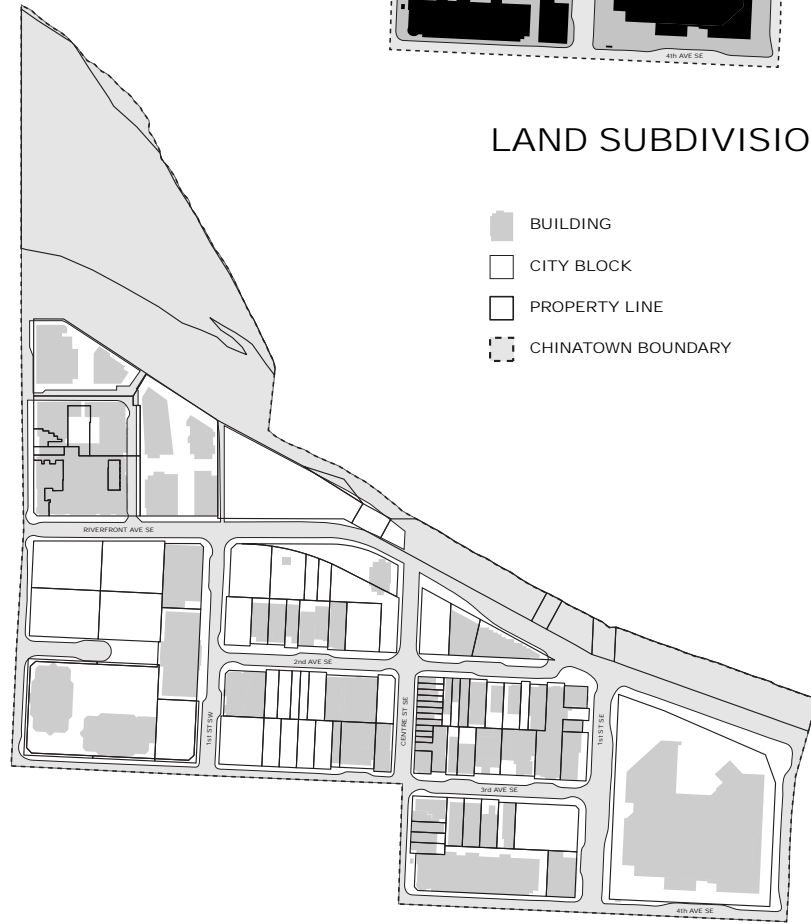
The figure ground shows extensive surface parking and under-utilized parcels. There are two small surface parking lots at the landing of the Centre Street bridge that present an opportunity for a better pedestrian connection to the bridge and a richer gateway into the community.

Based on the morphological analysis of Chinatown it is important to note that the fine-grained land subdivision, lower height and commercial land use of buildings along 2nd Avenue SE and 3rd Avenue SE support what currently is the commercial core of Chinatown. And as mentioned before, the commercial core tends to be the heart of activity for the community and should be supported.

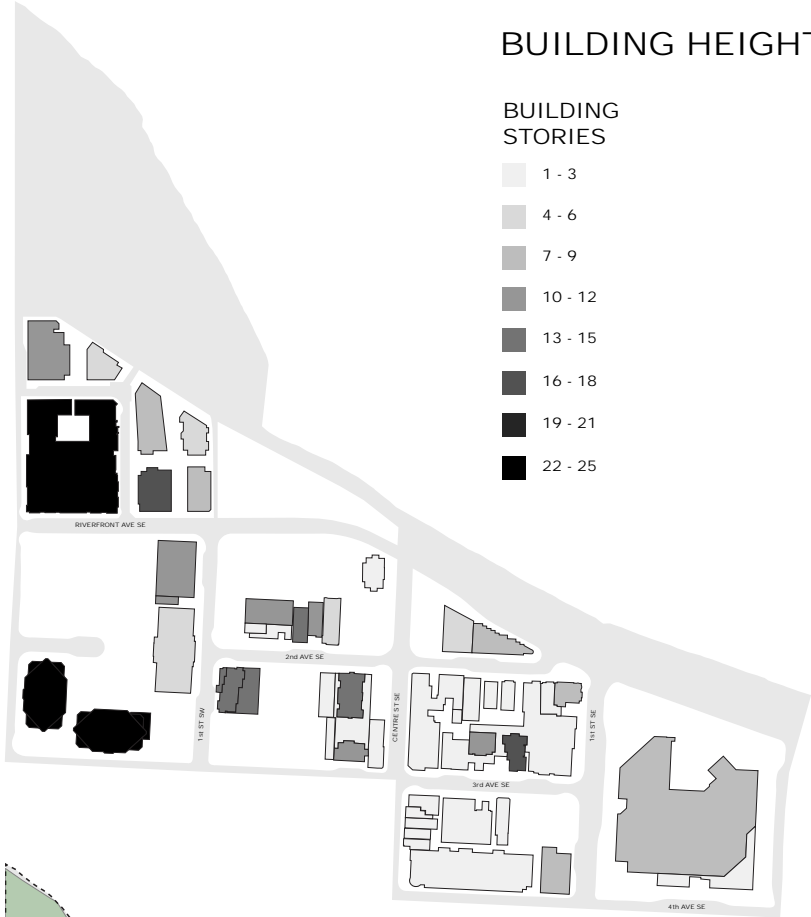
FIGURE GROUND



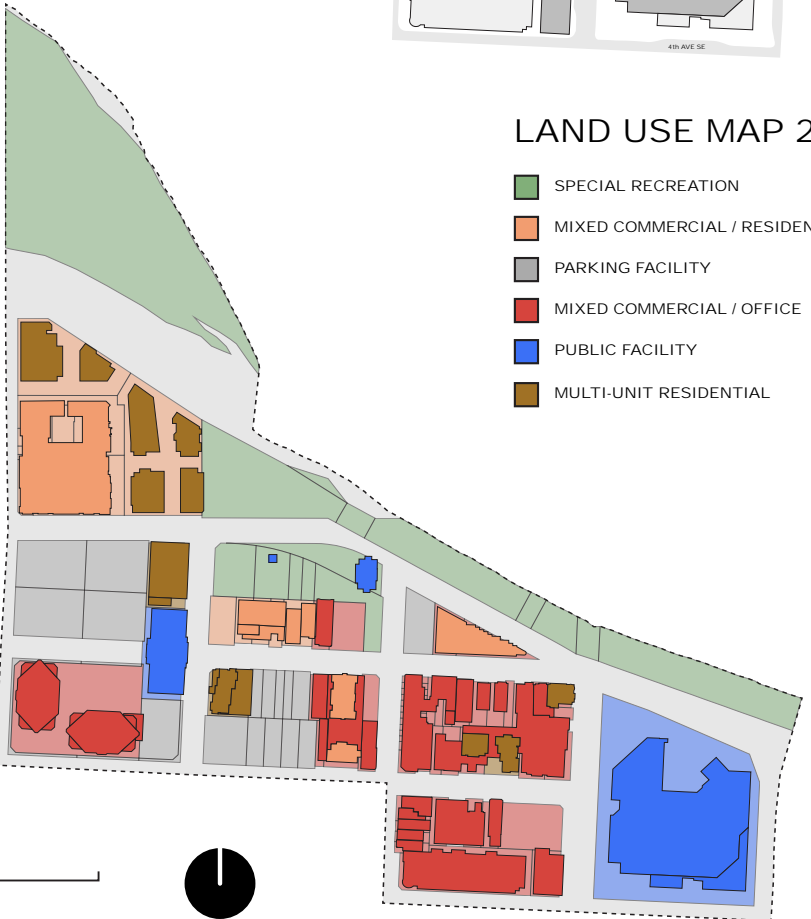
LAND SUBDIVISION



BUILDING HEIGHT



LAND USE MAP 2020





Chinatown Visual + Immersive Preference Survey

What is a Visual Preference Survey (VPS)?

Visual Preference Surveys were first introduced back in 1979 by Anton Nelessen (Chrisman 2006), but have greatly evolved since then. The general concept of a Visual Preference Survey (VPS) is for participants to score images based on how they react to the contents, either positively, neutral, or negatively (Institute for Public Administration 2014). In the case of urban planning and design, respondents react to visuals of the built environment and provide feedback on which elements contribute positively or negatively to their experiences. The first VPS conducted used a series of images as a presentation chosen from a variety of urban settings around the world. However, Chrisman (2006) notes that this method has the flaw of assuming that something which works in another city, in another country, will work in this place. Participants did not understand the greater context of that place that led it to the built form they were being shown and therefore did not understand why it may not be applicable to their neighbourhood. VPSs have evolved since then to be more place-specific, using visual altering technology, virtual reality, and other technology to make VPSs more accurate for participants.

Types of Visual Preference Surveys?

A VPS can either be community-specific, conceptual, or generic. A generic VPS uses images of other environments and implies they can be applied in another setting; a conceptual VPS builds the environment from scratch in 3D modelling software and may not reflect an actual space; and a community-specific VPS uses media of a real community and uses image altering software to change the environment (Institute for Public Administration 2014). The latter two provide a more realistic environment for participants, and therefore produce more accurate data from the respondents’ results (Barajas 2008).

Building a VPS

Once the type of VPS has been established, the next step is to collect images. Images should be organized by broad themes such as streetscapes, lanes, architecture, and are then further categorized within each of these (Institute for Public Administration 2014). A robust critique of VPS is the bias it can create between photos not just from changing the desired element, but also from background elements such as weather, people, and cars (Noland et al., 2017). For this reason, images must be as similar as possible and taken under the same conditions to prevent bias. Noland et al. (2017) used eye-tracking software to understand what caught the attention of participants, and found that specific elements such as cars, advertisements, and parking received negative responses while people, pedestrian-related features and greenery received positive responses. When using a VPS, these elements need to be consistent between photos to ensure that these background elements do not influence participants instead of the built form feature in focus.

When choosing a photo-manipulated VPS over a conventional VPS, there are a variety of elements that may be altered including material, shape, size, layout, style, and function. Barajas (2008) mentions that using the same photo for multiple scenarios will prevent inconsistencies in background information, and therefore bias. Photo-manipulated VPS has been considered the standard in academic research given its time and budget (Barajas 2008). This research suggests using one photo per topic, and creating multiple versions of that one photo, with the built form in question being manipulated between each. Also, Rahn (2014) found that VPS worked best when there were just subtle differences between the comparative photos. Rahn suggests changing a specific element, and working with a less is more philosophy.

When to Administer?

VPS provides a unique opportunity for public consultation, but also challenges. Rahn (2014) looks at a case study in St. Paul where residents were asked to participate in a VPS of street design in their neighbourhood. The VPS had an overwhelmingly negative response, largely because only one design option was presented and in a very polished manner. This gave residents the impression that the design had already been chosen and finalized. The VPS received much better feedback when multiple designs were presented less formally. Instead of focusing on one design and ensuring it looked as realistic as possible, Rahn (2014) found that residents respond better when they feel as though they are included early in the process when multiple designs are still in the “draft” phase. To prevent bias from forming, this VPS also applied a neutral overcast sky to each photo and fixed any blemishes in the street so it was consistent. The take away from this case study is to begin public consultation as early in the planning process as possible, and with many options, making it clear that it is still a work in progress.

How to Score the VPS?

The Institute for Public Administration (2014), mentions several methods for scoring VPS including written ballots, a structured set of self-administered questions, a facilitated discussion, a focus group format, an open semi-structured forum, and an online survey. Before ranking begins, however, Rahn (2014) mentions the importance of making the prompt and description for each photo as concise and consistent as possible so as not to confuse the participants. Also, Ewing (2001) mentions that it is effective to bring in a diverse group of people to view the VPS. In the case of this study on transit design, participants included transit users, transit professionals, non-users, etc. A sample size of 50-100 people, broken down into smaller groups of 10-15, is standard for a VPS (Ewing 2001). Based on this literature review, the most common type is an online questionnaire that asks participants to numerically rank each photo. The St. Paul Case Study from Rahn (2014) used a -3 to +3 ranking and then each photo was given a median score. Ewing (2001) explains that the most common way to assess participants’ feedback is with rating/scaling methods, with 1-5 being used for this study.

Each participant will also have their own experience with the environment in question and will score subjectively (Chrisman 2006). One group of people may have a different history and experience with an element of the built environment as opposed to another. Visual Preference Surveys, when not properly planned, will show only what something “looks like” but may not fully capture its identity or what it feels like to be there (Chrisman 2006). Because of this, it would also be beneficial to provide a space for participants to write or speak about their experiences with this space that they may not be able to fully communicate on a 5 point scale.

A study by Da Silva Vieira and Antunes (2014) looked at this issue, and rather than providing the photos, they asked the participants to take the photos themselves of elements in the built environment that they thought contributed positively or negatively. They found that this method allowed the community members to highlight elements of the community that Da Silva Vieira and Antunes (2014) never would have known to include. This knowledge is not necessarily public or well-known without consulting the community first. This could be part of a second phase of public engagement in the redevelopment and design improvements of Calgary Chinatown’s public realm.

Creating a Mixed Reality

There are multiple methods for creating a mixed reality that can be used in a VPS. Based on this literature review, a common theme is that the more realistic the mixed reality is to the actual environment the more accurate the participants’ responses will be. The first example is a combination of sight and sound. Ruotolo et al. (2013) used virtual reality (VR) and audio simulations to create a VPS on the creation of a motorway. When the survey was conducted, participants went through a quick run through of the experience and what was expected of them. Then, they were given a walkthrough of the VR and began providing feedback. In conclusion, Ruotolo et al. (2013) found “immersive virtual reality could be considered a valid tool to simulate the multisensory way in which the environment, with embedded sounds, is perceived in everyday life and can offer innovative applications.” Indeed, it may allow designers and consultants to understand in advance the possible negative effects of new infrastructure.

Why use Mixed Reality as a VPS?

Photo-manipulated VPS can help address misunderstood concepts and show participants how they might look when in their community. Participants can easily see a cost-benefit scenario for each option, and then compare them (Steiner & Butler 2007). A VPS can also educate participants on urban design elements, helping people see them in real-time rather than relying on a possible pre-existing bias in knowledge to help them make a decision. Lopes & Lindstroöm (2012) mention that all too often, technology is used later in the planning process once decisions have already been made. Rather, Lopes & Lindström (2012), look at how immersive VR can be used early in the planning process to better integrate community feedback into a design. This works as a continuous feedback loop, with the immersive VPS continuously changing until community concerns are addressed.



Virtual Reality (VR) to Augmented Reality (AR)

While virtual reality refers to the immersive environment where a user is often using a headset that mimics the experience of being in a specific time and place. The augmented reality, however, is a combination of real environment footage with virtual objects (Cirulis & Brigmanis 2013). AR differs from VR by providing a better perception and interaction with the real-world over VR, which is self-contained and isolated (Anagnostou & Vlamos 2011). An example of augmented reality is the largely popular Pokemon-Go, which allowed the user to view virtual Pokemon in the environment by looking through the camera of their phone. Augmented reality often refers to a 3D virtual object that is placed in the environment, such as a building or Pokemon, but in the case of the Chinatown Sense of Place VPS, it would be a layer that is applied to the reality rather than a 3D object. This is achieved by changing the type of material instead of replacing the material with a different object entirely.

Incorporating Audio into a VPS?

As the goal of the VPS is to create an immersive environment that is as realistic as possible, sounds are an important part of the experience. This includes the typical urban sounds that one experiences when walking down the street or being in a specific location. Cassina et al. (2017 p.2) found that “an audio input in a mixed audio-visual assessment of environmental representations has a stronger influence than a visual input, as demonstrated with laboratory tests and confirmed by several cases where different sound level values were responsible for the same comfort assessment”, demonstrating the importance of including an audio component. In their research on audio-visual preferences by Cassina et al. (2017) asked participants to consider how the audio impacted them, both by the level of noise, and if it caused discomfort or not. For this study, a handheld system with binaural headphones was used which they found achieved the most realistic environment. For the Chinatown Sense of Place VPS we included three different locations within Chinatown with three different sounds that mimicked vehicular traffic, pedestrian traffic and vehicular traffic over cobblestones to replicate three different road design scenarios.

Hardware and Software Considerations

Visual Preference Surveys (VPS) can be community specific, generic, or conceptual, and the type of technology and software depends on the type. For the purpose of this survey, it is community specific to Calgary’s Chinatown and, therefore, a VPS that is as close as possible to current conditions was developed.

To create the augmented reality tour through Chinatown for the immersive VPS a camera that can capture 360° photos was used, the Insta360 One X. This camera has a dual camera system that can capture 180° on either side with a self-timer that allows the user to remove themselves from the photo. For recording sound compatible with an AR environment, the 360° microphone Zoom H3-VR was used.

Capturing and Editing the Environment

It is important that all photos are as consistent as possible. This includes weather conditions, pedestrian and vehicle traffic, and foliage. The comparative images need to be as similar as possible when they are of the same scene, but when comparing two different environments they need to be reflective of their typical conditions.

Editing 360° photos in Photoshop is different than editing a standard photo as certain steps must be taken to ensure it retains its 360° view. Photoshop’s 3D tool allows the user to pan around the environment using the toggle tool and apply edits.

Collecting Feedback

Unfortunately, the software for producing a virtual tour does not have a built-in feedback technology that allows participants to record their thoughts. Rather, a secondary software needs to be used to collect feedback. The University of Calgary Qualtrics platform was used for this purpose. The technology has lots of options to format the survey however the organizer wishes, and the data can be easily analyzed after through Qualtrics. This will require the participant to be able to see the Qualtrics survey and the Virtual Tour at the same time, however. This can be done by creating a dual screen on the user’s computer (open each window to half size), or asking the user to open the virtual tour on their computer and the survey on a secondary device such as a smartphone or tablet.

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Questionnaire Composition

Introduction

When designing a questionnaire it’s important to make sure to ask the right questions, make those questions clear, focused, concise, and keep the questionnaire as short as possible. In order to define the set of questions to be included in the survey it was helpful to understand what other jurisdictions have considered as the main components of sense of place for their respective Chinatowns and what elements of the built environment they considered needed design guidelines. These precedents provided valuable, previous experience that helped us find a balance between the necessary amount of detail without venturing into a minute examination of the built form.

Questions Based on Precedent Research

While there are many Chinatowns across the world the selection criteria of precedents took into consideration only North American cities. The ten cities included in this research have specific planning documents or significant sections pertaining to the development of their Chinatowns including design guidelines. Plans from three Canadian cities, Victoria, Vancouver and Edmonton, and seven cities from the United States, Portland, San Francisco, Washington DC, Los Angeles, Honolulu, Boston and Philadelphia, were analyzed. Based

on a summary of the main characteristics of the built environment included in their respective guidelines, several characteristics were identified as the key components contributing to these Chinatowns’ sense of place. These characteristics were organized into broader built form categories: materials, parks/opens space, social activities, street programming, streetscapes, and architectural elements. Cities regulated each of these categories to a different resolution of detail, for example while Edmonton included 12 characteristics for streetscapes San Francisco only considered five. The matrix below quantifies the different characteristics included on each one of the main built form categories per each one of the precedent cities.

After reviewing in detail each of the different precedents five main categories for the visual preference survey were created: Streetscape, Street Programming and Use, Buildings, Parks and Plazas and Signage. A set of 23 questions were drafted covering the different key elements of the built environment that contribute to the sense of place. (Each one of the key elements are not listed here. A discussion on each one of those is provided on the recommendations section). For each of these questions a follow-up question was included to measure the

importance of that particular element for us to be able to assign a weight to the relevance of future recommendations. In the last section of the survey three additional questions were included that were related to the soundscape. These questions showed a static image but included a sound that simulated three different conditions: one with the predominant sound of vehicular traffic, one with the sound of vehicular traffic over cobblestones and one with the predominant traffic of pedestrians. At the end of the soundscape set of questions, follow-up questions were included that measured the importance of soundscapes for the character and sense of place of Chinatown.

Demographic Data

Nine sociodemographic questions were included to help us understand the profile of the different community members that participated in the survey.

Precedent Cities

The following pages include a brief summary for each of the precedents with a link to their current Website location in case further detailed analysis is required.

Chinatown Design Guideline Comparison Matrix

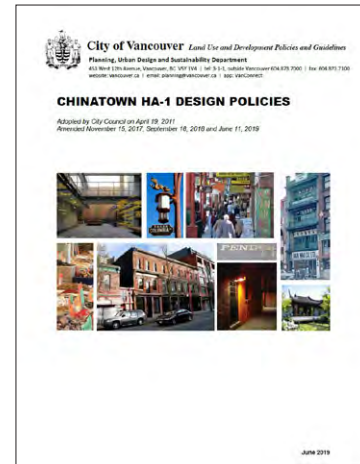
Built Form Categories		Number of Characteristics Addressed per Precedent Cities									
		Victoria	Vancouver	Edmonton	Portland	San Francisco	Washington DC	Los Angeles	Honolulu	Boston	Philadelphia
Materials	7	6	6	3	7	0	2	1	2	0	0
Park / Open space	6	1	2	3	0	2	4	4	3	6	3
Social Programming	12	1	1	1	0	0	6	0	8	2	7
Street Programming	4	2	3	4	3	0	4	0	2	2	4
Streetscape	15	8	9	12	8	5	7	2	5	11	8
Architectural Elements	10	7	7	3	8	0	4	5	1	6	2



Victoria, BC, Canada

The City of Victoria *Old Town Design Guidelines* regulate new development in a historically significant area. There are several ‘Heritage Properties’ and historical streetscapes within the Old Town area. It is evident that these guidelines aim to protect these historical sites. The new development guidelines generally place constraints on massing, scale, height, pattern of the street wall, and aesthetics. It contains more explicit guidelines for architectural character elements in the Chinatown area to retain indicators of Chinese heritage. These include, but are not limited to: colour, signage, awnings, and materials. Although the document is extensive in detailing what are acceptable aesthetics, it allows for some flexibility to deviate.

Name: *Old Town Design Guidelines*
Approved: March 28, 2019



Vancouver, BC, Canada

Like Victoria, the City of Vancouver deployed prescriptive constraints with its *Chinatown HA-1 Design Policies*. Heritage sites are present in the area and there are policies to protect them. In addition to heritage preservation, the *Chinatown HA-1 Design Policies* encourage adaptive re-use of buildings to align with the City’s environmental goals. The document outlines criteria and constraints on heights, form, frontage, façades, and orientation of interior living spaces. The design policies of Vancouver also place restrictions to retain the existing public open spaces and block sizes, as well as other open space elements such as laneways and breezeways. Therefore, it comes across as prescriptive and with a strong mandate to preserve the current built form.

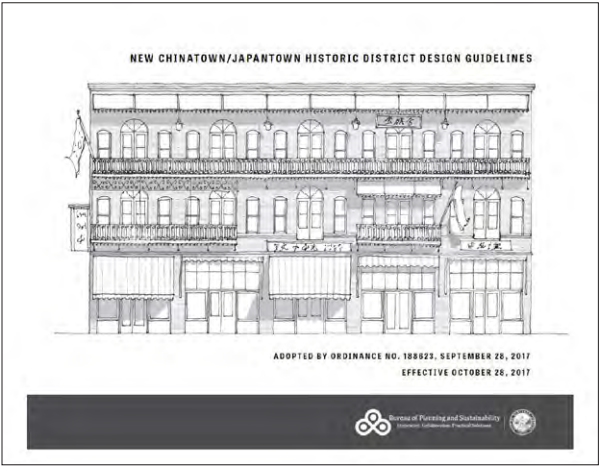
Name: *Chinatown HA-1 Design Policies*
Approved: April 19, 2011



Edmonton, AB, Canada

The motivation for the City of Edmonton’s Chinatown Urban Interface Plan is explicitly about using placemaking as a tool for economic development. It is part of *The Chinatown Strategy: Energizing A Prosperous Future* plan. It identifies the public streets and open spaces as opportunities to create economically productive places with an emphasis on the pedestrian experience along commercial frontages. This plan is not the final guiding document for Edmonton’s Chinatown development, however it does provide several recommendations, criteria, and guidelines which encourage new development to enhance Chinatown’s connectivity to the rest of the urban fabric and brand itself as a destination. Unlike the other two Chinatown documents, there are very few constraints on height or material, but the retention of human scale and respect for the few remaining heritage buildings is clear. The final phase of this plan is now complete. It includes a series of concepts and built form diagrams that support the Strategy’s pillars.

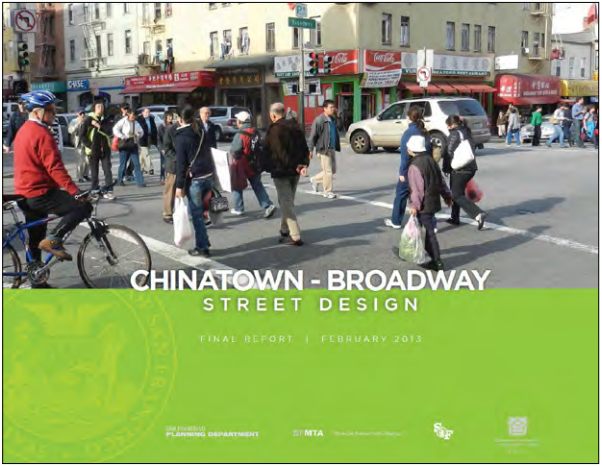
Name: *Chinatown Urban Interface Plan*
Approved: June 27, 2017



Portland, OR, USA

Chinatown/Japantown is a historical district in Portland, like most Chinatowns, the historical buildings were not built in a style of architecture of Asian origin. The Chinese and Japanese immigrant community that came to occupy it applied a liberal range of embellishments that expressed their cultural adaptation. The guidelines for Chinatown/Japantown are dedicated to integrating these Chinese and Japanese design features indicative of the district’s Asian history. Most of the guidelines address materials, architectural adaptations, and streetscape. There are not explicit restrictions on massing and building height, the appropriateness of new or additional construction is to be based on the scale and characteristics of the adjacent buildings.

Name: *New Chinatown/Japantown Historic District Design Guidelines*
Approved: October 28, 2017
Supporting Documents: *Old Town/Chinatown Action Plan*



San Francisco, CA, USA

The *Chinatown – Broadway Street Design Final Report* is less of a design guideline or policy advocate, rather it is an initial study that informs the final outcomes. There is a Chinatown Area Plan that was adopted in 1995 that outlines general objectives and policies, given the Area Plan’s date of adoption, the *Chinatown – Broadway Street Design Final Report* serves as an improved document to understand how new development should be guided. The report focuses primarily on the streetscape and roadway design and recommends some specific streetscape design elements that incorporate characteristics of Chinese culture. The *Chinatown – Broadway Street Design Final Report* is rather non-prescriptive in terms of the aesthetic characteristics of Chinatown. Since this report is not applied broadly to the entirety of Chinatown, the lack of recommendations for materials and architectural adaptations is understandable.

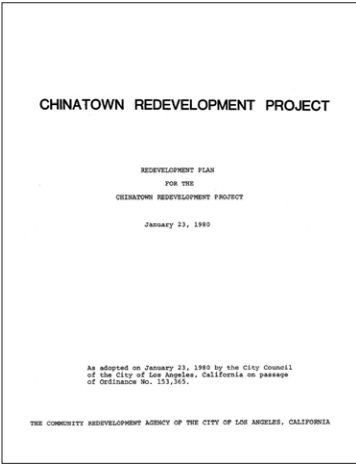
Name: *Chinatown-Broadway Street Design*
Approved: Spring 2012 (Planning Report)



Washington DC, USA

The *Chinatown Cultural Development Small Area Plan* for Washington, DC dates back to 1989, and in it there are several design guidelines that address the aesthetic characteristics of its Chinatown. The approach to regulating development in Washington DC’s Chinatown show guidelines that promote the traditional images of Chinese culture with a few suggestions on how they should be adapted to new post-modern designs. The roofs, doors, windows, decoration, signage, and colours all have guidelines for them. This document also emphasizes the use of traditional Chinese architectural motifs such as wood lattice corners and moon gates. There are clear guidelines on the dimensions of the streets, sidewalk material and landscape treatment that draw from traditional Chinese garden designs. The *Chinatown Cultural Development Small Area Plan* appears to accentuate the aesthetics of Chinese architecture in detail, which is in line with the document’s objective of making Chinatown a tourist destination. However, it leaves little room for new interpretations of Chinese aesthetics.

Name: *Chinatown Cultural Development Small Area Plan*
Approved: December 15, 2009
Supporting Documents: *Chinatown Cultural Development Strategy*



Los Angeles, CA, USA

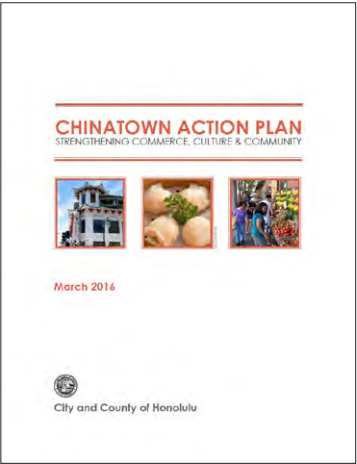
The Los Angeles *Chinatown Redevelopment Project* is not a plan that addresses the cultural significance of Chinatown. Although there are guidelines for open space and new buildings, it lacks specifics and references to Chinese heritage and culture. The policies detailed in the *Chinatown Redevelopment Project* are limited to infrastructure and commercial value.

Name: *Chinatown Redevelopment Project*
Approved: January 23, 1980

Honolulu, HI, USA

The *Chinatown Action Plan* for Honolulu is another document that is in the early stages of development. The Actions Plan has less to do with historical cultural preservation, although it is mentioned. There is more about general enhancements to the public realm such as better street lighting. Although there are many streetscape elements and programming mentioned in the document, most of the characteristics addressed are not specifically attributed to Chinese heritage, they are just good general design elements for the public realm.

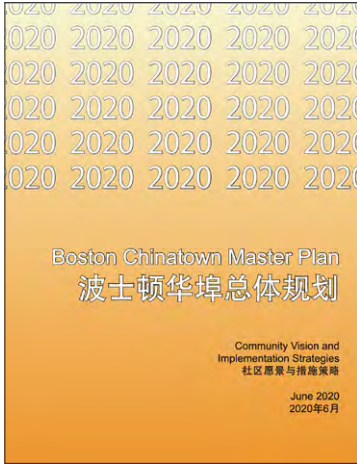
Name: *Chinatown Action Plan*
Approved: March 2016



Boston, MA, USA

The Boston *Chinatown Master Plan 2010* is structured in a way that makes several design recommendations, but does not over prescribe the aesthetics of the design elements. Instead, the document states design intent in the recommendations. There are a few mentions of design aesthetics catering to the Chinese community, but specifics on elements such as art are broadly captured with phrases like “Asian-style ornamentation”, “celebrating Chinatown”, or “reflective of the communities’ culture”. Like most documents reviewed in this study, there is a guideline that encourages new development to respect the existing streetwall. Unlike previous documents discussed in this section, the density and type of new development is broken down by parcel. Future building scale, height, and land use are detailed in each parcel with conceptual plans that estimate the square footage of potential development. Overall the *Boston Chinatown Master Plan 2010* does not directly define what is considered to be “Asian-style ornamentation”, which grants a high degree of aesthetic flexibility for future developments. The plan was updated in 2018.

Name: *Chinatown Master Plan 2010*
Approved: December 2010
Supporting Documents: *Chinatown Master Plan 2020* (updated plan).



Philadelphia, PA, USA

The *Chinatown Neighborhood Plan* for Philadelphia is another document that lays a general framework for future development, but does not provide specific guidelines. Design elements are mentioned several times across the document but it does not define the details or the aesthetic of characteristic elements. Like Boston, it is more explicit in the reasoning and intent of adding elements but gives little attention to the expression of Asian aesthetics.

Name: *Chinatown Neighborhood Plan Including Callowhill, China Town And China Town North*
Approved: October 2017



04

FINDINGS AND RECOMMENDATIONS



Main Recommendations

Introduction

The following section presents the results of the survey responses. The first set of questions, Q1 to Q9, are demographic questions that helped us to understand the participants involved in answering the questionnaire, while the rest of the questions, Q10 to Q56, focus on the different elements of the built environment that form the main characteristics of Chinatown’s sense of place.

For each of the built environment questions, recommendations are provided supported by precedents from other Chinatowns across the world and also examples from China. These recommendations were drafted not only based on the survey responses but also on precedent studies and our previous body of research.

The recommendations are grouped by five main characteristics that support and enhance the sense of place of various Chinatowns:

- Streetscape
- Street Programming and Use
- Buildings
- Plazas and Parks
- Signage

The following is a summary of the recommendations for each of these main characteristics. Detailed recommendations and the precedents that support them follow each one of the built environment questions.

Streetscape Recommendations

The elements of streetscaping considered in these questions and recommendations include street dimensions, lighting, urban furniture, street trees, sidewalk and roadway material. The main recommendations are:

- Prioritize the pedestrian environment by expanding current areas.
- Provide additional lighting fixtures including string lighting.
- Provide additional urban furniture including sitting areas, waste disposal and bike racks, all of which should be designed to contribute to the sense of place.
- Increase the number of street trees.
- Improve the sidewalk and roadway surface with materials similar to red brick or grey cobblestone.

Street Programming and Use Recommendations

The aspects of street programming and use considered in the questions and recommendations include the temporary closure and use of the roadway, sidewalk use, the possibility of street vendors and the sale of products on sidewalks. The main recommendations are:

- Continue to allow seasonal closure of roadways for seasonal events and festivals.
- Support patios and merchandise display areas by expanding the sidewalks to add accommodating space.
- Allow for a limited amount of street vendors and food trucks that can complement and support current commercial units.

Buildings Recommendations

The built form elements considered in these questions and recommendations include scale of buildings, use of traditional Chinese motifs, building permeability, awnings and balconies, external material of buildings and land use. The main recommendations are:

- While current regulations allow for 14-16 storey buildings, prioritize low rise character buildings (podium-tower building type) with a human scale focus on the first six storeys.
- Use Chinese traditional motifs but also modern expressions that are grounded in tradition.
- Retain and require a high degree of building permeability at street level with the use of windows and multiple entries.
- Allow for awnings for commercial units and recessed balconies on residential buildings.
- Use traditional materials on the exterior of buildings especially at street level.
- Use a mix of land uses within buildings, prioritizing commercial use at street level and residential use on upper levels.

Parks and Plazas Recommendations

The elements considered in the design of parks and plazas include the use of hardscape vs. softscape in plazas, urban furniture, hardscape material and permanent programming. Main recommendations are:

- Create a balance between softscape and hardscape that responds to the needs of the space. More traffic and programming requires hardscape while other areas can contribute with

additional planting and landscaping.

- Provide additional urban furniture for board games, activities and places to sit and rest, with a combination of fixed and movable furniture.
- Use hardscape materials that can evoke traditional materials similar to brick and cobblestones.
- Allow for a diversity of programming features on parks and places for multiple age groups.
- All new design of parks and plazas should include an inclusive engagement process with members of the community.

Signage Recommendations

The different elements for commercial signage included in the questions and recommendations are projecting signage, signage lighting and the language used on signs. The main recommendations are:

- Allow for projecting and hanging signage similar to many original and lost Chinatown signs.
- Use language on signage that includes an Asian language and is predominant as part of its design.
- Signage should be lit preferably with LED technology and consider light pollution reduction.

It is important to note that there are also a series of questions at the end of the survey related to the different potential soundscapes of Chinatown (questions Q54-Q56). The results from these questions helped support the findings and recommendations for a pedestrian oriented Chinatown along all of its streets and open spaces.

Guiding Principles Matrix

These sets of recommendations have taken into consideration the *Guiding Principles for Development in Chinatown* approved by Council on December 6, 2016. Each of the five main characteristics of sense of place have been cross-referenced with each of the principles. The matrix shows the questions and associated recommendations that support each of the guiding principles.

It is important to note that none of the findings from the survey contradict the Principles. This supports the work completed during the previous public engagement phases of the Tomorrow’s Chinatown Project. Therefore the recommendations also support the Principles and contribute to their implementation and future guidelines.

Guiding Principles \ Main Characteristics	Streetscape	Street Programming & Use	Buildings	Plazas & Parks	Signage
1. All new developments reinforce the distinct cultural and historical character of Chinatown.	Q16	Q26	Q28 - Q38	Q40 - Q46	Q48 - Q52
2. Chinatown is a residential, mixed-use community.			Q38, Q39		
3. All developments enhance the pedestrian experience.	Q10 - Q18	Q20 - Q26	Q32	Q40 - Q46	
4. Chinatown is a community for all, and provides housing for residents of all ages and incomes.	Q12, Q14, Q16		Q38	Q42, Q46	
5. There are a variety of options for getting to Chinatown.	Q10, Q14	Q20, Q22			
6. Chinatown has a variety of public and private gathering spaces.				Q40 - Q46	
7. Chinatown is safe, clean and vibrant, day or night.	Q10 - Q18		Q32, Q38	Q40 - Q46	Q48 - Q52
8. Commercial activity in Chinatown supports the residential and cultural community.		Q22, Q24	Q38		Q50, Q52

Question Numbers

STREETSCAPE
Q10 Street Dimensions
Q12 Street Lighting
Q14 Urban Furniture
Q16 Sidewalk Materials
Q18 Roadway Materials

STREET PROGRAMMING AND USE
Q20 Temporary Closure and Use of Roadway
Q22 Sidewalk Use
Q24 Street Vendors/Products on Sidewalks
Q26 Street Trees

BUILDINGS
Q28 Scale of Buildings
Q30 Traditional Chinese Motifs
Q32 Permeability (land use spillage)
Q34 Awnings and Balconies
Q36 Material/Colour of Buildings
Q38 Land Use

PARKS & PLAZAS
Q40 Hardscape vs. Softscape (in plaza)
Q42 Urban Furniture (in park/plaza)
Q44 Hardscape Material (in park)
Q46 Permanent Programming (in park)

SIGNAGE
Q48 Projecting Signage
Q50 Signage Lighting
Q52 Language of Signage



Importance for the Character of Chinatown

As part of the questionnaire, for each of the visual preference questions, a follow up question asked the participants to weight the level of importance for each key element. The available responses were:

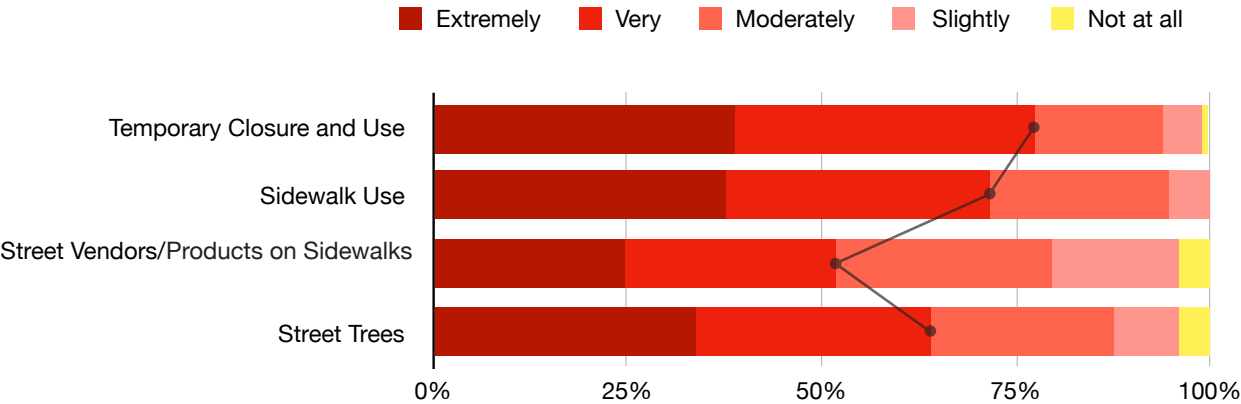
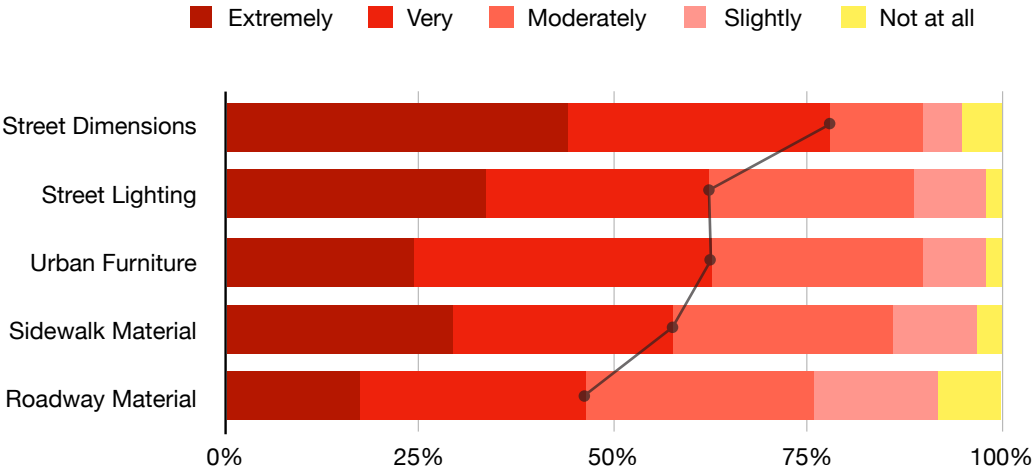
- Extremely Important
- Very Important
- Moderately Important
- Slightly Important
- Not at all Important

The following tables show the percentage of responses corresponding to Extremely Important and Very Important combined. These two top values were combined to identify the higher level of importance and weight participants considered for each of the questions. We combined these two responses to better understand what participants could consider a priority.

The accompanying graph shows the percentage values of all the responses. These two representations of the findings illustrate the weight given by the participants to each of the key elements of the built environment. The darker the red colour the more important participants considered that particular key element to be for the character of Chinatown and careful guidelines should be prioritized for those elements.

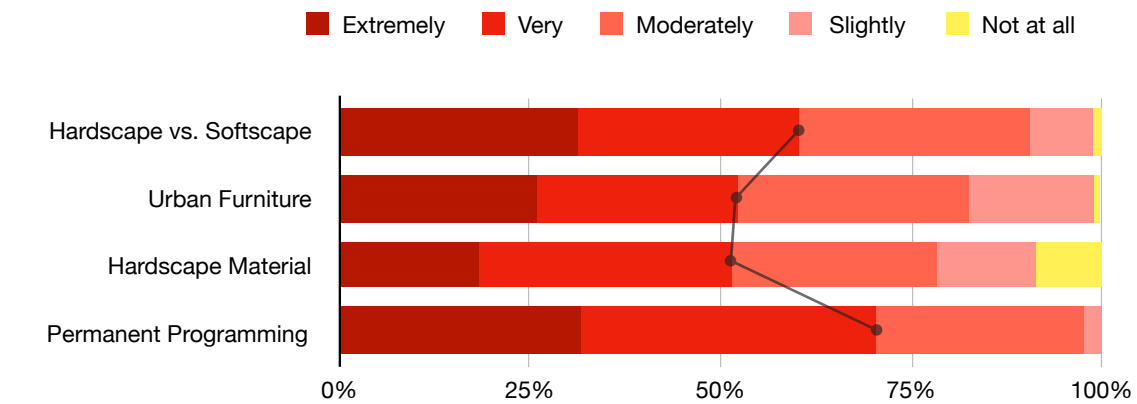
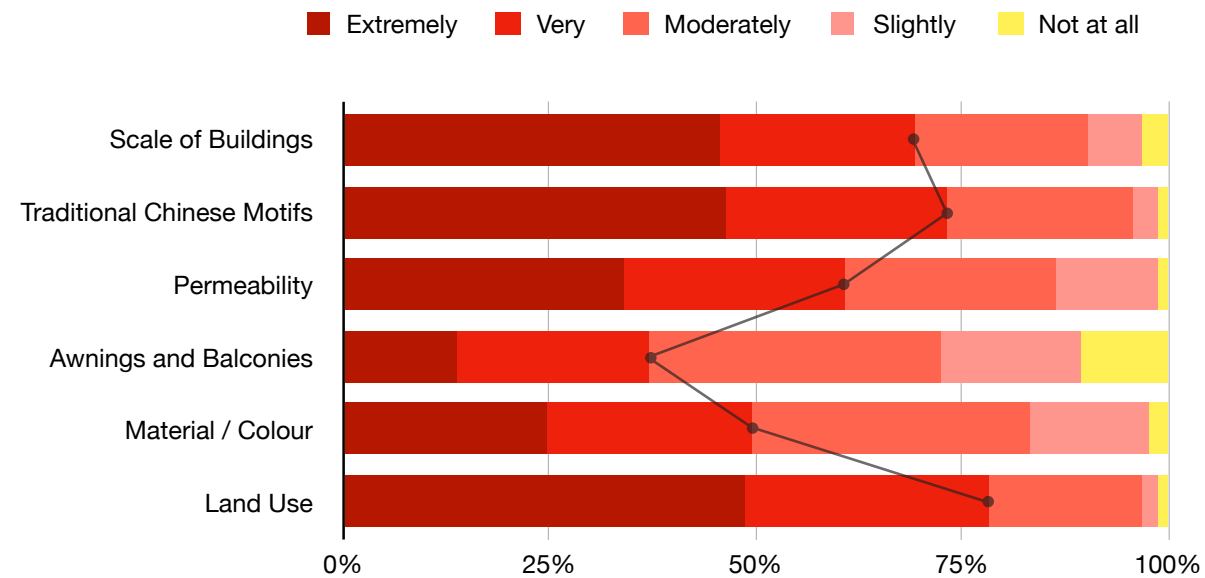
Streetscape		% of Responses
Number	Key Element	Extremely/Very Important
Q10	Street Dimensions	78%
Q12	Street Lighting	62%
Q14	Urban Furniture	62%
Q16	Sidewalk Materials	57%
Q18	Roadway Materials	46%

Street Programming and Use		% of Responses
Number	Key Element	Extremely/Very Important
Q20	Temporary Closure and Use of Roadway	77%
Q22	Sidewalk Use	71%
Q24	Street Vendors/Products on Sidewalks	52%
Q26	Street Trees	64%

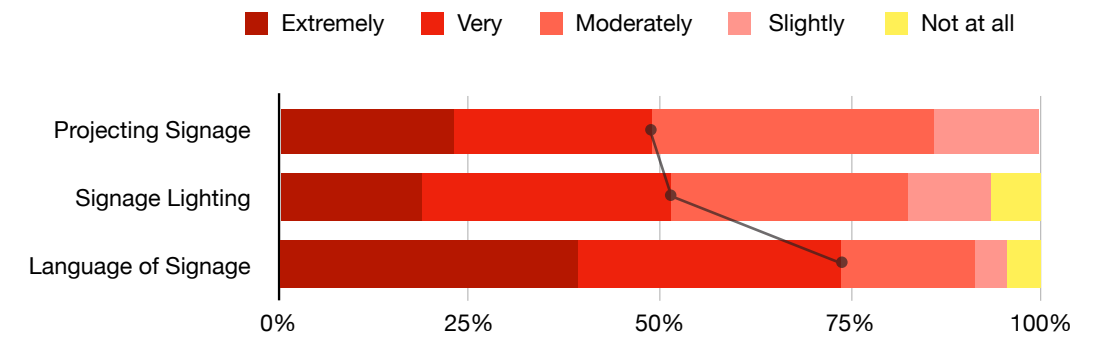


Buildings		% of Responses
Number	Key Element	Extremely/Very Important
Q28	Scale of Buildings	69%
Q30	Traditional Chinese Motifs	73%
Q32	Permeability (land use spillage)	60%
Q34	Awnings and Balconies	37%
Q36	Material/Colour of Buildings	49%
Q38	Land Use	78%

Parks and Plazas		% of Responses
Number	Key Element	Extremely/Very Important
Q40	Hardscape vs. Softscape (in plaza)	60%
Q42	Urban Furniture (in park/plaza)	52%
Q44	Hardscape Material (in park)	51%
Q46	Permanent Programming (in park)	70%



Signage		% of Responses
Number	Key Element	Extremely/Very Important
Q48	Projecting Signage	77%
Q50	Signage Lighting	71%
Q52	Language of Signage	52%





Demographic Data

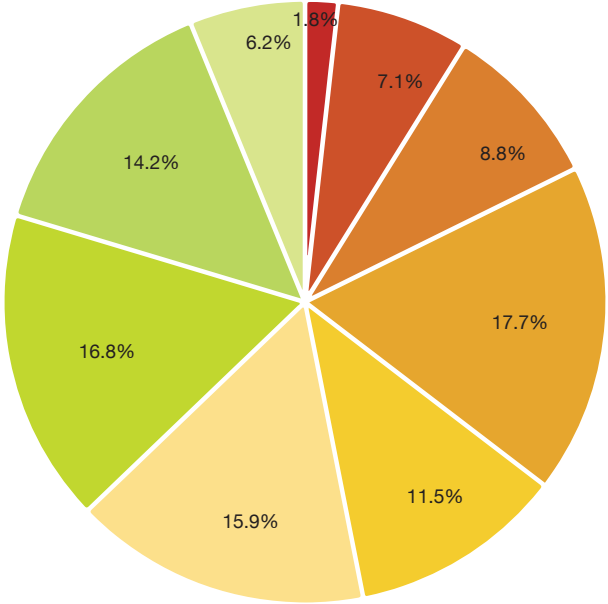
Based on the demographic information provided by the respondents we consider that the survey was inclusive and represents multiple age groups, residents and visitors of Chinatown.

Q1 - What is your year of birth (age range)?

	1920-1929 (100-91 yo)	1.8%	2
	1930-1939 (90-81 yo)	7.1%	8
	1940-1949 (80-71 yo)	8.8%	10
	1950-1959 (70-61 yo)	17.7%	20
	1960-1969 (60-51 yo)	11.5%	13
	1970-1979 (50-41 yo)	15.9%	18
	1980-1989 (40-31 yo)	16.8%	19
	1990-1999 (30-21 yo)	14.2%	16
	2000-2009 (20-11 yo)	6.2%	7
	Total Responses		113

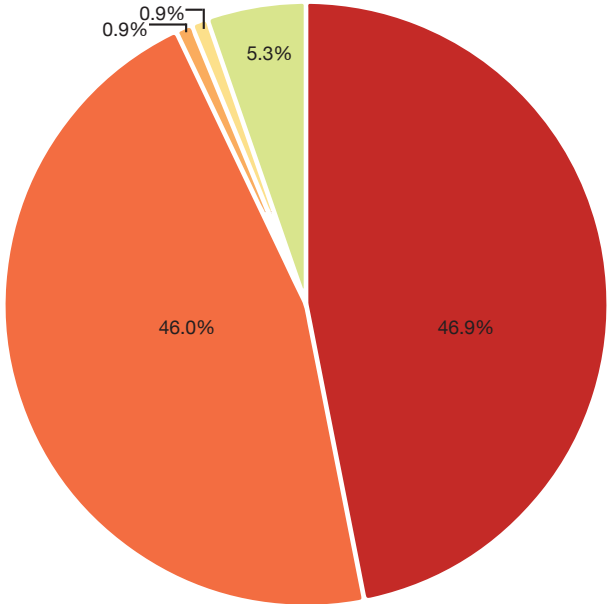
yo= Years Old

Not all respondents answered all questions, therefore some of the total numbers of responses may vary from question to question.



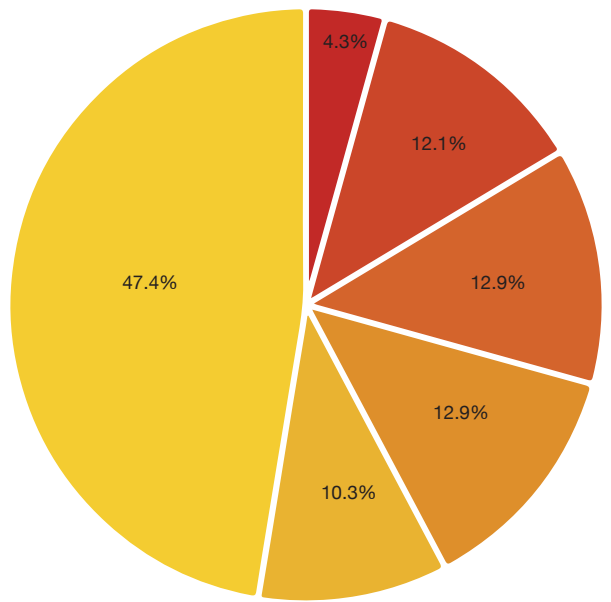
Q2 - Gender?

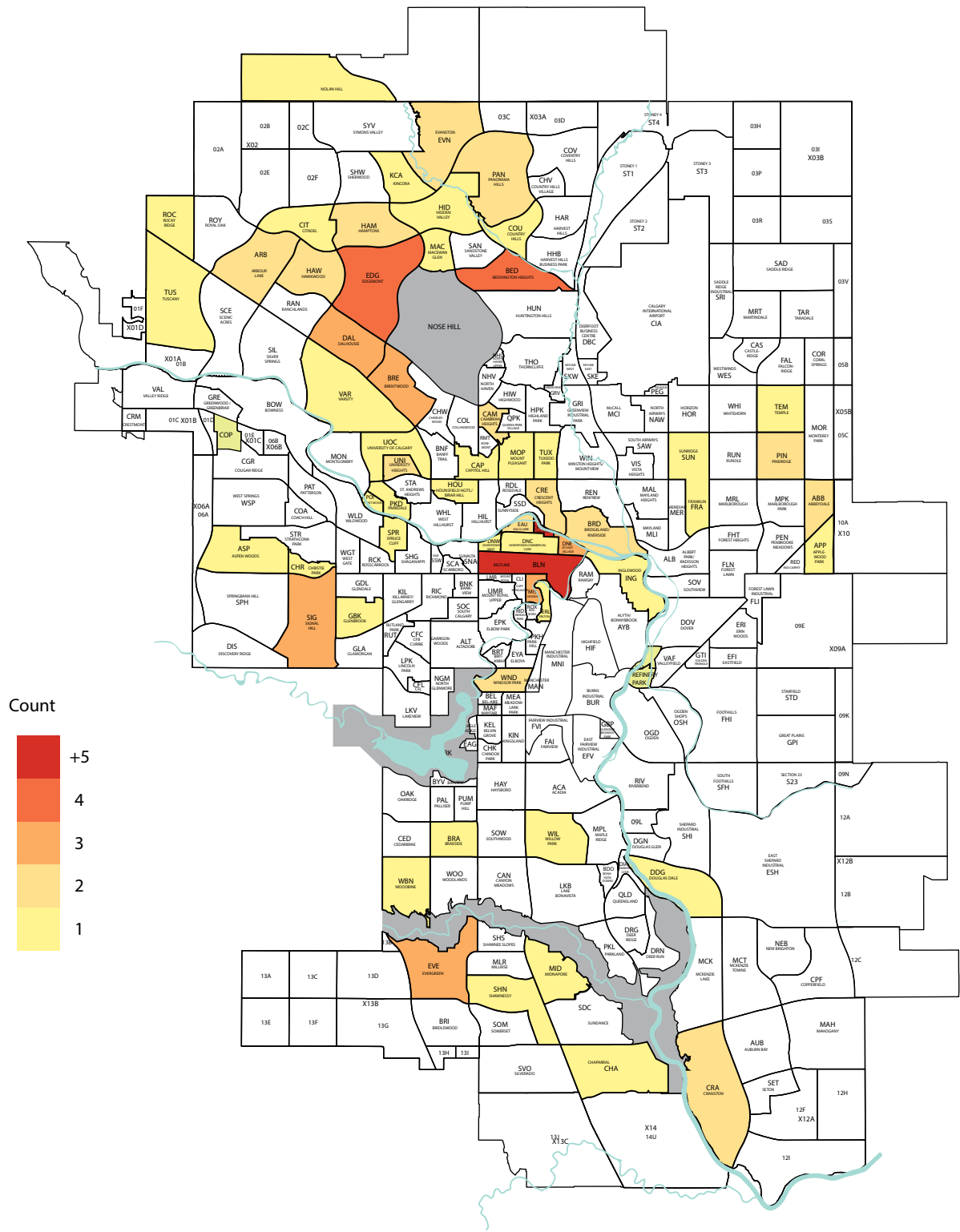
	Female	46.9%	53
	Male	46.0%	52
	Non-Binary	0.9%	1
	Other	0.9%	1
	Prefer not to say	5.3%	6
	Total Responses		113



Q3 - How long have you lived in Calgary?

	No Response	4.3%	5
	0-5	12.1%	14
	6-10	12.9%	15
	11-15	12.9%	15
	16-20	10.3%	12
	20+	47.4%	55
	Total Responses		116

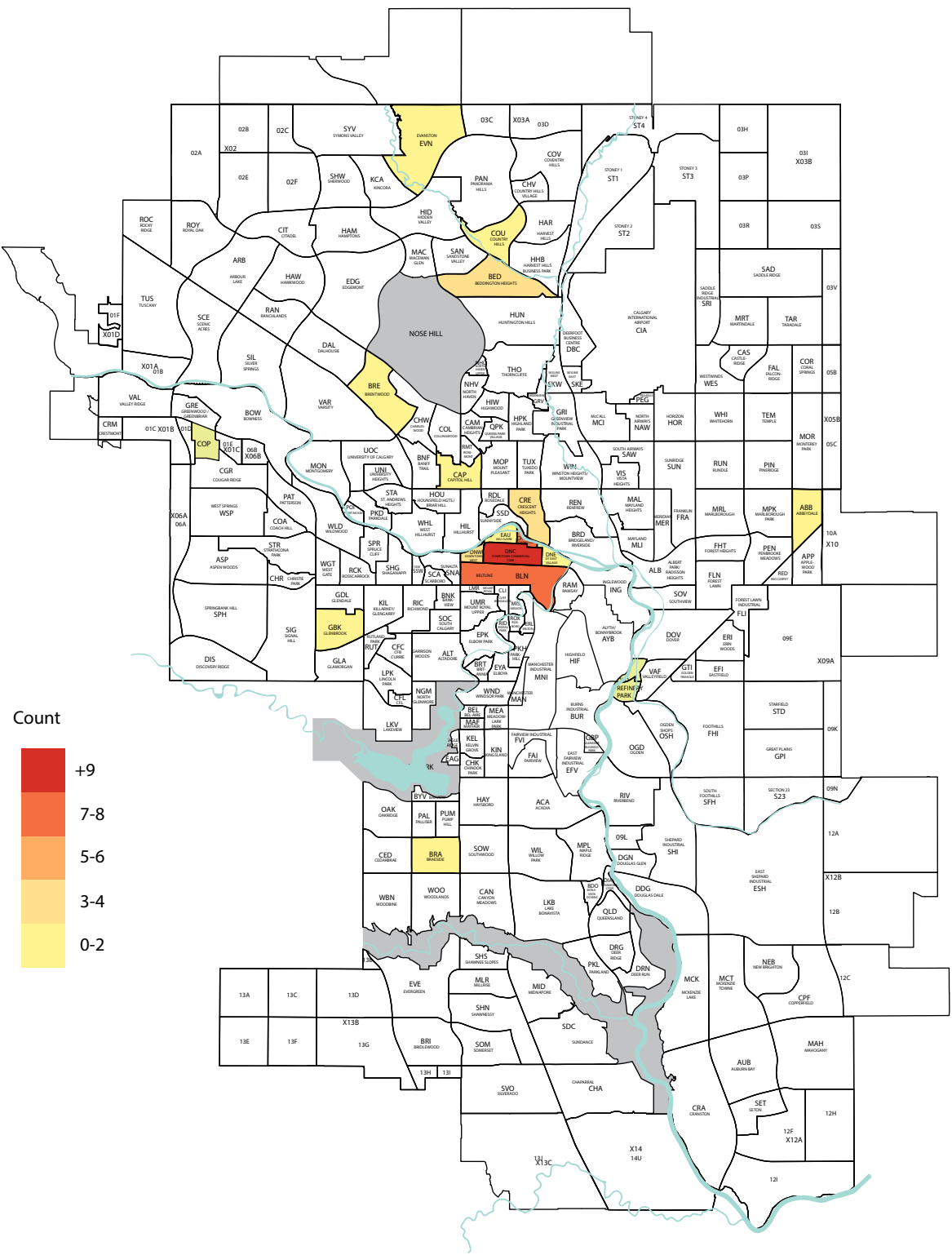




Q4 - In which neighbourhood do you live?

We found there was a good distribution of respondents from different quadrants of the city with 8.5% living in Chinatown and 22.5% in nearby Downtown communities.

The rest of the respondents were from multiple communities with a relative concentration living in NorthWest communities.



Q5 - In which neighbourhood do you work?

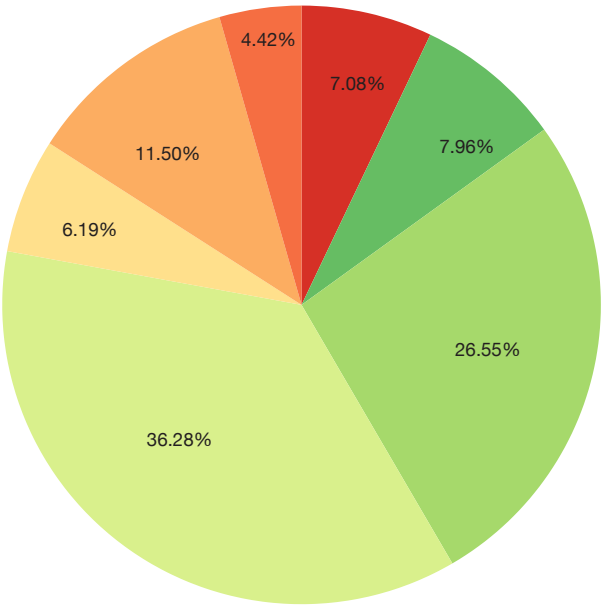
We found there was a good distribution of respondents from different quadrants of the city with 7.6% working in Chinatown, 24% in the Downtown Commercial Core and 8.4% in the

Beltline. The rest of respondents worked in various communities across the city.



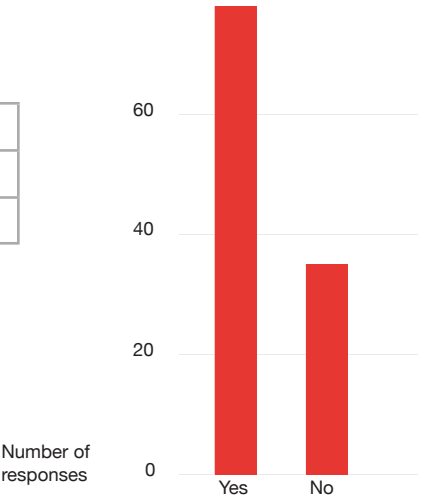
Q6 - What is your highest level of education completed?

	Doctorate	7.96%	9
	Masters	26.55%	30
	Bachelors	36.28%	41
	Vocational training	6.19%	7
	High school	11.50%	13
	No formal education	4.42%	5
	Other	7.08%	8
	Total Responses		113



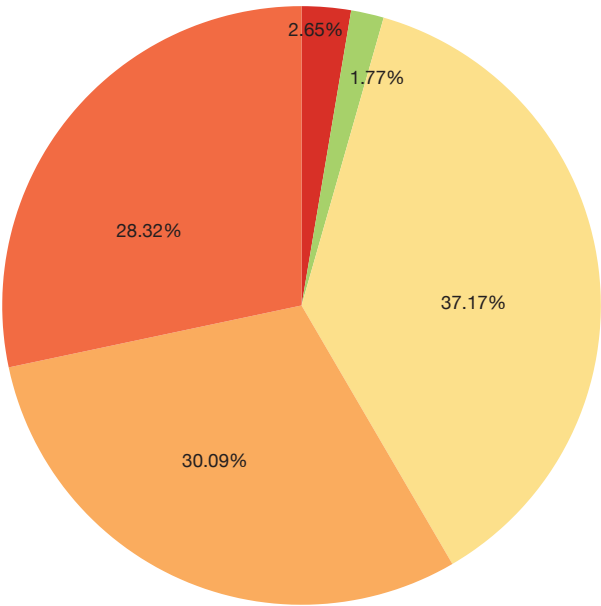
Q8 - Do you own a car?

Yes	69.03%	78
No	30.97%	35
Total Responses		113



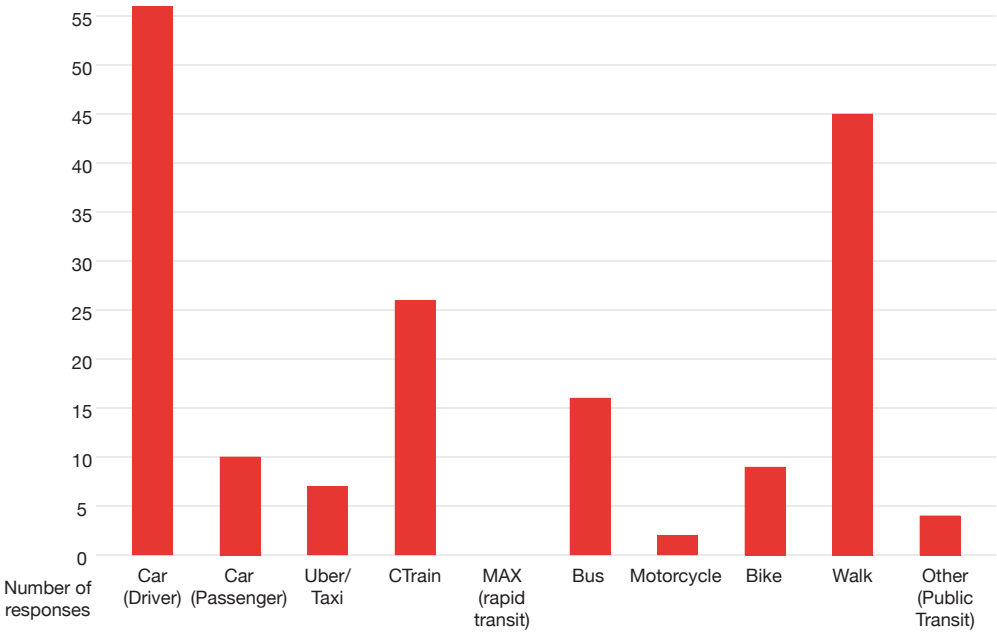
Q7 - What is your primary language?

	Vietnamese	1.77%	2
	English	37.17%	42
	Mandarin	30.09%	24
	Cantonese	28.32%	32
	Other	2.65%	3
	Total Responses		113



Q9 - How do you get to Chinatown?

Car (Driver)	32.00%	56
Car (Passenger)	5.71%	10
Uber/Taxi	4.00%	7
CTrain	14.86%	26
MAX (rapid transit)	0.00%	0
Bus	9.14%	16
Motorcycle	1.14%	2
Bike	5.14%	9
Walk	25.71%	45
Other (Public Transit)	2.29%	4
Total Responses (Participants could pick more than one)		175



Findings and Recommendations Page Layout

The two-page layout for the findings and recommendations was designed for ease of implementation and to facilitate for the reader the connection between the recommendations and the survey responses from the public.

Visual 360° images were provided as options to choose from for this particular question. Only the built form elements in question were highlighted with colour.

Survey responses were presented graphically and in numbers. There are two sets of responses. The first question refers to the visual options provided while the second question refers to the importance of that particular built form element.

The recommendations are introduced by a brief discussion that summarize the main findings and frames the set of recommendations.

These accompanying images support the recommendations and provide useful precedents from other Chinatowns across the world and examples from China. The captions include project name, author, photo credits and the Web-based source.

Streetscape

Street Dimensions

Current

Option 1 - Half Pedestrian

Option 2 - Full Pedestrian

Q10 - Which photo contributes more to the character of Chinatown?

Current

Option 1
Half Pedestrian

Option 2
Full Pedestrian

Current	26.26%	26
Option 1 - Half Pedestrian	32.32%	32
Option 2 - Full Pedestrian	41.41%	41
Total Count		99

Q11 - How important is this for the character of Chinatown?

Extremely important

Very important

Moderately important

Slightly important

Not at all important

Extremely important	44.00%	44
Very important	34.00%	34
Moderately important	12.00%	12
Slightly important	5.00%	5
Not at all important	5.00%	5

Recommendations

Street Dimensions

Discussion.

Recommendations:

New York's Chinatown's Doyers Street temporary closure. Photo: Gary He/Eater. Source: <https://ny.eater.com/2020/6/25/21302334/nyc-outdoor-dining-streets-suggestions-for-mayor>

CHINATOWN SENSE OF PLACE

04. FINDINGS AND RECOMMENDATIONS

37

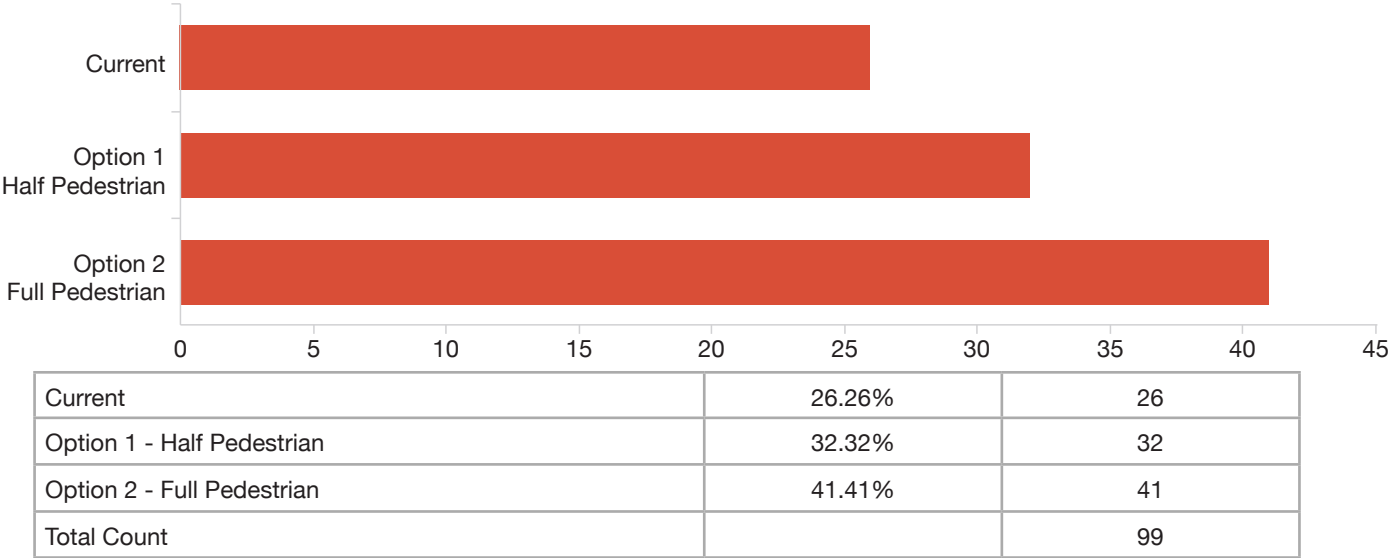


Streetscape

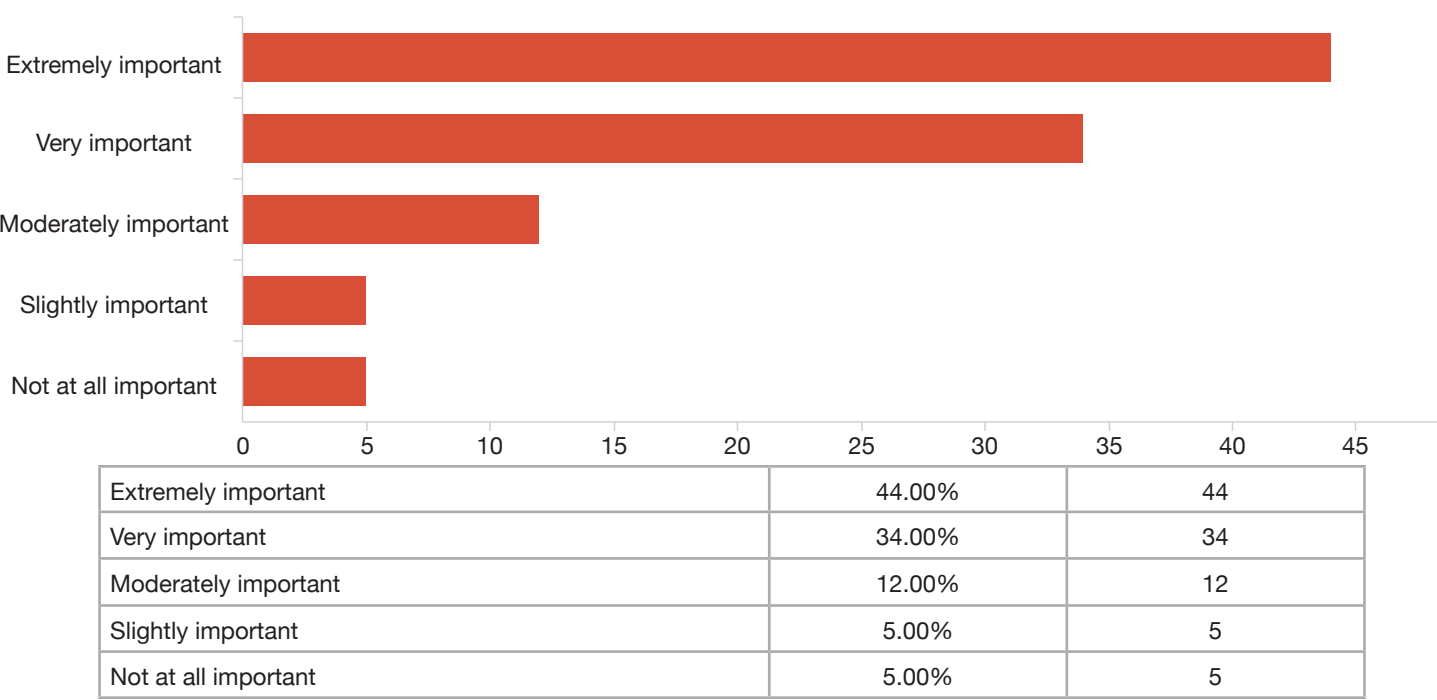
Street Dimensions



Q10 - Which photo contributes more to the character of Chinatown?



Q11 - How important is this for the character of Chinatown?



Recommendations

Street Dimensions

Discussion. Street dimensions recommendations focus on the different ‘zones’ of the public realm right-of-way (ROW) of streets. There are three main zones: the vehicular traffic zone, the parking zone, and the pedestrian zone. Different locations throughout Chinatown have different set of conditions for its ROWs. This question focused on the public perception of the pedestrian zone. A large portion of respondents considered the increase of the pedestrian zone as a preferred condition and it was considered of high importance. At the same time we need to recognize that for some businesses it remains important to have vehicular access. For any future redesign of the public realm ROW it is important to have a wider involvement in the consultation process from different members of the community and to work closely with businesses to minimize any disruption to their operations and client base access.

Recommendations:

- Conduct a thorough ROW analysis of Chinatown and identify areas where the pedestrian zone can be extended. The ROW analysis will help determine the ideal dimensions for a pedestrian zone based on predicted pedestrian traffic.
- In areas with a narrow pedestrian zone, efforts should be taken to extend it to occupy perhaps one or two parking stalls to allow for additional pedestrian and street tree space. It is important to take into consideration not eliminating a large number of parking stalls.
- New developments should consider a setback from the property line that would increase the pedestrian zone.
- Continue the support for the temporary closure of some local streets, either partially or in full, for festivals and other local events.
- During weekends there is also the possibility of closing one or two lanes of traffic on local streets to add pedestrian space.



New York's Chinatown's Doyers Street temporary closure. Photo: Gary He/Eater. Source: <https://ny.eater.com/2020/6/25/21302334/nyc-outdoor-dining-streets-suggestions-for-mayor>

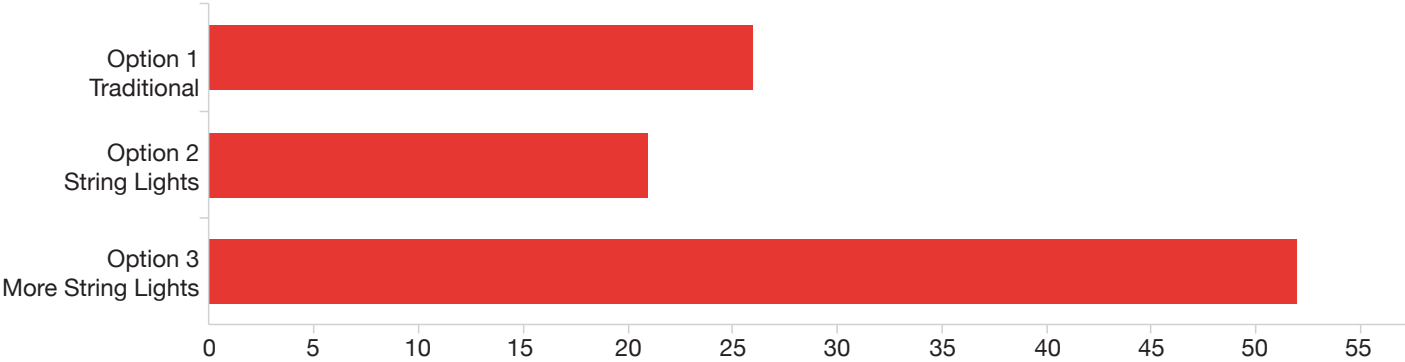


Streetscape

Street Lighting

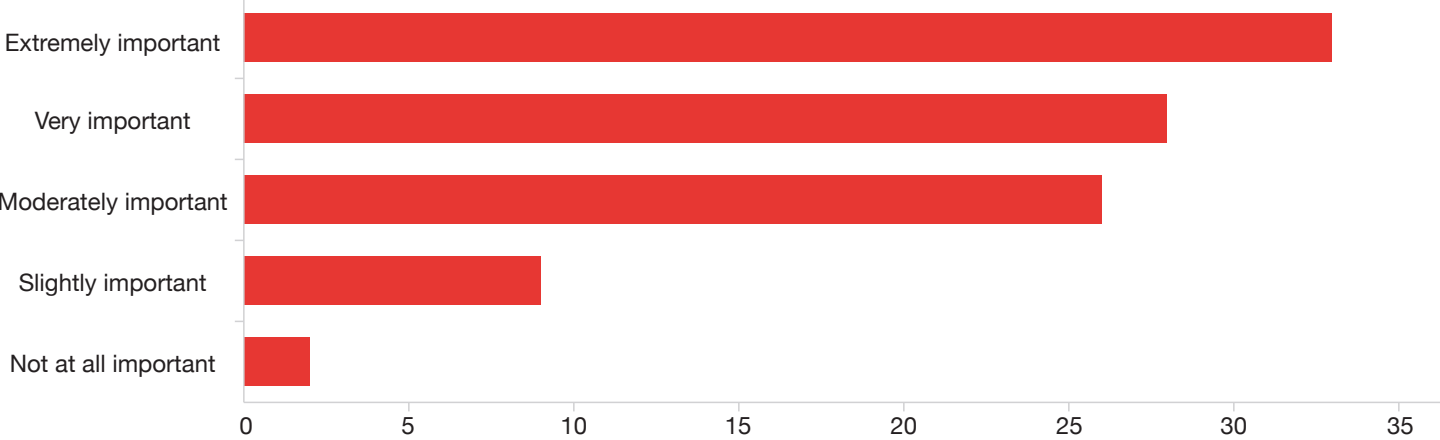


Q12 - Which photo contributes more to the character of Chinatown?



Option 1 - Traditional	26.26%	26
Option 2 - String Lights	21.21%	21
Option 3 - More String Lights	52.53%	52
Total Count		99

Q13 - How important is this for the character of Chinatown?



Extremely important	33.67%	33
Very important	28.57%	28
Moderately important	26.53%	26
Slightly important	9.18%	9
Not at all important	2.04%	2

Recommendations

Street Lighting

Discussion. Street lighting contributes to the ambience and human scale of the public realm. Nearly two thirds of the respondents considered street lighting of high importance and over half considered string lights as a preferred addition. In Chinatown and other areas of the city street lighting provided a unique character to the public realm, it also contributes to the sense of place and the sense of arrival. The sense of arrival is the perception a person has when they feel like they have crossed a threshold and are now inside a distinct place. Street lighting can contribute to this perception.

Recommendations:

- Current traditional streets lights are valued and should continue to be used in future developments and other areas of Chinatown.
- In addition, string lights would contribute greatly to the character of Chinatown and these could be added in a way similar to what is currently in place on Kensington Road and 10th Street NW but using a Chinese lantern type of string light.
- Year round string lights could be installed exclusively over sidewalks and the main pedestrian areas, while seasonal lights, for example Chinese New Years, could be installed across the streets and over vehicular areas.
- The addition of string lights could also be a phased approached focusing initially on Centre Street (from the landing of the bridge to 4th Avenue SW/SE), 2nd Avenue SW/SE and 3rd Avenue SW/SE (from 1st Street SE to 1st Street SW).



Lanterns over Mott Street, in New York City, for Chinese New Year 2021.
Photograph: Lauren Shin. Source: <https://www.theguardian.com/travel/2021/jan/28/new-yorks-chinatown-pulls-together-to-brighten-the-covid-darkness>

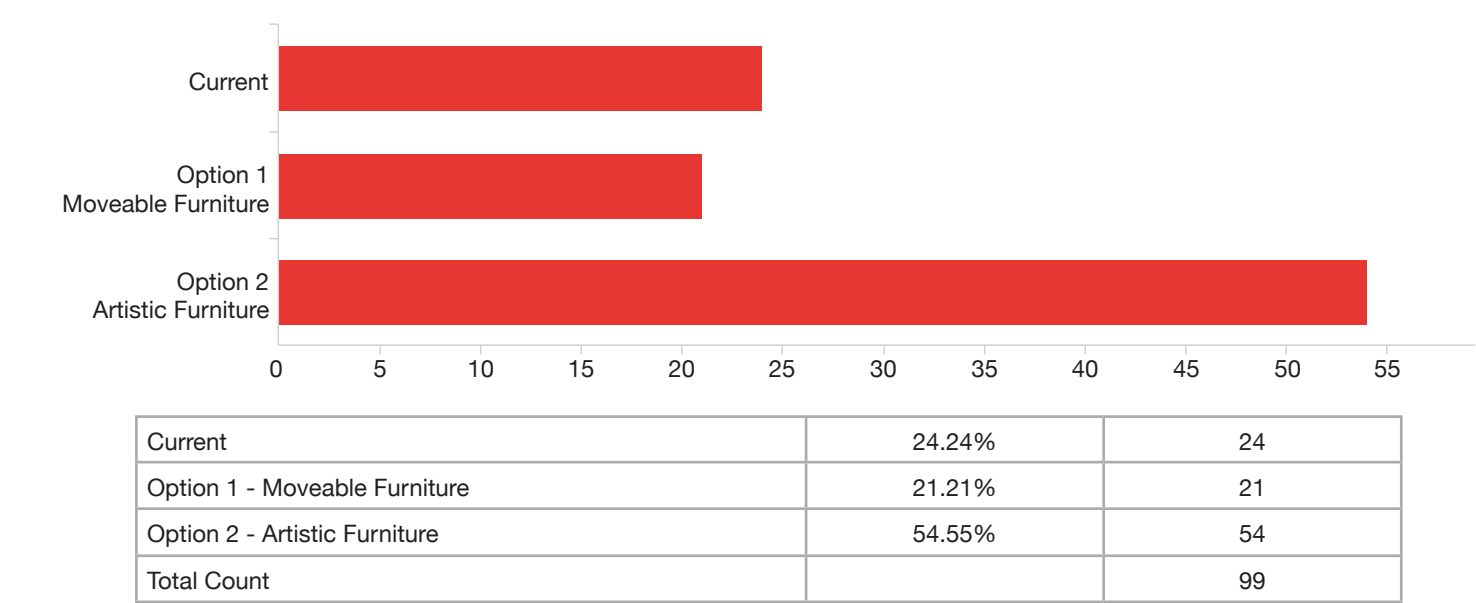


Streetscape

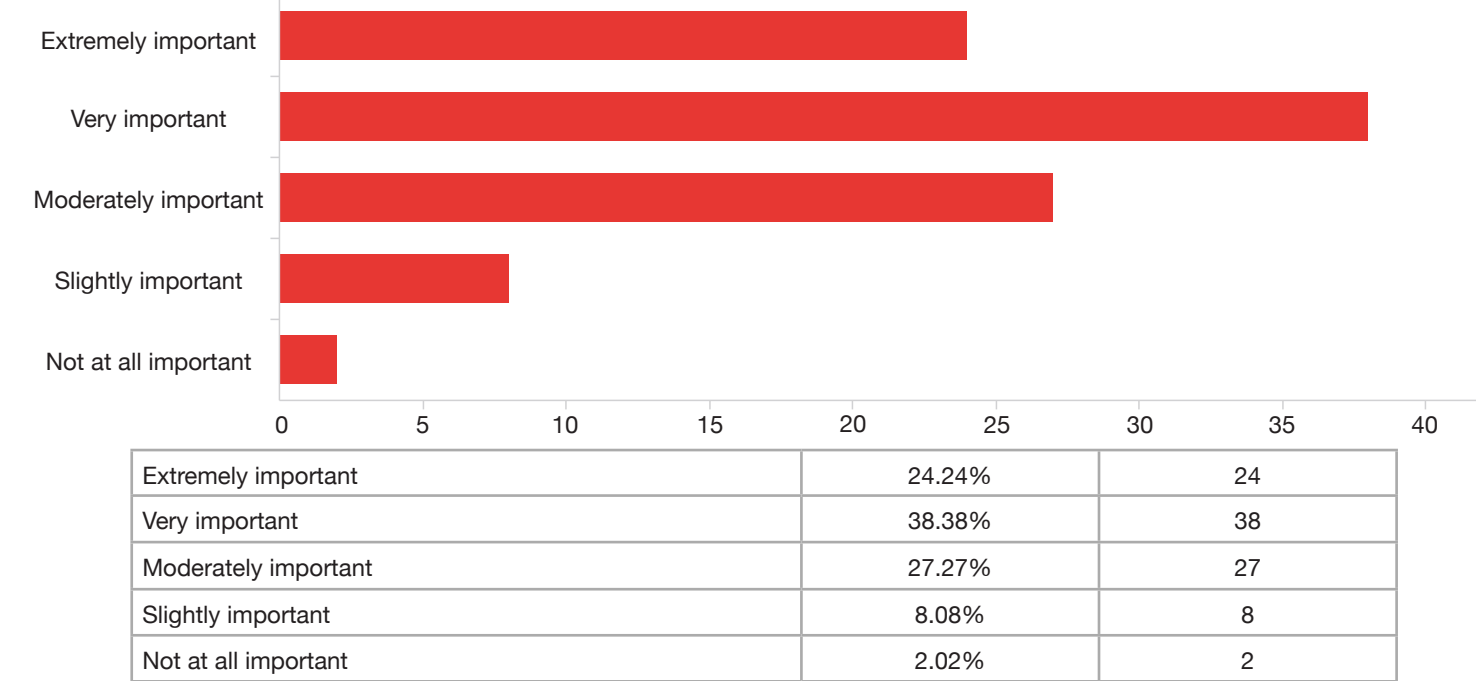
Urban Furniture



Q14 - Which photo contributes more to the character of Chinatown?



Q15 - How important is this for the character of Chinatown?



Recommendations

Urban Furniture

Discussion. Urban furniture is a necessary addition to the public realm that can improve the habitability of the pedestrian environment. Some key urban furniture elements are waste bins, benches, and bicycle racks. Over 75% of respondents considered the need for additional urban furniture and over half identified high quality artistic urban furniture as the preferred option. Nearly 90% of respondents considered this to be an important character feature.

Recommendations:

- Conduct an audit of current urban furniture and its location to identify areas of need.
- On a first impression there is a significant lack of benches and places to sit. There is also limited pedestrian space to include additional urban furniture. The recommended ROW analysis and pedestrian space expansion should provide additional space.
- Additional places to sit should be added to local streets.
- The two sides of the landing of the Centre Street bridge present unique opportunities for additional sitting areas as well as other additional urban furniture. These two locations should also be considered arrival points into Chinatown and require special attention.
- The community can contribute to identify locations of priority for new sitting areas. It would be important to take into consideration previous engagement processes and the Chinatown Cultural Plan process to include previous community feedback in this regard.
- It is of high importance to add places for sitting specially taking into consideration the significant seniors population in the area. New urban furniture sitting areas should consider seniors as part of its design.
- Local artists could be involved in the design and procurement of additional urban furniture. It could be part of a competition and an overall public realm improvement project with a strong focus on public art and supports the findings of the Chinatown Cultural Plan.



Top: Bench inspired by clouds represented in Chinese paintings. Designed by Michael Arcega as part of San Francisco's Broadway Chinatown Streetscape Project. Source (top left): <http://www.spotlightchinatown.com/public-art>. Source (top right): <https://www.sfxaminer.com/news/city-celebrates-completion-of-street-improvements-to-broadway-spofoford-alley/>

Bottom: Planter and bench from the San Francisco public realm improvement initiative Chinatown Living Alley Project. Source: <https://www.sfxaminer.com/news/city-celebrates-completion-of-street-improvements-to-broadway-spofoford-alley/>

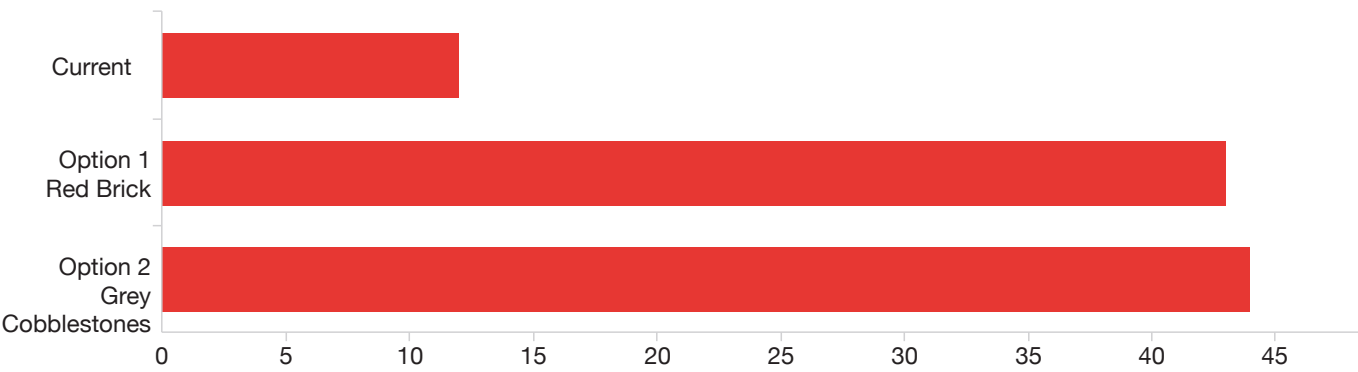


Streetscape

Sidewalk Material

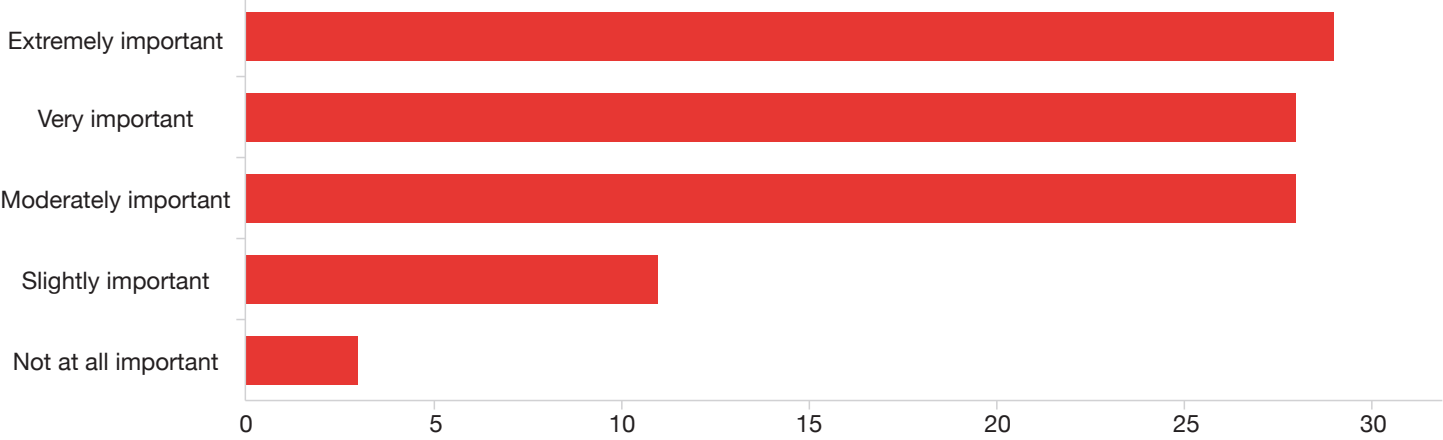


Q16 - Which photo contributes more to the character of Chinatown?



Current	12.12%	12
Option 1 - Red Brick	43.43%	43
Option 2 - Grey Cobblestones	44.44%	44
Total Count		99

Q17 - How important is this for the character of Chinatown?



Extremely important	29.29%	29
Very important	28.28%	28
Moderately important	28.28%	28
Slightly important	11.11%	11
Not at all important	3.03%	3

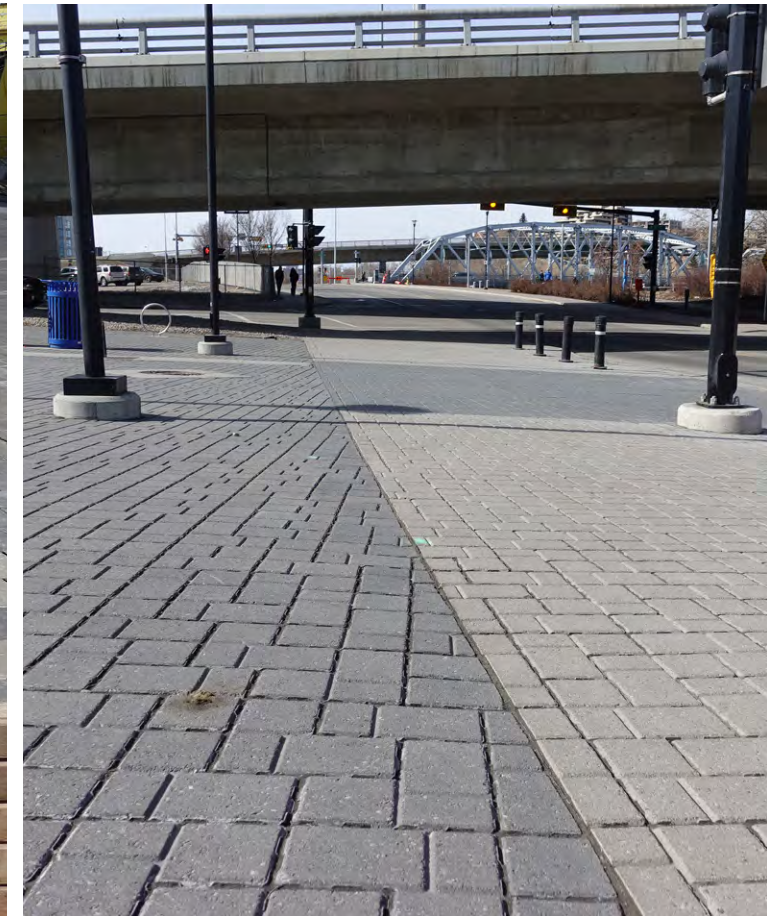
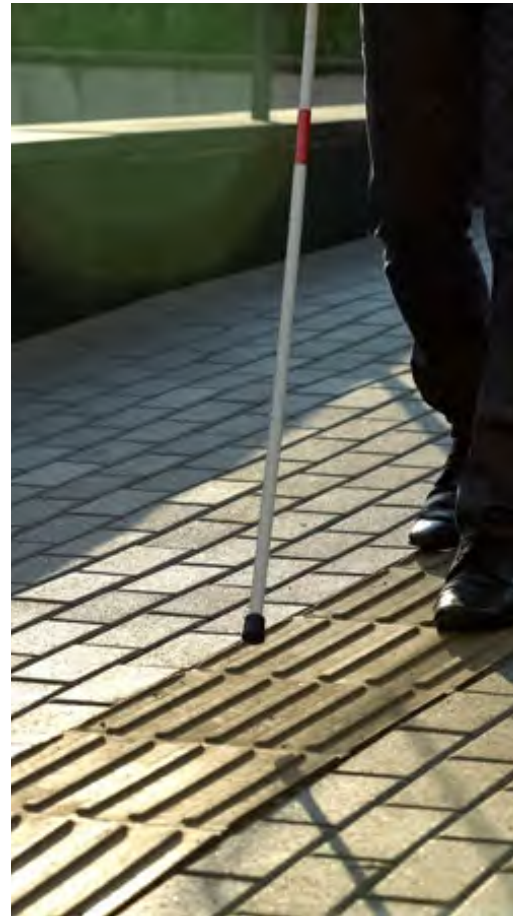
Recommendations

Sidewalk Material

Discussion. Sidewalk material can be a differentiating factor for character zones in our cities. In particular for Chinatown it presents an opportunity to strengthen its sense of place. Other locations in our city present viable examples such as the case of East Village and the University District. While there was not a clear preference between the options provided for new textured materials (brick or stone) and 85% considered it important for Chinatown's character.

Recommendations:

- Taking into consideration our city's winter conditions textured pavement in the form of brick or stone and/or pavers should be included in future public realm improvements.
- Winter conditions in the city will require a snow clearing process using sweeper/brushes instead of plows for these materials.
- Any new development should include the addition of textured pavement in the form of brick or stone and/or pavers in accordance with an overall strategy for sidewalk material improvement.
- Since roadway material was also considered as an important addition to the quality of the public realm (see questions 18 and 19), sidewalk material should be considered in conjunction with roadway material.
- It is recommended that all the streets in the community use this pavement treatment. It could be a phased-in approach with initial phases focusing on the commercial core of the community along Centre Street, 2nd Avenue, and 3rd Avenue.
- The use of Urban Braille, a tactile approach to design benefitting the visually impaired, should be considered as part of the redesign of the sidewalks.



Left: Urban Braille. Tenji directional block, Japan. Source: <https://www.reliance-foundry.com/blog/tenji-blocks>

Centre: University District sidewalk materials, University of Calgary Property Group, Calgary, Canada. Source: The Urban Lab, University of Calgary.

Right: East Village sidewalk materials, Calgary Municipal Land Corporation, Calgary, Canada. Source: The Urban Lab, University of Calgary.

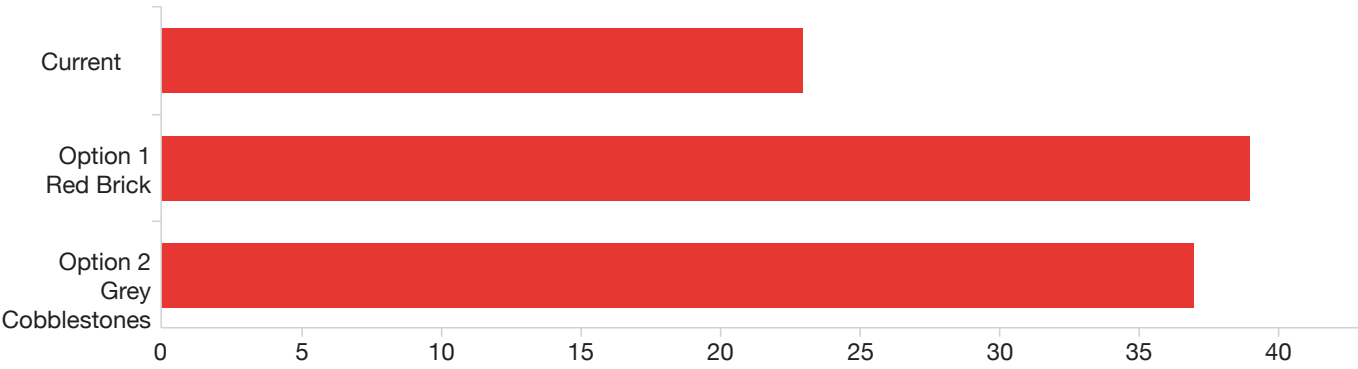


Streetscape

Roadway Material

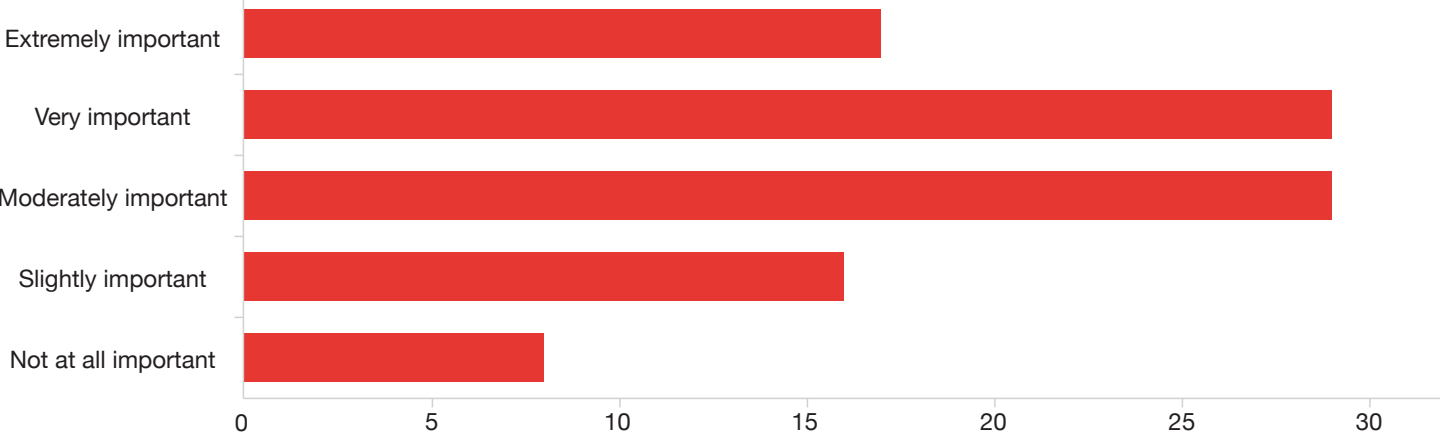


Q18 - Which photo contributes more to the character of Chinatown?



Current	23.23%	23
Option 1 - Red Brick	39.39%	39
Option 2 - Grey Cobblestones	37.37%	37
Total Count		99

Q19 - How important is this for the character of Chinatown?



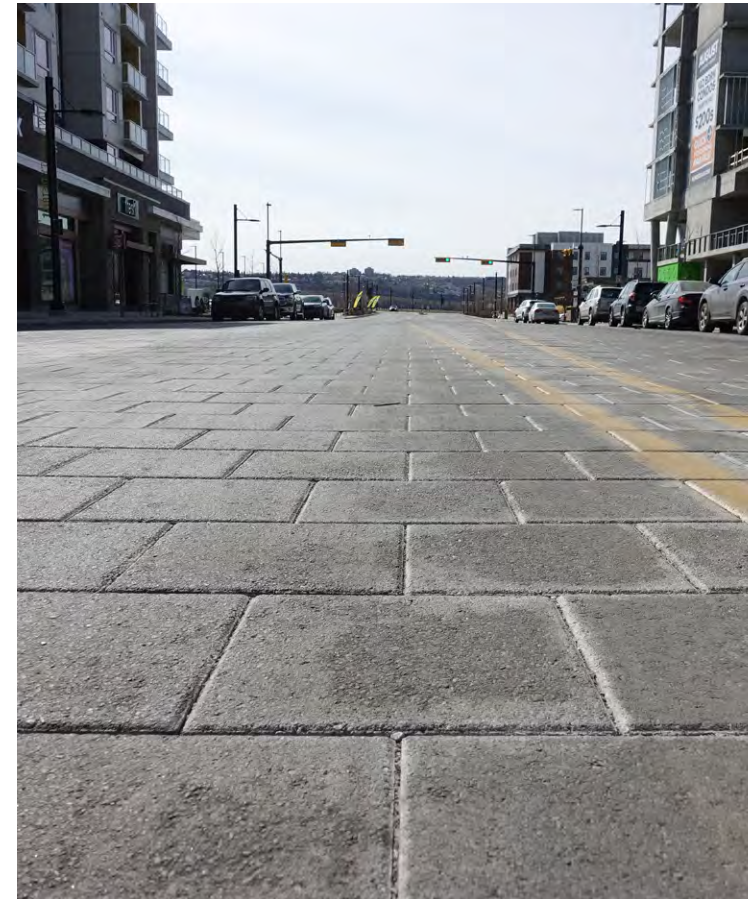
Extremely important	17.17%	17
Very important	29.29%	29
Moderately important	29.29%	29
Slightly important	16.16%	16
Not at all important	8.08%	8

Roadway Material

Discussion. Similar to sidewalk material, roadway material can also be a differentiating factor for neighbourhoods in our cities. It can strengthen a sense of place and a sense of arrival. It also can function as a traffic calming feature by slowing vehicles down. Over 76% of participants considered textured pavement as a desired feature that is of importance to the character of Chinatown.

Recommendations:

- Taking into consideration our city's winter conditions textured pavement should be included as part of future public realm improvements.
- The city's winter conditions might require a different snow clearing process using sweeper/brushes rather than plows.
- The pavement could be in the form of high quality texture concrete simulating brick or cobblestones.
- Pavers and cobblestones could also be used to provide texture to the roadway's pavement.
- It is recommended that all the streets in the community use this pavement treatment. It could be a phased-in approach with initial phases focusing on the commercial core of the community along Centre Street, 2nd Avenue, and 3rd Avenue.
- Roadway material should be considered in conjunction with sidewalk materials.
- Precedents in East Village and the University District are good examples of high quality standards for roadway materials that could also be used in Chinatown.



Left: University District roadway materials, University of Calgary Property Group, Calgary, Canada. Source: The Urban Lab, University of Calgary.



Right: East Village roadway materials, Calgary Municipal Land Corporation, Calgary, Canada. Source: The Urban Lab, University of Calgary.



Street Programming & Use

Temporary Closure and Use of Roadway



Current

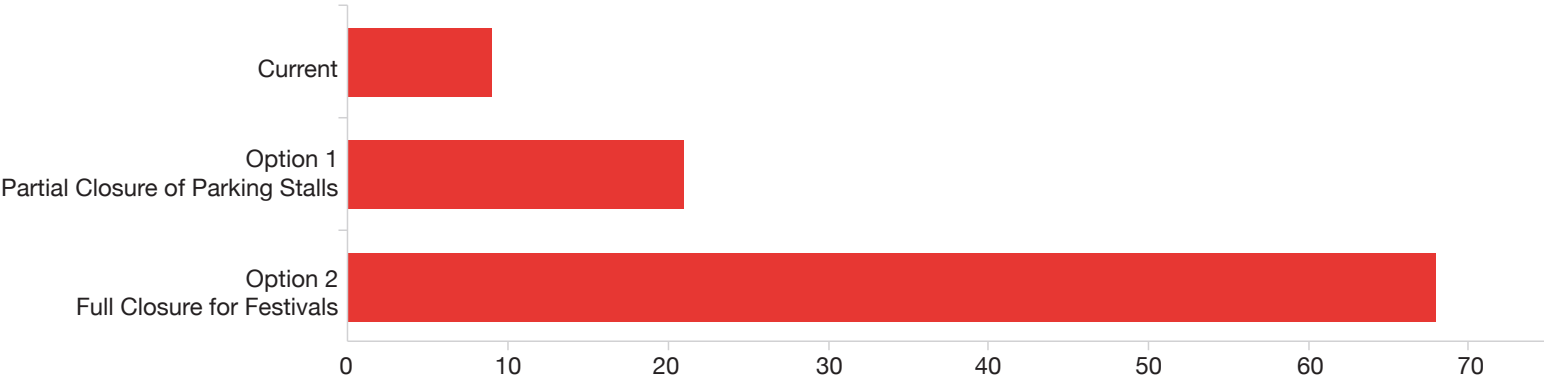


Option 1 - Partial Closure of Parking Stalls



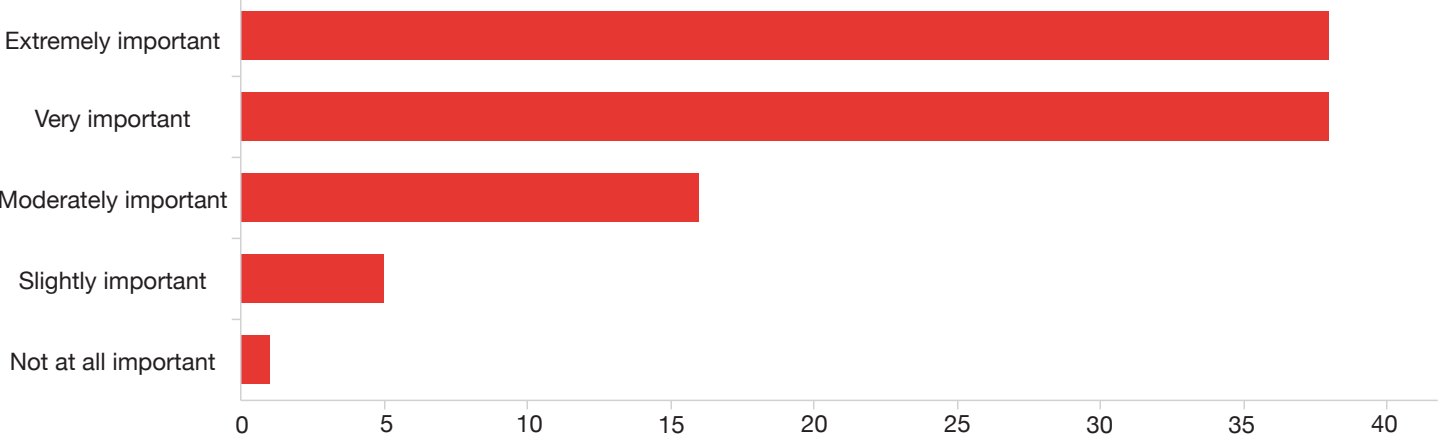
Option 2 - Full Closure for Festivals

Q20 - Which photo contributes more to the character of Chinatown?



Current	9.18%	9
Option 1 - Partial Closure of Parking Stalls	21.43%	21
Option 2 - Full Closure for Festivals	69.39%	68
Total Count		98

Q21 - How important is this for the character of Chinatown?



Extremely important	38.78%	38
Very important	38.78%	38
Moderately important	16.33%	16
Slightly important	5.10%	5
Not at all important	1.02%	1

Roadway Closure

Discussion. Temporary closure of roadways provides opportunities for seasonal events that can accommodate a larger number of pedestrians and multiple activities. Partial closures of parking stalls was not preferred, instead the full closure of the street for festivals was heavily supported. The large majority of respondents, 90%, supported and considered this an important feature of Chinatown.

Recommendations:

- Continue to support the temporary closure of roadways in support of community events.
- To further support these events it is necessary to perform an audit of infrastructure for outdoor events that should inform modifications and additions. It is recommended to involve the current organizers of these events to better identify their needs for additional supporting infrastructure.
- Some examples of infrastructure elements for seasonal events could be outdoor electrical connections and access to water sources.



Top Left: Calgary Chinatown Street Festival 2019 Daqing Square, Calgary. Source: Calgary Chinatown. <https://dailyhive.com/calgary/silk-road-2019-chinatown-street-festival>
 Bottom Left: Calgary Chinatown Street Festival 2019 3rd Ave SE, Calgary. Source: Danny NG. <https://dailyhive.com/calgary/silk-road-2019-chinatown-street-festival>

Top Right: Vancouver's 2018 Lunar New Year Parade. Source: Kyle Benning / Global News. <https://globalnews.ca/news/4033325/thousands-pack-vancouvers-chinatown-for-lunar-new-year-parade/>

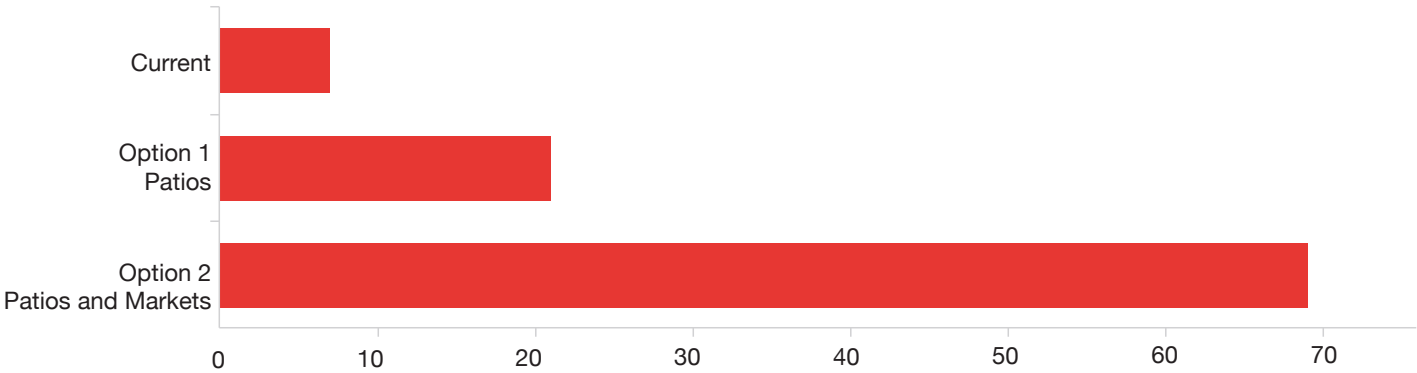


Street Programming & Use

Sidewalk Use

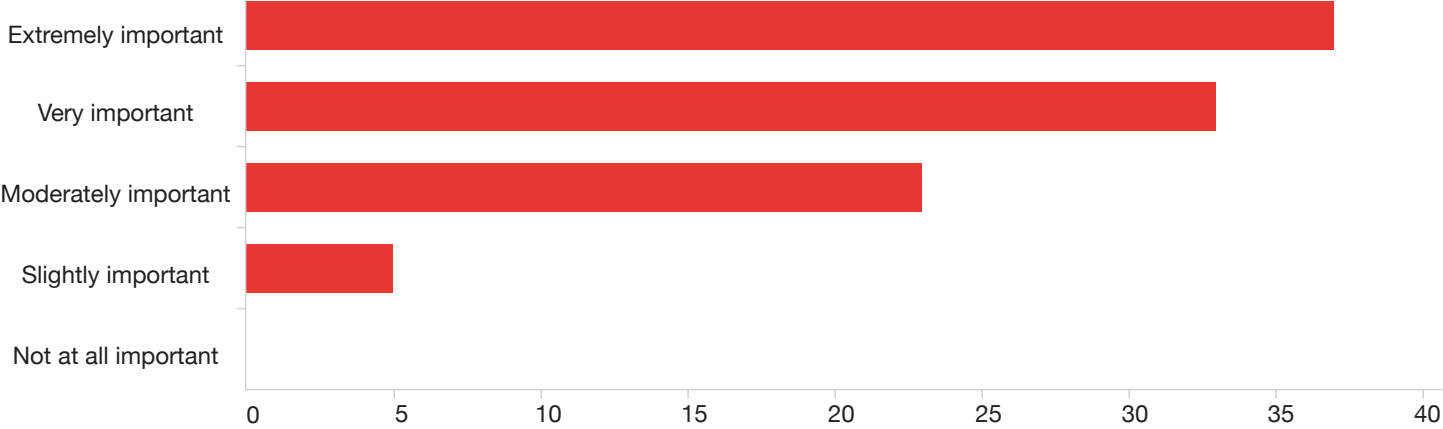


Q22 - Which photo contributes more to the character of Chinatown?



Current	7.22%	7
Option 1 - Patios	21.65%	21
Option 2 - Patios and Markets	71.13%	69
Total Count		97

Q23 - How important is this for the character of Chinatown?



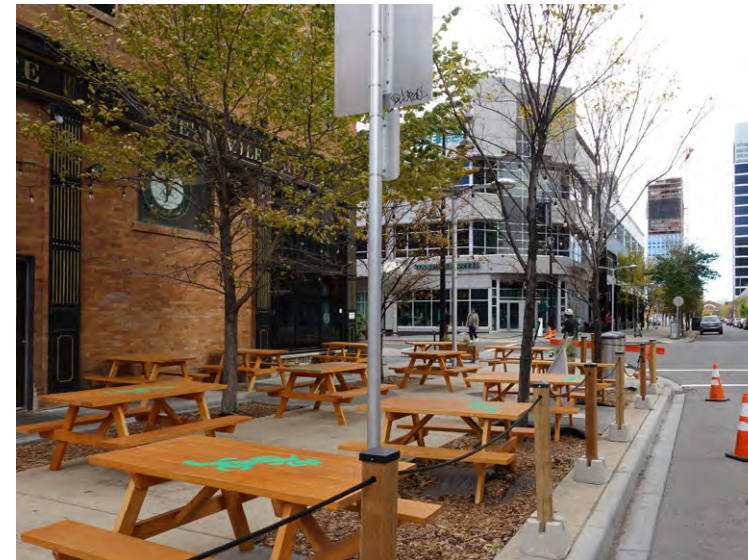
Extremely important	37.76%	37
Very important	33.67%	33
Moderately important	23.47%	23
Slightly important	5.10%	5
Not at all important	0	0

Sidewalk Use

Discussion. The use of the sidewalks presents an opportunity for increasing the vibrancy of a place. It can provide local businesses with additional spaces for sitting and for selling their products. During the Covid-19 pandemic we learned how these spaces are also very important for social distancing while continuing to enjoy the public realm. Over 90% of respondents considered the need for additional patio space and opportunities for markets/product stands. This feature was considered very/extremely important by 70% of the participants.

Recommendations:

- While current space is limited a ROW analysis and audit is recommended and should take into consideration potential areas for expansion of the sidewalk space to include patios and markets/product display stands.
- New developments should include provisions that allow for doors and windows to open to the exterior allowing for merchandise to be displayed outside the store premises.
- New developments should include setbacks to create space for patios and other uses that can contribute to the vibrancy of the street.
- Patios and markets/product display stands should be considered where possible in existing areas taking into consideration available space and pedestrian flow.
- One of the lessons learned from the Covid-19 pandemic is the need for relaxation of patio regulations to facilitate the use of the public realm and lower the burden of businesses. The process of providing patios should not be onerous. These relaxations should remain in place and continue to support the use of the public realm.



Examples of patios in Calgary. Some include additional space due to Covid-19 social distancing restrictions. Source: The Urban Lab, University of Calgary.

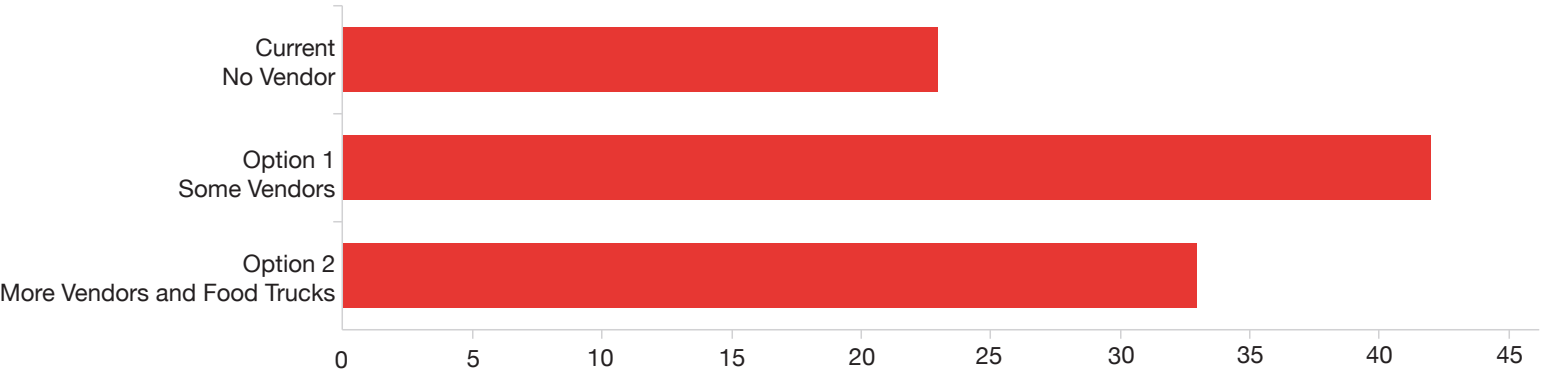


Street Programming & Use

Street Vendors/Products on Sidewalks

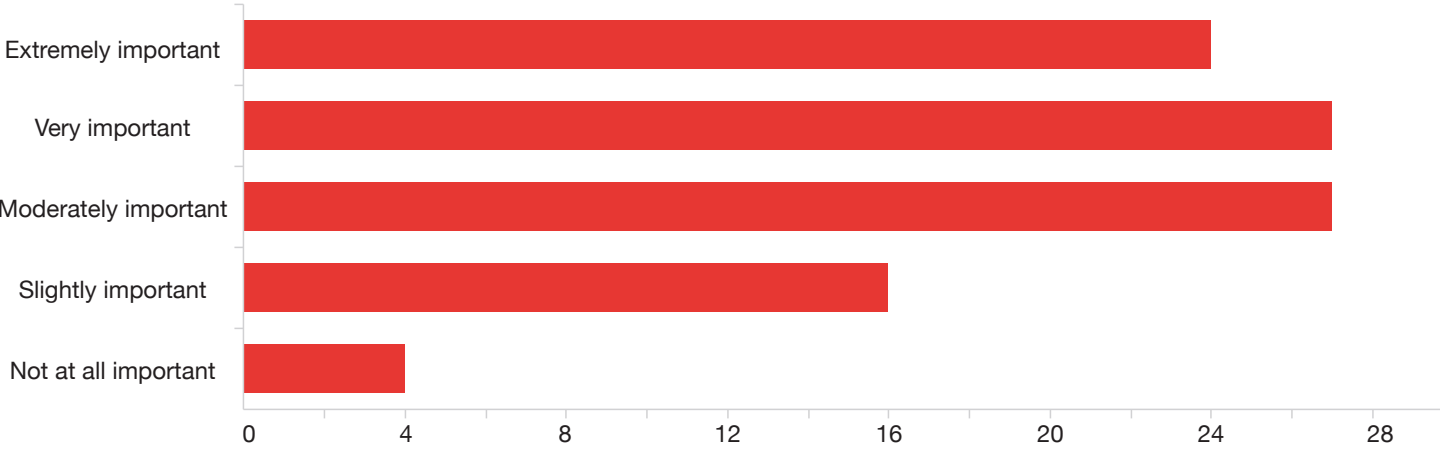


Q24 - Which photo contributes more to the character of Chinatown?



Current - No Vendors	23.47%	23
Option 1 - Some Vendors	42.86%	42
Option 2 - More Vendors and Food Trucks	33.67%	33
Total Count		98

Q25 - How important is this for the character of Chinatown?



Extremely important	24.49%	24
Very important	27.55%	27
Moderately important	27.55%	27
Slightly important	16.33%	16
Not at all important	4.08%	4

Street Vendors

Discussion. Street vendors can bring added amenities to the public realm but need to be considered carefully. The product or service these street vendors can provide should be complementary to the existing local businesses and not a competing use. Over 76% of respondents considered street vendors as a positive addition to Chinatown but the majority in that group were cautious about the number of vendors. Nearly 80% of the respondents consider street vendors to be important to the character of the neighbourhood.

Recommendations:

- The local business community should be involved in the planning and decision-making process for allowing street vendors in Chinatown.
- While the process should not be onerous financially there should be a set of guidelines for the approval of street vendors. Their design and visual language should contribute to the character of Chinatown. New York City's Street Vendor Project provides a good precedent to develop some basic guidelines.
- Some of the street vendors could be associated with local businesses. For example a restaurant located inside Dragon City Mall could offer a foodtruck destination perhaps along 2nd Avenue SW or along Riverfront Ave SE.
- Similarly other businesses that don't offer a street-front could use a street vendor stand to promote and sell their products.
- To support street vendors is important to provide appropriate electrical outlets and prohibit electrical generators to prevent noise and fumes.
- It is important to provide sufficient waste bins to prevent littering.



Left: The Chairman food truck San Francisco. Source: <http://www.hailthechairman.com>

Top right: Precedent for guidelines: Street Vendor Project. Source: <http://welcometocup.org/Projects/MakingPolicyPublic/VendorPower>

Bottom right: New York Chinatown Market. Source: <https://www.wsj.com/articles/chinatowns-jack-fruit-fuzzy-squash-and-baby-shanghai-choy-1466729490>

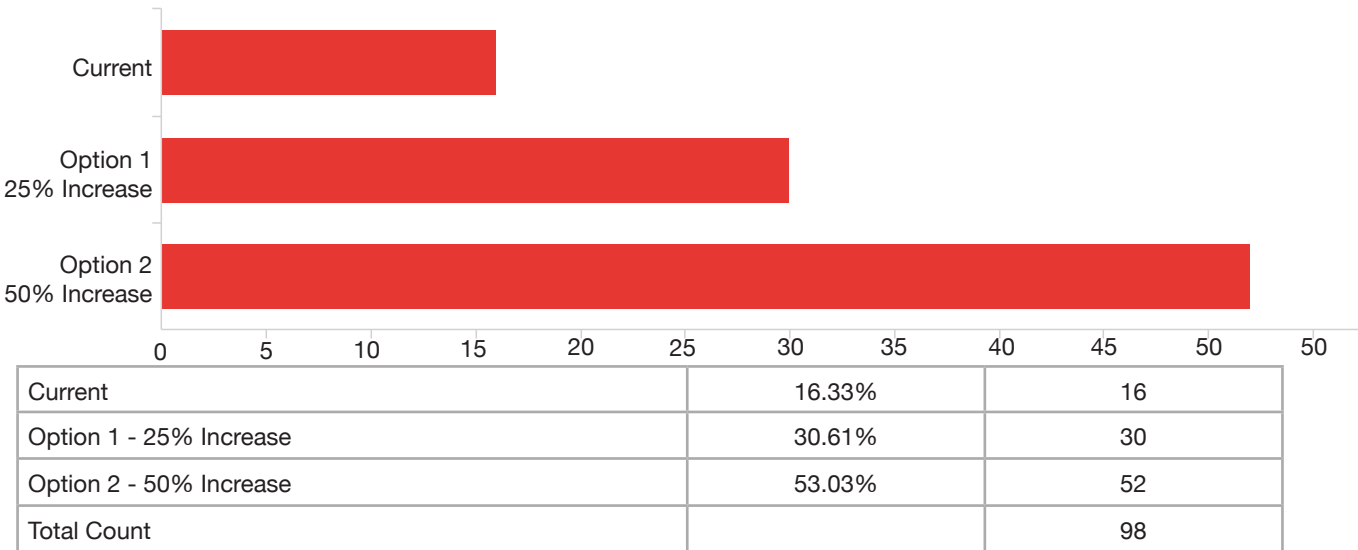


Street Programming & Use

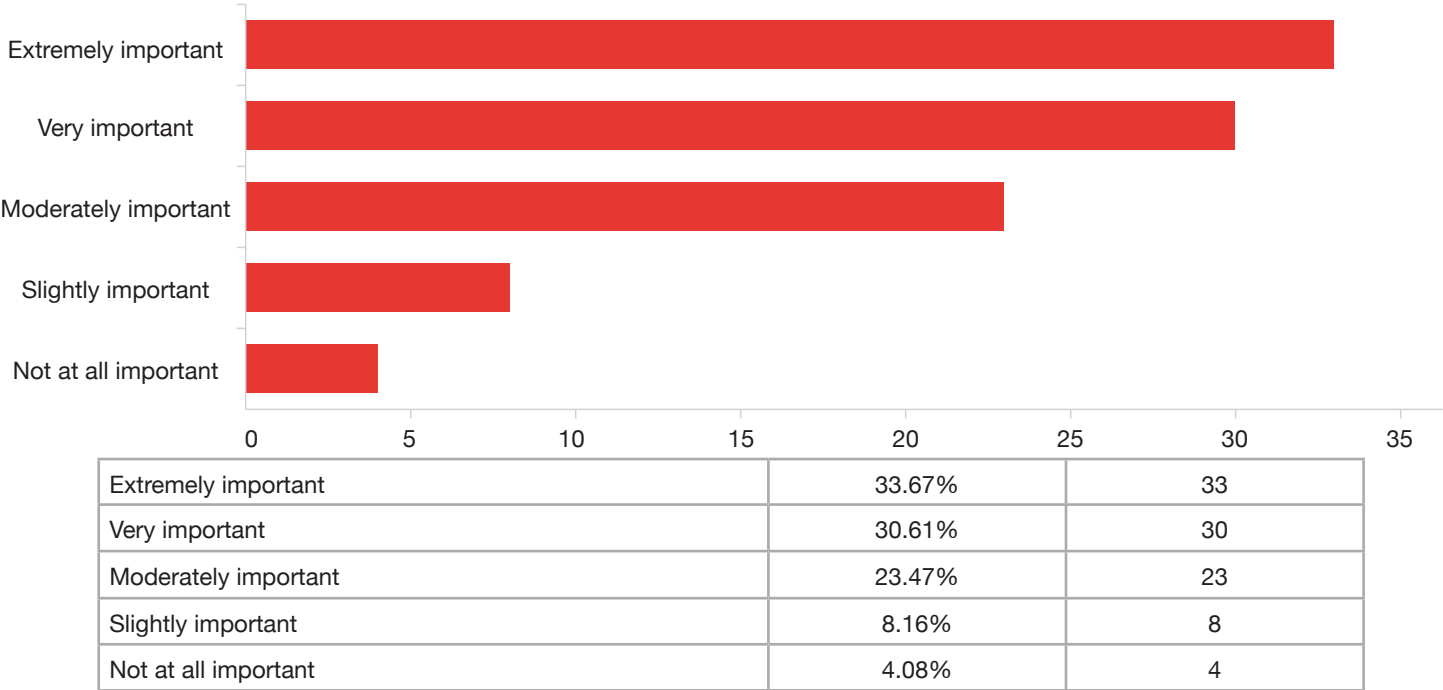
Street Trees



Q26 - Which photo contributes more to the character of Chinatown?



Q27 - How important is this for the character of Chinatown?



Street Trees

Discussion. Street trees are a key component for any street. They provide shelter from wind and sun, mitigate the heat-island effect, and contribute to air quality among many other benefits. The survey found that 80% of respondents supported an increase of at least 25% in street trees with over half of respondents supporting an increase of 50% in street trees. In fact, 64% of respondents considered street trees as extremely/very important for the character of the neighbourhood.

Recommendations:

- Replace any trees that have been removed in the past and take advantage of existing potential planting locations.
- In collaboration with the community identify areas where additional street trees can be planted.
- In areas where underground infrastructure does not support the planting of trees, moveable planters could be used for smaller trees and as a temporary measure. A street tree planting strategy should be developed and implemented for the addition of permanent trees.
- It is recommended to realign underground infrastructure to create more space for permanent street trees.
- Street trees can work well together with street lighting. It is recommended that a street tree planting strategy be developed as part of a comprehensive public realm improvement plan that takes into consideration all new additions to the public realm.
- The design of the moveable planters presents an opportunity for local artists to incorporate Chinese art expressions into the planters.



Top Left: Street trees in central Amsterdam, Netherlands. Street trees can be planted in congested areas of downtown with the appropriate realignment of underground utilities. Source: The Urban Lab, University of Calgary.

Bottom Left: Street trees can work well with street lighting of different kinds. Street trees in Breda's city centre, Netherlands. Source: The Urban Lab, University of Calgary.

Centre and Right: Moveable tree planters by StreetLife. Source: <https://www.streetlife.nl/us/tree-planters>

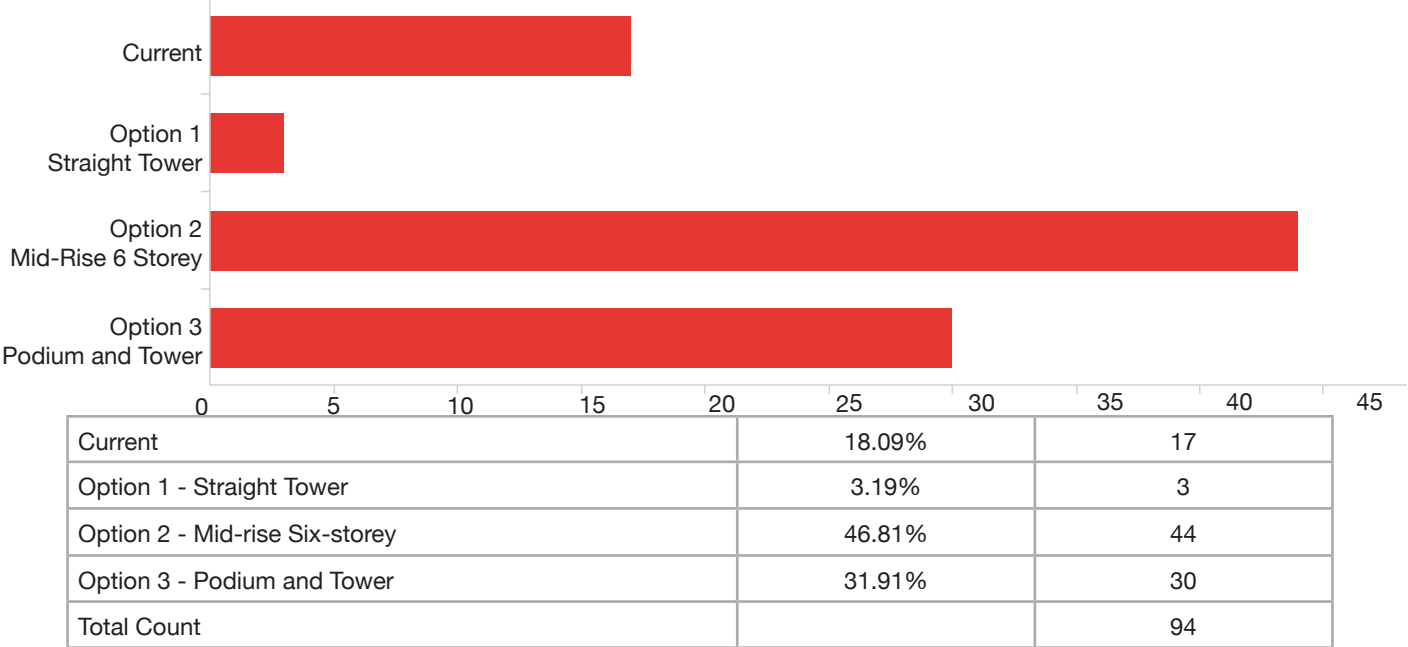


Buildings

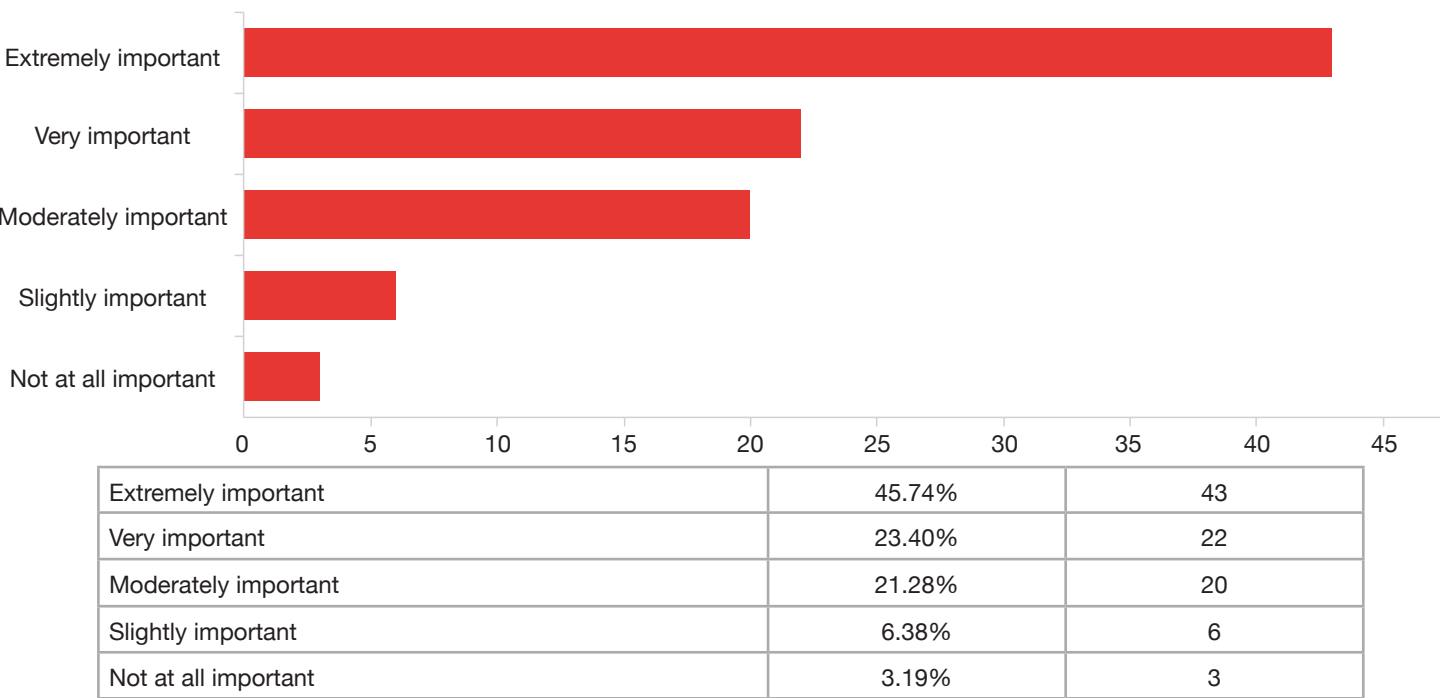
Scale of Buildings



Q28 - Which photo contributes more to the character of Chinatown?



Q29 - How important is this for the character of Chinatown?



Scale of Buildings

Discussion. The scale and type of buildings of a neighbourhood are a key factor in its character and sense of place. Nearly 70% of respondents considered extremely/very important the scale of the buildings and almost 65% of respondents rejected the addition of towers. Sensible densification is possible as is indicated by a 46% support of mid-rise buildings. We understand that the limited support for a podium-tower building type also shows a support for density that complements the existing scale of buildings. It is important to note that existing building heights vary from 2-25 storeys. The aerial picture shows the current diversity of building heights in the neighbourhood with the blocks east of Centre Street S. consisting of lower buildings while some of the blocks west have higher buildings.

Recommendations:

- Sensible densification should be discussed further with the public. This survey should not be the only basis for decision making for the location and type of density that can contribute to Chinatown.
- Based on our findings it is recommended to keep within the current range of scale of buildings to preserve the character and sense of place with an emphasis on the first six storeys of buildings.
- Current regulation allows for a building height between 14-16 storeys, therefore a podium/tower building type could accommodate the respondents' support for mid-rise density and the existing height maximums.
- All new development should pay close attention to the first four to six storeys since these are the ones that have the most impact on the public realm and the human scale.
- Upper-level setbacks for any height over four to six storeys should be considered to attenuate for the impact of taller structures.

High density towers in Chinatown
over 20 storeys high

Mid-rise 10-18 storeys buildings are
set back toward the alley

Low-rise 5-9 storeys buildings



Chinatown aerial picture with boundary shown in red. Source: Google Maps, 2021. Maxar Technologies, S. Alberta MDs and Counties Map. Calgary's Chinatown. Google Maps [online].



Buildings

Traditional Chinese Motifs



Current



Option 1- None

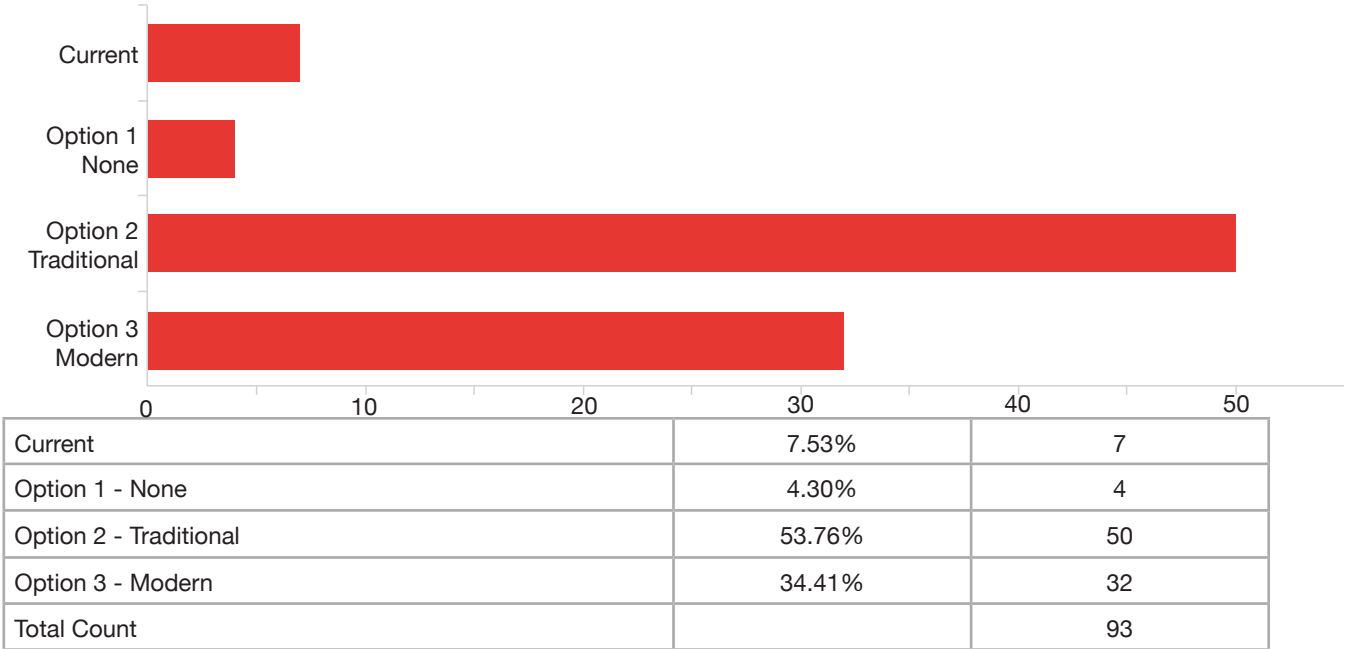


Option 2 - Traditional

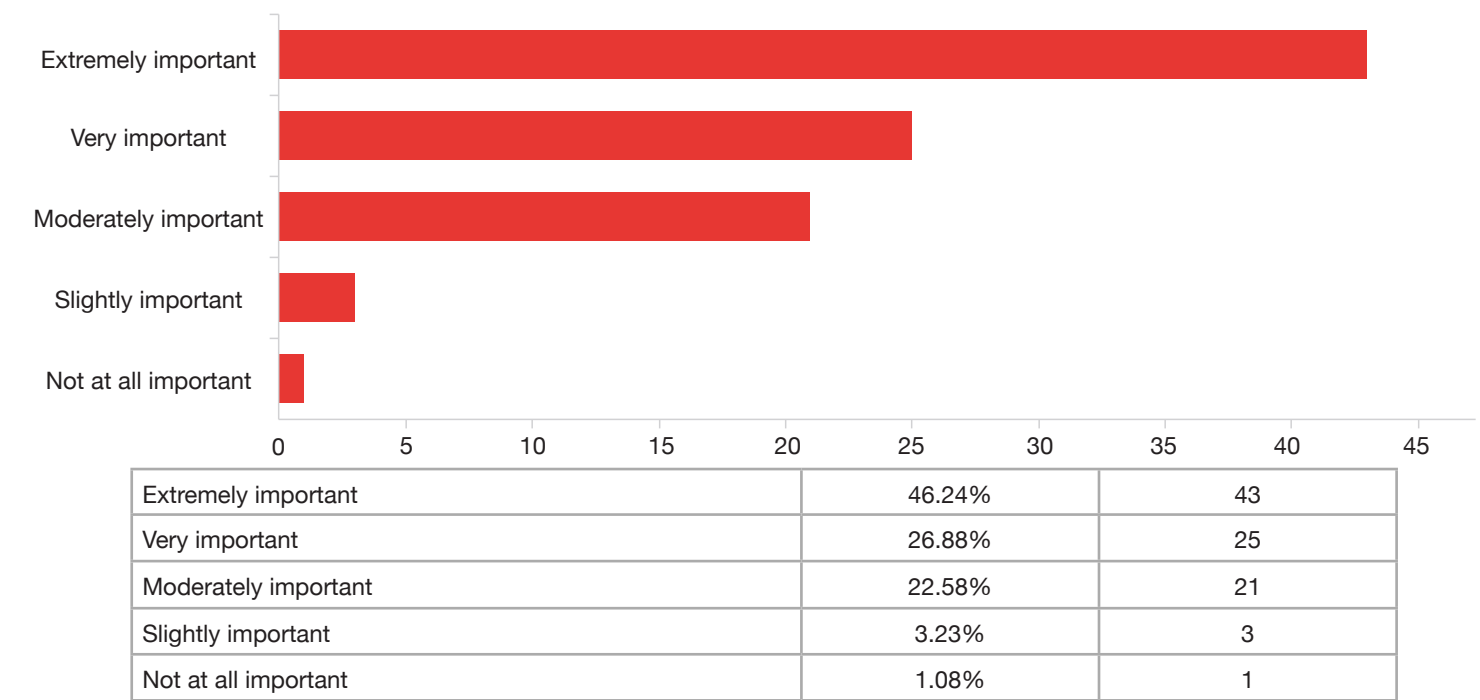


Option 3 - Modern

Q30 - Which photo contributes more to the character of Chinatown?



Q31 - How important is this for the character of Chinatown?



Traditional Chinese Motifs

Discussion. Design patterns and motifs are part of a visual and architectural language that can reflect the origin and cultural background of a building. Chinatowns across the world are expressions of their cultural background and their built form is a local adaptation of historical and traditional motifs. The use of motifs was considered extremely/very important by 73% of respondents, with 53% of total respondents supporting the use of traditional motifs. One third of respondents preferred a modern interpretation of Chinese architecture.

Recommendations:

- The use of Chinese architecture design patterns and motifs should be used in any new development with special emphasis and detailing on the first one to four storeys of the building where they make a clear and significant impact to the pedestrian's perception of space.
- Creativity should not be stifled through the use of over prescriptive regulations. The use of Chinese motifs and design patterns can be used in many different expressions of architecture.
- Public consultation is encouraged during the design process in order for the designers to communicate their ideas to the public in a collaborative way.
- Motifs should not be the only way to reflect the cultural background of a building. Materials, structural elements, landscaping and other design elements can also support the character and architectural language of a building and should be utilized in future developments.
- Include traditional Chinese roof-line structures. These features should be included within the first one to four storeys of the building so they can be perceived by the pedestrian and can contribute to the sense of place at street level.
- Include traditional and contemporary interpretations of historical geometries for Chinese window screen detailing at street level.
- Include gates and entries with traditional geometric forms.
- Use traditional Chinese geometries in railings and other ironwork.
- Include the Tou-Kung wooden structure technique as a Chinese specific way of using timber.



Reference for this section: Liang, F., & Fairbank, W. (1984). *A pictorial history of Chinese architecture: A study of the development of its structural system and the evolution of its types*. Cambridge: MIT Press.

Top and Bottom Right: Gusu Aristo Villa, Suzhou Shi, China by Shanghai Dushe Architectural Design. Photo Shengliang Su, Yong Zhang. Source: <https://www.archdaily.com/902304/gusu-aristo-villa-shanghai-dushe-architectural-design>

Top Centre and Left: Lan Su Chinese Garden Portland, USA. Source: Local Ecologist. <https://www.localecologist.org/2010/12/lost-photos-of-portland-classical.html>

Bottom: The Lanxi Curtilage, International Intangible Cultural Heritage Park in Chengdu, China. Source: <https://www.dezeen.com/2012/12/04/the-lan-xi-curtilage-by-archi-union/>



Buildings

Permeability



Current

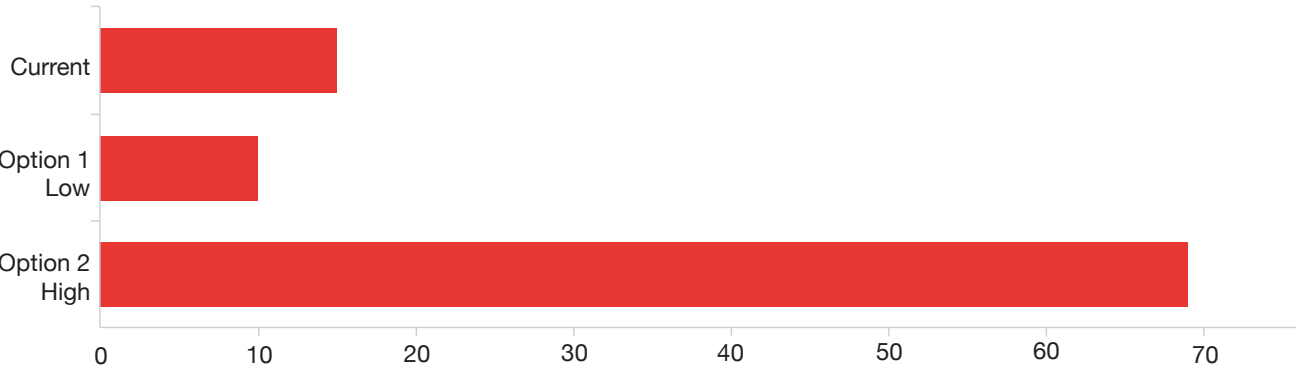


Option 1 - Low



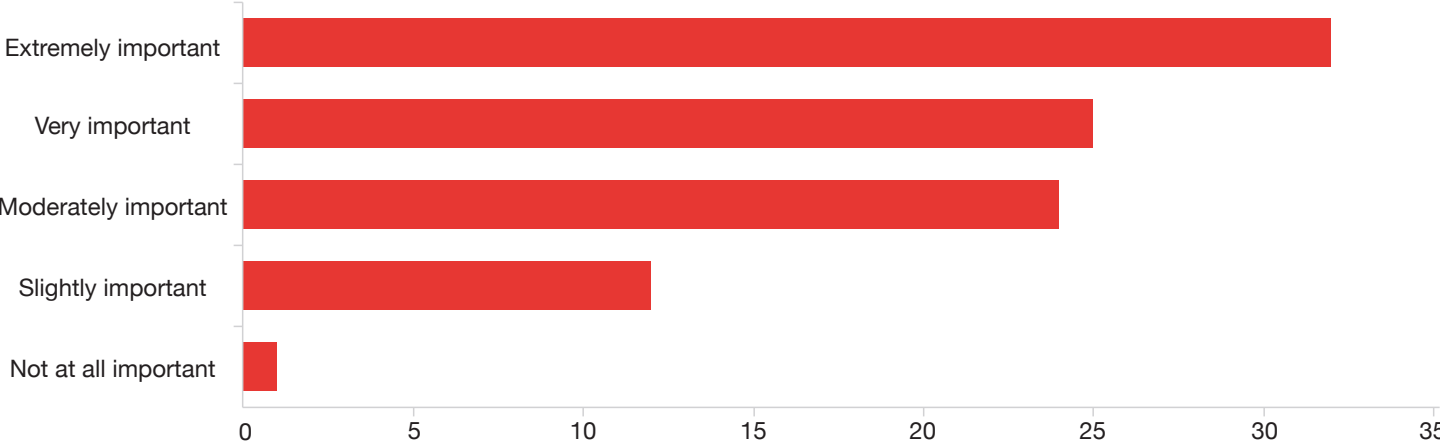
Option 2 - High

Q32 - Which photo contributes more to the character of Chinatown?



Current	15.96%	15
Option 1 - Low	10.64%	10
Option 2 - High	73.40%	69
Total Count		94

Q33 - How important is this for the character of Chinatown?



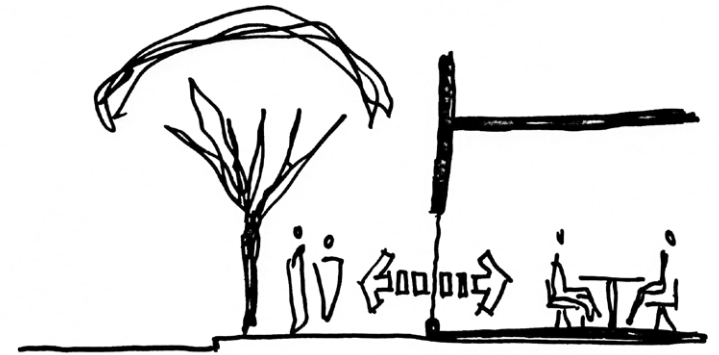
Extremely important	34.04%	32
Very important	26.60%	25
Moderately important	25.53%	24
Slightly important	12.77%	12
Not at all important	1.06%	1

Permeability

Discussion. Permeability refers to the level of connection, visual and physical, between the inside of a building and the public realm. The level of permeability together with the ground floor land uses can contribute to the vibrancy of the public realm. Over 73% of respondents considered a high level of permeability necessary for the character of Chinatown, and 60% considered it extremely/very important. The current level of permeability in Calgary's Chinatown varies but it is important to note that most of the heritage buildings have and use to have a high level of permeability.

Recommendations:

- New developments should have a high level of physical and visual permeability at its ground level. This allows for the interaction of the activities and land use at the interior of the building to “spill” into the public realm. This “land use spillage” (diagram shown) contributes greatly to the richness of the public realm by creating an interaction between the people inside a building and the pedestrians on the outside.
- They should provide multiple entries and considered short distances between those entries. Current heritage commercial units have a distance between entries of 5-10 metres.
- New developments with a large footprint should provide articulated facades and interior subdivisions at ground level to achieve permeability and diversity.
- New developments should allow a degree of flexibility for individualization of street-front commercial units facades, to support and reflect the cultural diversity.



Land use spillage diagram.
Source: (C) 2021 Francisco Alaniz Uribe



Articulated façades and diversity of ground floor commercial units.
Source: <https://thecityateyelevel.com/biglearning/80-lessons/>



Buildings

Awnings and Balconies



Current

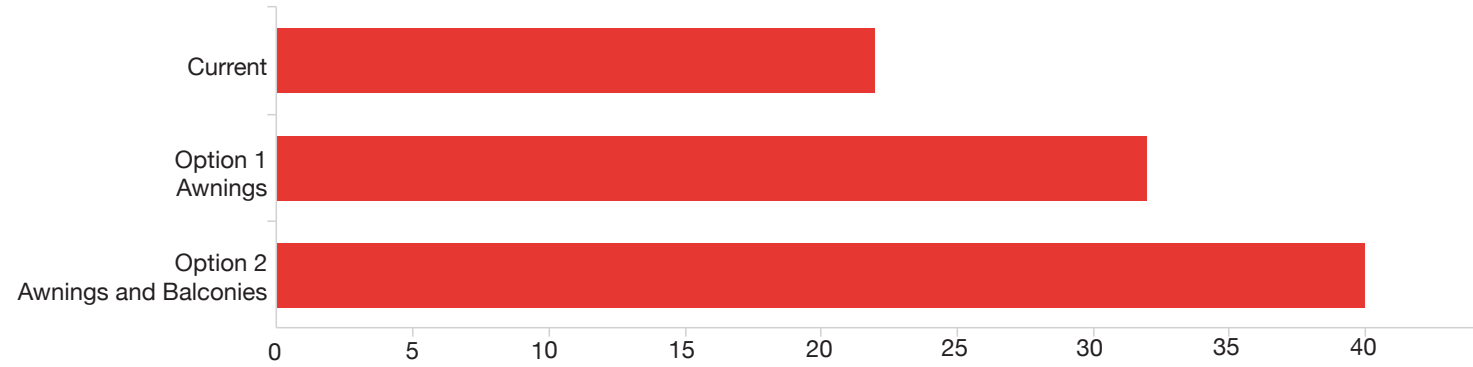


Option 1 - Awnings



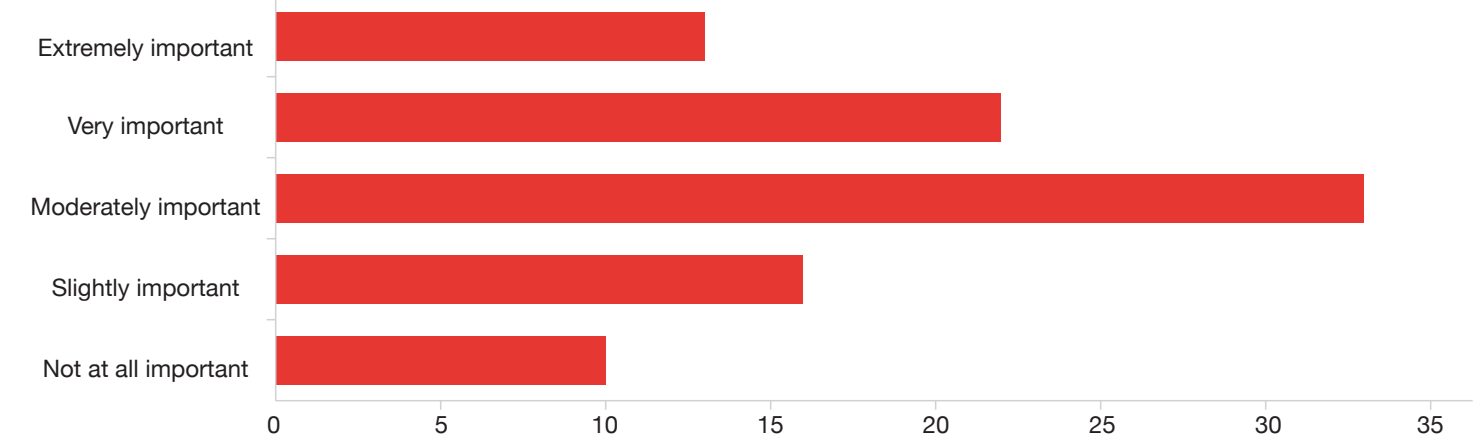
Option 2 - Awnings and Balconies

Q34 - Which photo contributes more to the character of Chinatown?



Current	23.40%	22
Option 1 - Awning	34.04%	32
Option 2 - Awning and Balconies	42.55%	40
Total Count		94

Q35 - How important is this for the character of Chinatown?



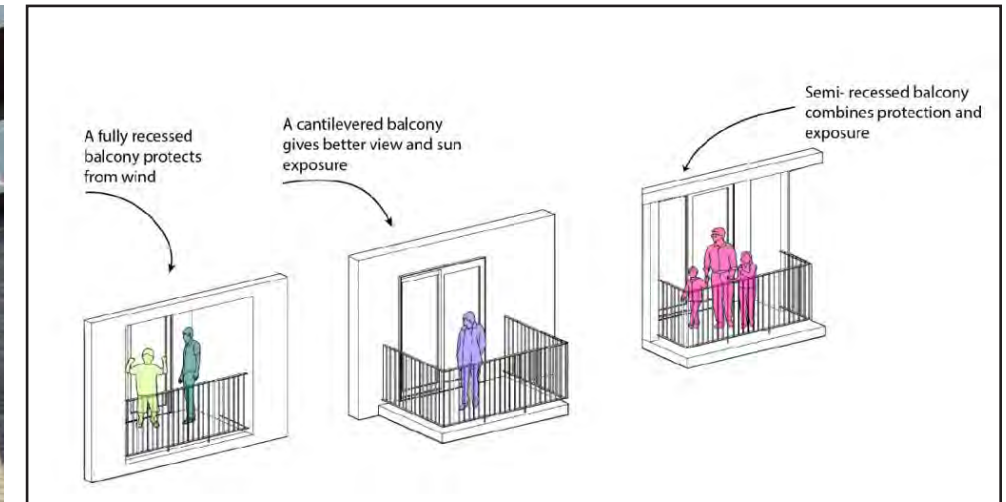
Extremely important	13.83%	13
Very important	23.40%	22
Moderately important	35.11%	33
Slightly important	17.02%	16
Not at all important	10.64%	10

Awnings and Balconies

Discussion. Awnings and balconies can serve as design elements that can enrich the façade of a building. At the same time awnings can provide shelter from the elements and are a surface where commercial units can advertise. Balconies provide valuable outdoor private space for residential units. Note that 76% of respondents considered one or both of these elements as potential features of a new development, but there was no clear indication that this represents a very important element of the character of Chinatown.

Recommendations:

- Potential balconies should be recessed and semi-recessed to protect from the elements and provide better privacy.
- To protect residential units from the street noise balconies should include acoustic measures to dissipate and absorb traffic noise.
- Awnings should be designed in a way that supports the traditional design patterns and motifs. materials and colours that contribute to the character of Chinatown.



Top: Recessed and semi-recessed balconies can better protect from the elements and provide additional privacy from the street. Source: Livabe by BuzzBuzzHome: <https://www.livabl.com/2017/11/8-tips-designing-balconies-people-will-actually-use.html>

Bottom: City of Vancouver's *Chinatown HA-1 Design Policies*, Exterior Façade Design awnings and balconies (pages 15 and 16). Source: <https://guidelines.vancouver.ca/C018.pdf>

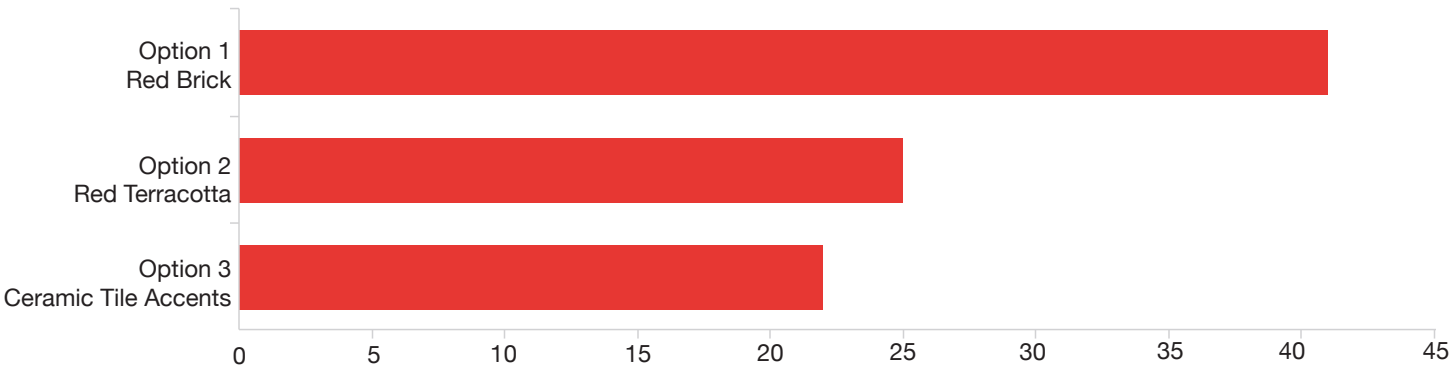


Buildings

Material / Colour of Buildings

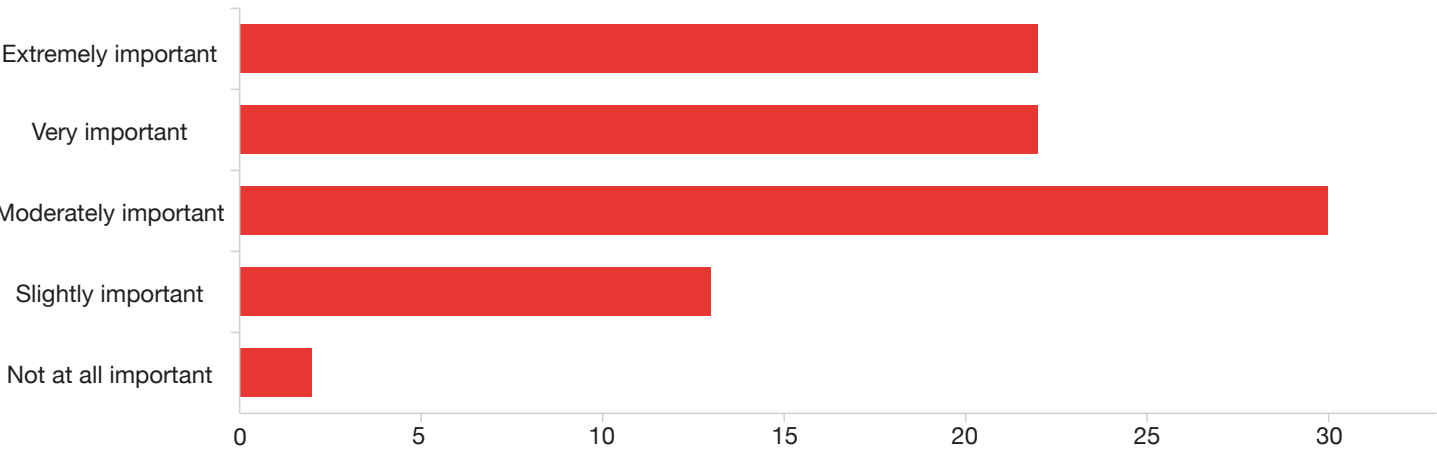


Q36 - Which photo contributes more to the character of Chinatown?



Option 1 - Red Brick	46.59%	41
Option 2 - Red Terracotta	28.41%	25
Option 3 - Ceramic Tile Accents	25.00%	22
Total Count		88

Q37 - How important is this for the character of Chinatown?



Extremely important	24.72%	22
Very important	24.72%	22
Moderately important	33.71%	30
Slightly important	14.61%	13
Not at all important	2.25%	2

Material / Colour of Buildings

Discussion. Materials are a key element that give a building its identity. The materials used are often a response to local building practices but they can also offer a different character if those materials are imported or used in a different way. Historical research shows that Chinatown's buildings often used red brick as the main exterior material. Some of the newer buildings in Chinatown have stopped using these kinds of materials and have lost some of its traditional character. Red brick was widely available at the time when Chinatown was built and constitutes a connection with its heritage. This is reflected in the responses where 46% considered red brick and 28% red terracotta (very similar in texture and colour to red brick) as the preferred materials. Around 82% of respondents considered moderate to extremely important the use of these materials.

Recommendations:

- New developments should use heritage materials similar to red brick at least on the first one to four floors of the building where the pedestrian can perceive this kind of detailing.
- The reuse and recycling of red brick from that era on new or existing buildings is highly recommended to recover some of the character lost in the past few years.
- While not widely used or considered as part of the survey there are other traditional materials that could be used in new buildings. Materials imported from China should be also considered, as it is the case with tile used in the Calgary Chinese Cultural Centre.
- Wood and timber also present an opportunity for a material that provides character, it's available locally and has a long tradition of use in China and Canada and should be considered in new developments.
- Masonry and wood are two of the main traditionally used materials in Chinese architecture and should be considered in new developments and renovations.

Reference for this section: Liang, F., & Fairbank, W. (1984).. *A Pictorial History of Chinese Architecture: A Study of the Development of Its Structural System and the Evolution of Its Types*. Cambridge: MIT Press.



Top Left: Contemporary use of brick at the Shanghai Arts Centre, Shanghai, China by Archi-Union Architects. Photos by Archi-Union Architects. Source: <https://www.dezeen.com/2016/11/01/bricklaying-robots-bulging-masonry-facade-china-shanghai-arts-centre-archi-union-architects/>

Top Centre: Brick preservation Guangzhou laneways renovation project by Lab D+H in Guangzhou, China. Photos by Lab D+H. Source: <http://landezine.com/index.php/2017/04/yongqing-fang-guangzhou-by-lab-dh/>

Top Right: Example of use of reclaimed brick (in this case is not red) at the Ningbo Historic Museum, Ningbo, China by Amateur Architecture Studio. Source: https://www.architectmagazine.com/technology/contemporary-architecture-in-china-part-2-what-works_o

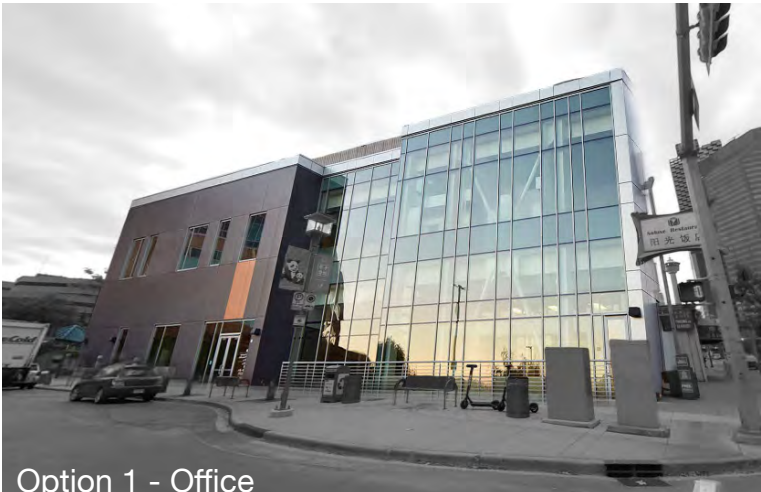
Bottom Right: Spring Whispers Book Club Library, Beijing, China by FON Studio. Photos by FON Studio. Source: <https://www.archdaily.com/886057/spring-whispers-book-club-fon-studio>

Bottom Centre: Wa Shan Guesthouse, Xiangshan, China design by architect Wang Shu photo by Edward Denison. Source: <https://www.architectural-review.com/today/wa-shan-guesthouse-xiangshan-china-by-wang-shu>

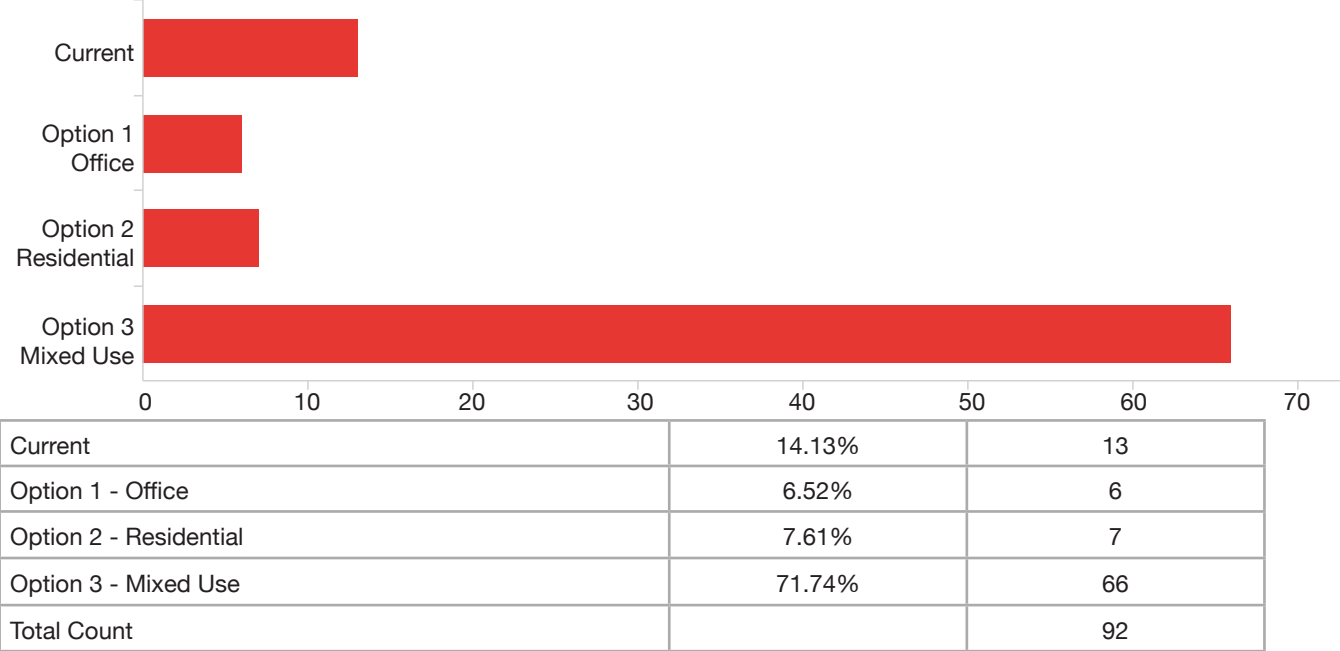
Bottom Left: Use of timber and brick at Community Centre, Yuanheguan, China, by LUO Studio. Source: <https://www.dezeen.com/2020/03/17/party-and-public-service-centre-luo-studio-architecture-china/>

Buildings

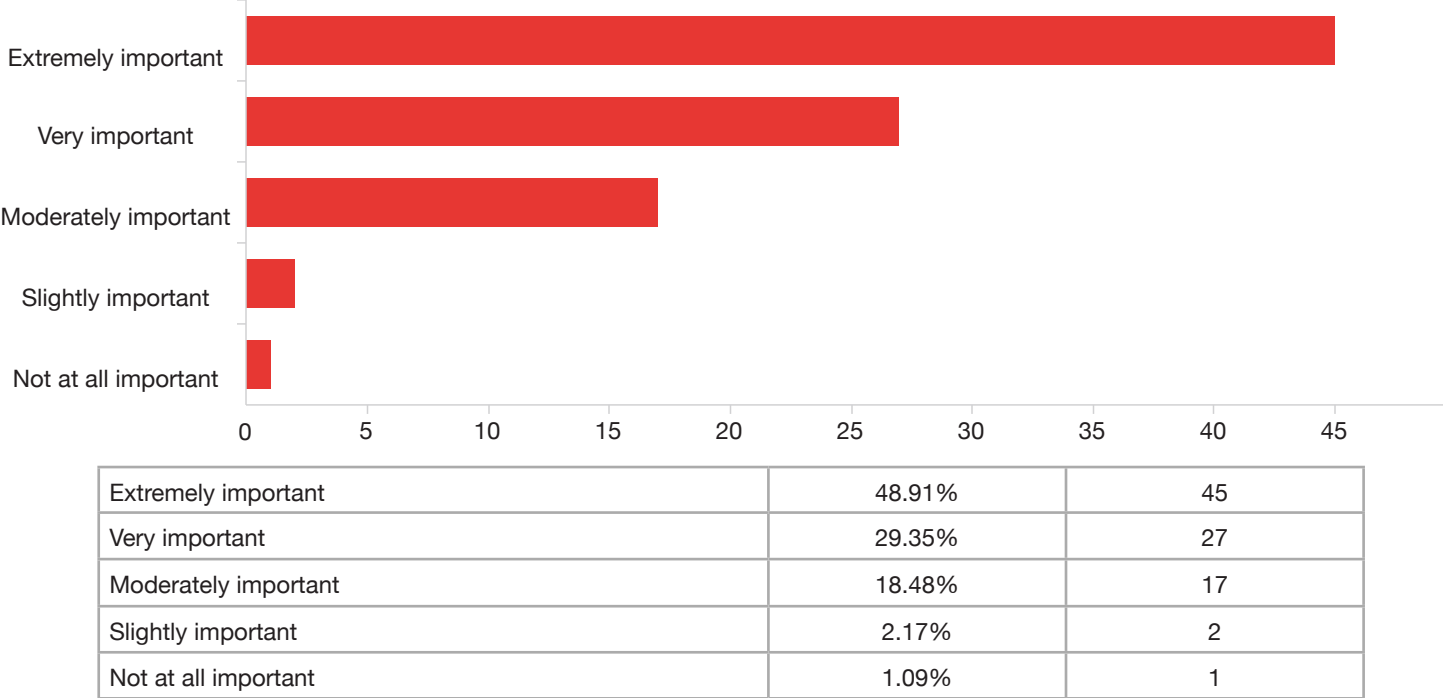
Land Use



Q38 - Which photo contributes more to the character of Chinatown?



Q39 - How important is this for the character of Chinatown?



Land Use

Discussion. The land use of buildings has a direct impact on the vibrancy of the public realm. A residential land use allows for an increase of population living in the neighbourhood, which can then support current and additional businesses. At the same time a commercial land use at ground level can provide the opportunity for new businesses to locate in Chinatown. If the ground floor also has a high degree of permeability this commercial activity can spill into the public realm and create an attractive and rich pedestrian environment. Second and third storeys offer a good location for additional services that contribute to the neighbourhood for example professional services, medical offices, and other wellness and beauty services. It was clear that the vast majority of respondents, 71%, considered a mix of uses as the desired land use. Also, 78% considered land use as very/extremely important for the character of Chinatown.

Recommendations:

- Currently 2nd Ave SE and 3rd Ave SE are the core of the commercial activity in Chinatown and should be supported, preserved and enhanced as much possible. This should be a top priority.
- New developments should include a mix of uses that includes a commercial component at ground level and residential component at upper levels.
- Professional services and other office related services should not be allocated at ground level and should leave that space for land uses that better interact with the public realm. This refers to land uses that require pedestrian traffic and that contribute to the wealth of diversity of the street.
- The current mix of land uses and diversity of commercial offerings needs to be considered when redeveloping or building new developments. Some of the current commercial offerings have a long tradition on site and are a key component of the community.
- It is important to support and protect as much as possible current commercial offerings in Chinatown. It is unknown how much the Covid-19 pandemic might have affected the viability of current commercial offerings and perhaps they need support to reactivate.
- As mentioned before on the permeability recommendations “land use spillage” is important for the richness of the public realm and the identity of Chinatown, this spillage should be permitted on commercial/retail land uses at ground level.



Top Left: “Land use spillage” in San Francisco’s Chinatown, photo by RunAwayRice. Source: <https://runawayrice.com/blog/chinatown-san-francisco-one-day-excursion/#lightbox/3/>

Top Centre & Right: Mixed use building in San Francisco’s Chinatown, photos by Melissa Zink (left) and Ronnie Chua Getty Images. Source: <https://www.tripsavvy.com/san-francisco-chinatown-tour-1479047>

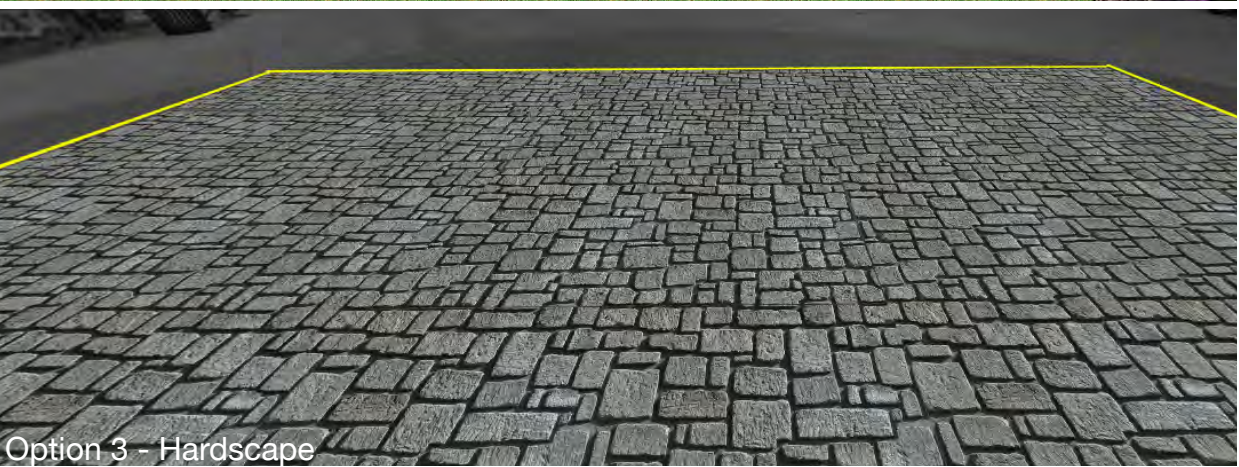
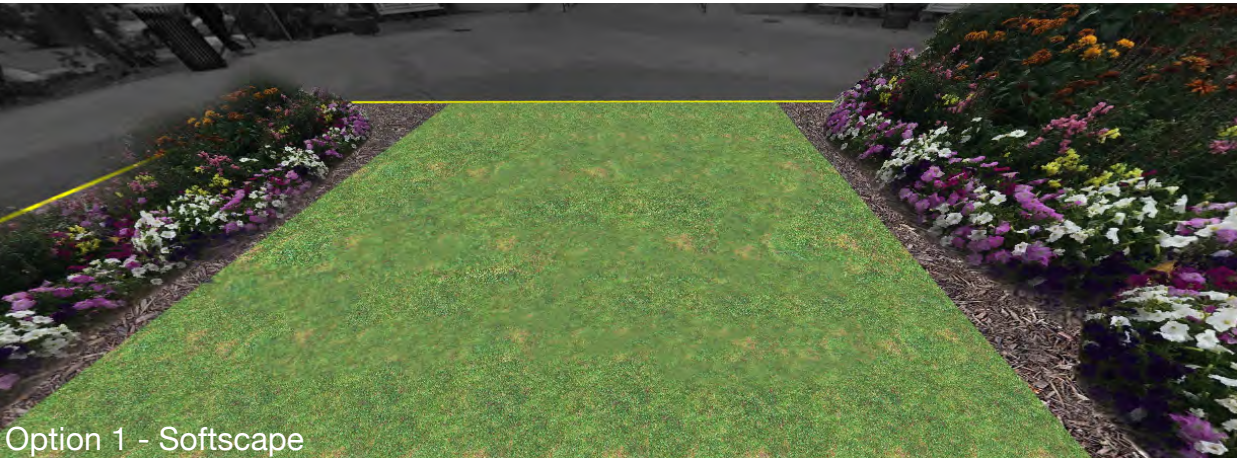
Bottom Left: “Land use spillage” in New York’s Chinatown, photos by Hannah Albertine. Source: <https://www.theinfatuation.com/new-york/guides/nyc-where-to-eat-outside-in-chinatown>

Bottom Centre & Right: Mixed use building in Victoria’s Chinatown, photos by Rachel Rilkoff. Source: <https://www.hellobc.com/stories/exploring-victorias-chinatown/>

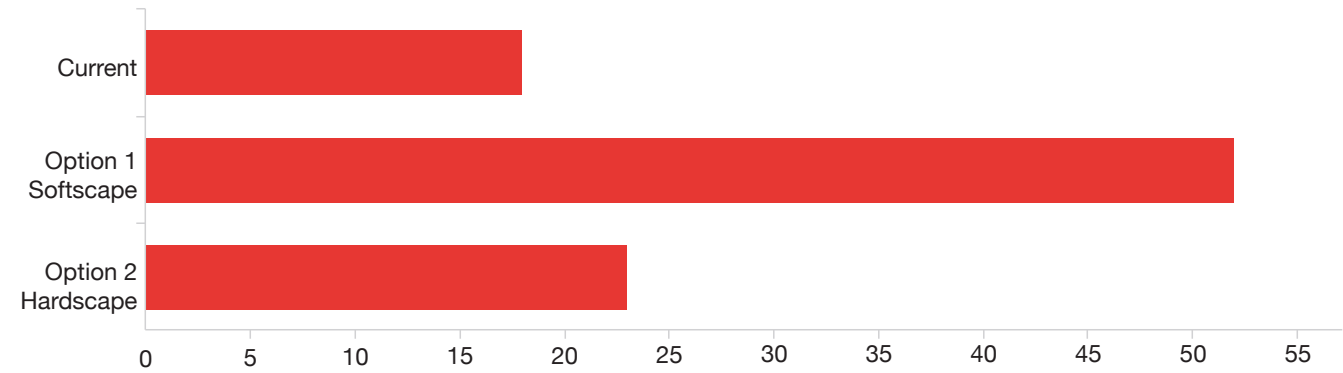


Parks & Plazas

Hardscape vs Softscape (in plaza)

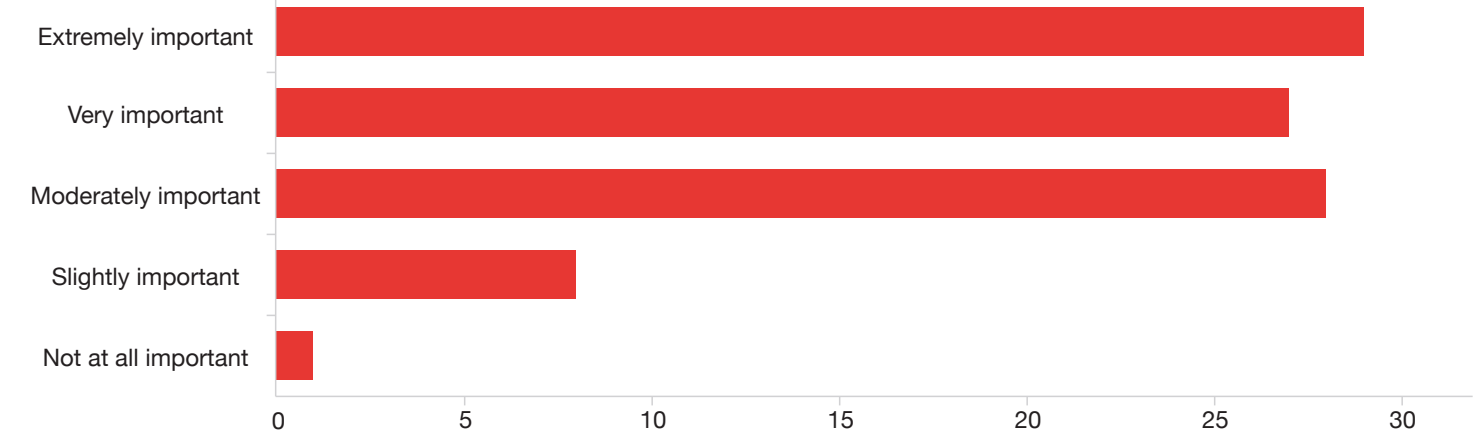


Q40 - Which photo contributes more to the character of Chinatown?



Current	19.35%	18
Option 1 - Softscape	55.91%	52
Option 2 - Hardscape	24.73%	23
Total Count		93

Q41 - How important is this for the character of Chinatown?



Extremely important	31.18%	29
Very important	29.03%	27
Moderately important	30.11%	28
Slightly important	8.60%	8
Not at all important	1.08%	1

Hardscape vs. Softscape (in plaza)

Discussion. The surface of a plaza or park can help determine its use and its character. The results from the survey showed a balance between the respondents with 56% softscape and 44% hardscape (current and proposed). The importance of the surface treatment was considered by the majority to be of importance for the character of Chinatown.

Recommendations:

- Create a balance between softscape and hardscape that responds to the needs of the space. More traffic and proگرامing requires hardscape while other areas can contribute with additional planting and landscaping.
- Changes to the existing surfaces should be part of a comprehensive redesign of Chinatowns' parks and plazas.
- The process of redesigning parks and plazas should include a highly collaborative and participatory engagement process from the very beginning of the project.
- To help in the decision-making process for surface treatment it is important to first explore the potential uses for the space. For example, the current hardscape on Daqing Square allows for hosting events like the Chinatown Street Festival.



Top Right, Centre and Bottom Left: Huron Street Square in Toronto's Chinatown design by figureground studio inc. was recently redesigned. Photos by figureground studio inc. Source: <https://figuregroundstudio.ca/huron-street-square/>

Top and Bottom Left: Boston Chinatown Park, Boston USA, designed by IBI Group. Source: <https://www.ibigroup.com/ibi-projects/chinatown-park/>



Parks & Plazas

Urban Furniture (in park/plaza)



Current



Option 1 - Fixed

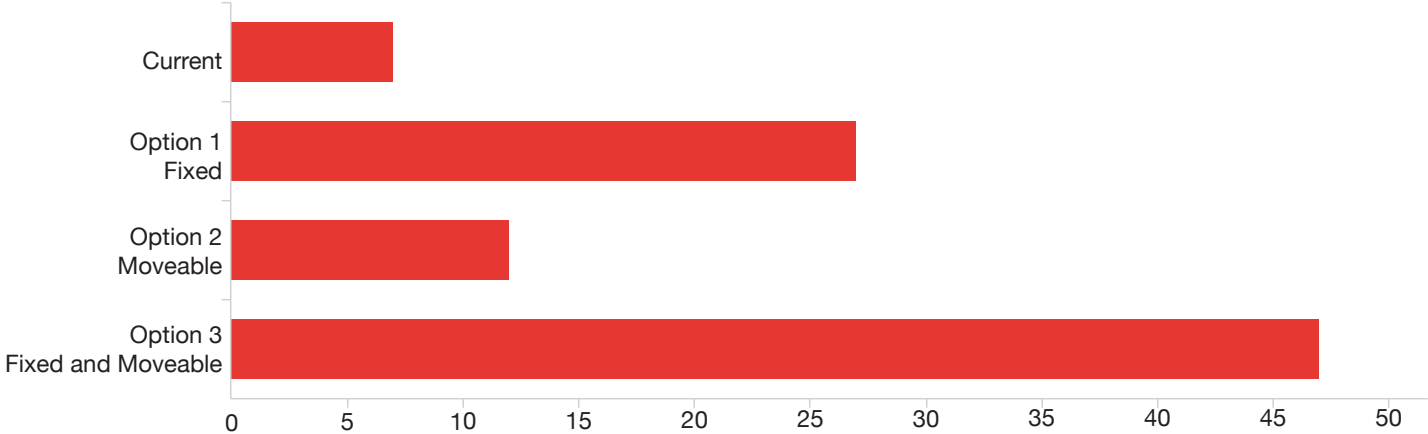


Option 2 - Moveable



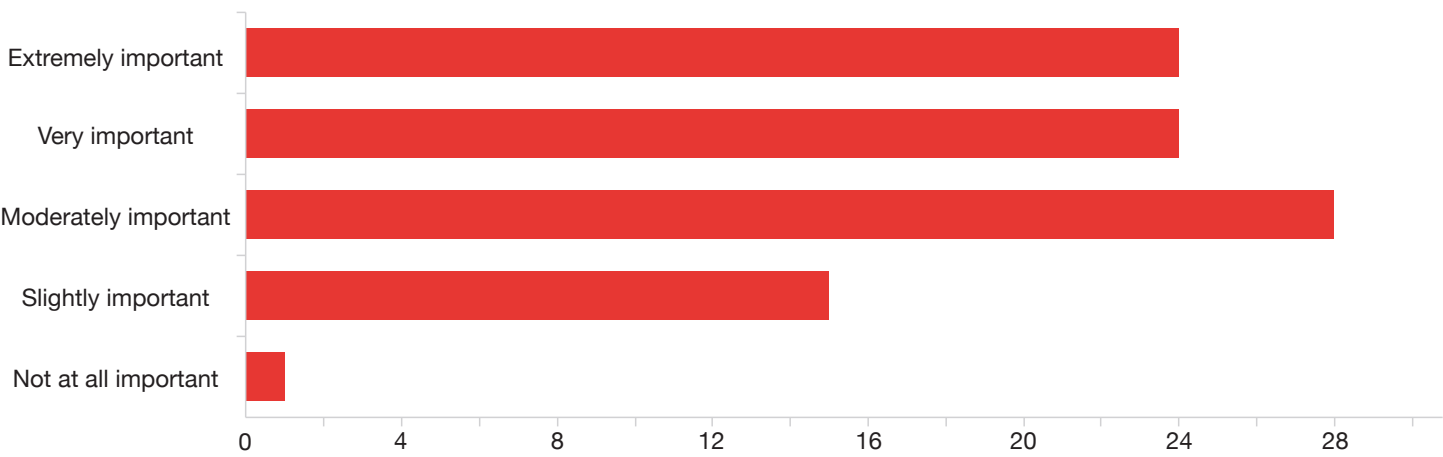
Option 3 - Fixed and Moveable

Q42 - Which photo contributes more to the character of Chinatown?



Current	7.53%	7
Option 1 - Fixed	29.03%	27
Option 2 - Moveable	12.90%	12
Option 3 - Fixed and Moveable	50.54%	47
Total Count		93

Q43 - How important is this for the character of Chinatown?



Extremely important	26.09%	24
Very important	26.09%	24
Moderately important	30.43%	28
Slightly important	16.30%	15
Not at all important	1.09%	1

Urban Furniture (in park/plaza)

Discussion. Urban furniture enriches, adds functionality and accessibility to the public realm. For example benches, chairs and tables provide places to sit, rest and socialize. It allows people with limited mobility to go out for a walk knowing that they can always find a place to rest and enjoy the space. From the survey it was overwhelmingly clear that the respondents saw the need for additional urban furniture (93%) and half considered a mix of moveable and fixed furniture as the right approach. This was considered to be important to the character of Chinatown with 82% responding that it is moderate to extremely important.

Recommendations:

- Parks, plazas and even streets in Chinatown should have additional places to sit in the form of benches and moveable chairs. Moveable chairs are important to allow for the public to individualize their experience to the space. There are ways of preventing the removal/theft of these (it is just a matter of design). In Zurich, Switzerland, they link two moveable chairs together to make it moveable enough but harder to carry over long distances.
- Waste bins should be provided to keep spaces clean and to facilitate people eating outside.
- Drinking water stations/fountains should be provided for the public. These can also help reduce the use of disposable water bottles. There are ways of providing these within a wintertime context. They can be operational only when seasonal temperatures allow it.
- All of the urban furniture elements present a great opportunity for public art, the involvement of the community and the creative expression of local artists.



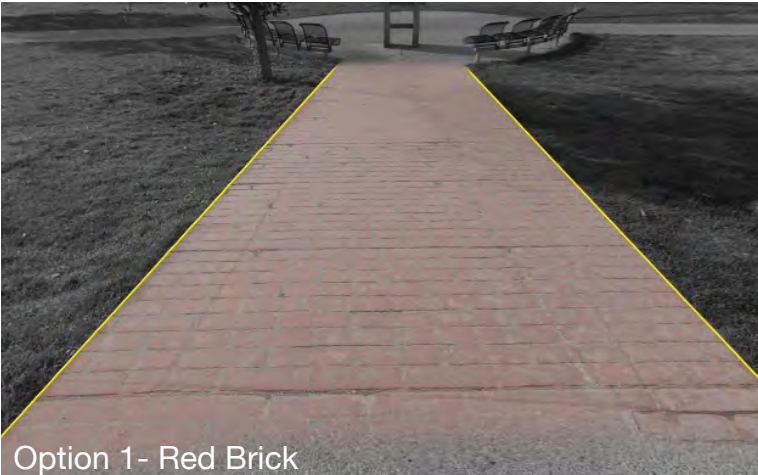
Top Left: Drinking water station, fixed sitting and waste bin, Zurich, Switzerland. Top Centre and Right: Shelter, fixed furniture and public art in Pak Tsz Lane Park, Hong Kong, China designed by Gravity Green. Bottom: Moveable chairs at Sechseläutenplatz allow for people to sit in groups at their preferred spot in the plaza. Two moveable chairs are chained to each other to prevent removal from the plaza. Zurich, Switzerland.

Source (all photos): The Urban Lab, University of Calgary.

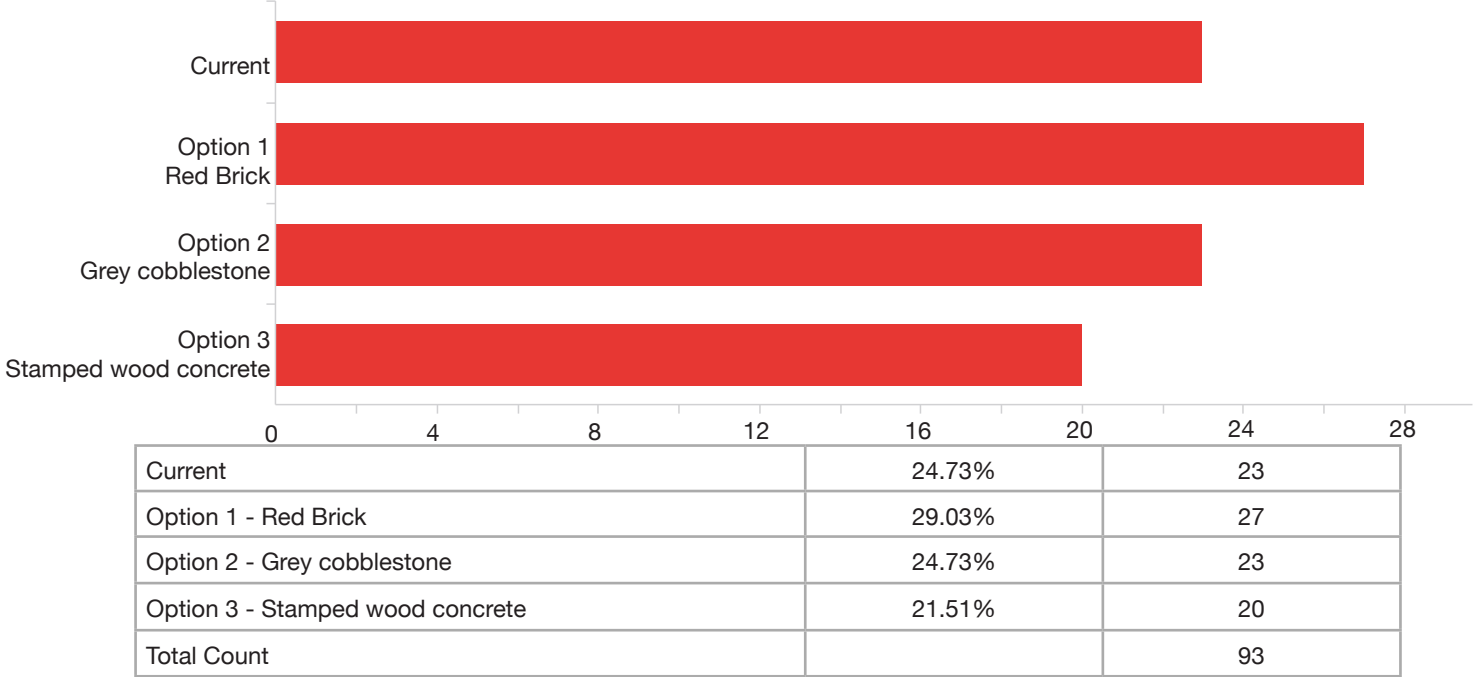


Parks & Plazas

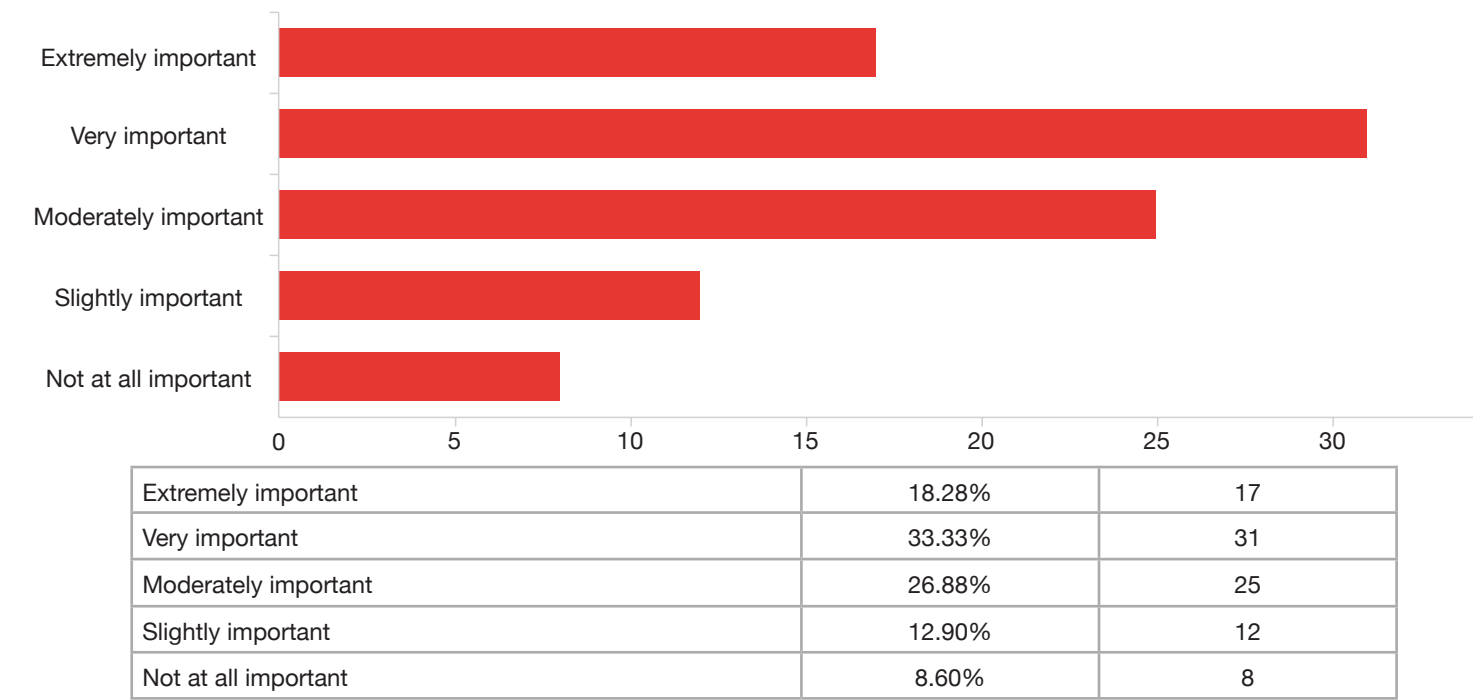
Hardscape Material



Q44 - Which photo contributes more to the character of Chinatown?



Q45 - How important is this for the character of Chinatown?



Hardscape Material

Discussion. Hardscape material has both a functional and character component. Depending on the material characteristics (texture, durability, colour, etc.) hardscape can help define a space. While it was considered important for the character of Chinatown with 51% choosing extremely/very and 26% moderately important, not one material was preferred better than another. There was a virtual even split on the options provided.

Recommendations:

- Any new redevelopment/redesign of Chinatown's parks should incorporate a robust, inclusive and collaborative public participation process so that decisions for these important spaces originate from the community.
- Future redevelopment/redesign of these spaces could incorporate a diversity of hardscape material where softer materials like compact gravel could be used in natural/contemplation gardens while textured forms of pavement (cobblestone, brick, etc.) could be used in other areas of high traffic.
- Based on the responses from the public this doesn't seem to be a priority for improvement but this survey should not be the sole source of information when identifying priority interventions in the neighbourhood.

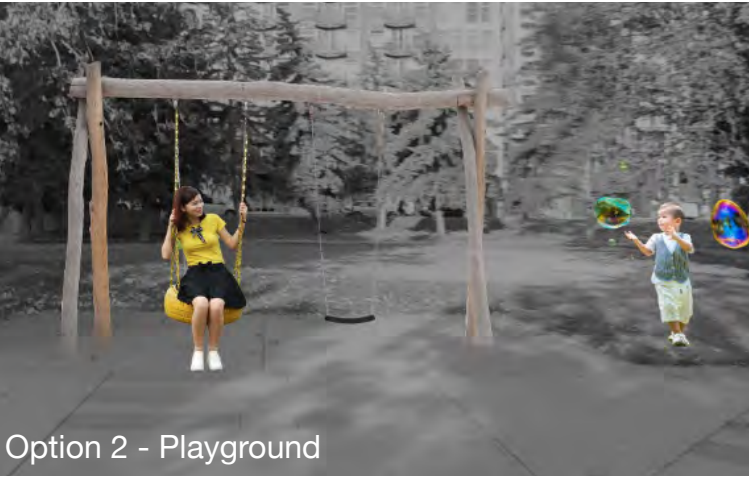


Di Shui Lake Green Belt Linear Park Shanghai, China by Design Land Collaborative (DLC), is a water front park offering different experiences and using different hardscape/path materials. Photos by DLC. Source: <http://landezine.com/index.php/2020/07/di-shui-lake-green-belt-linear-park-by-dlc/>

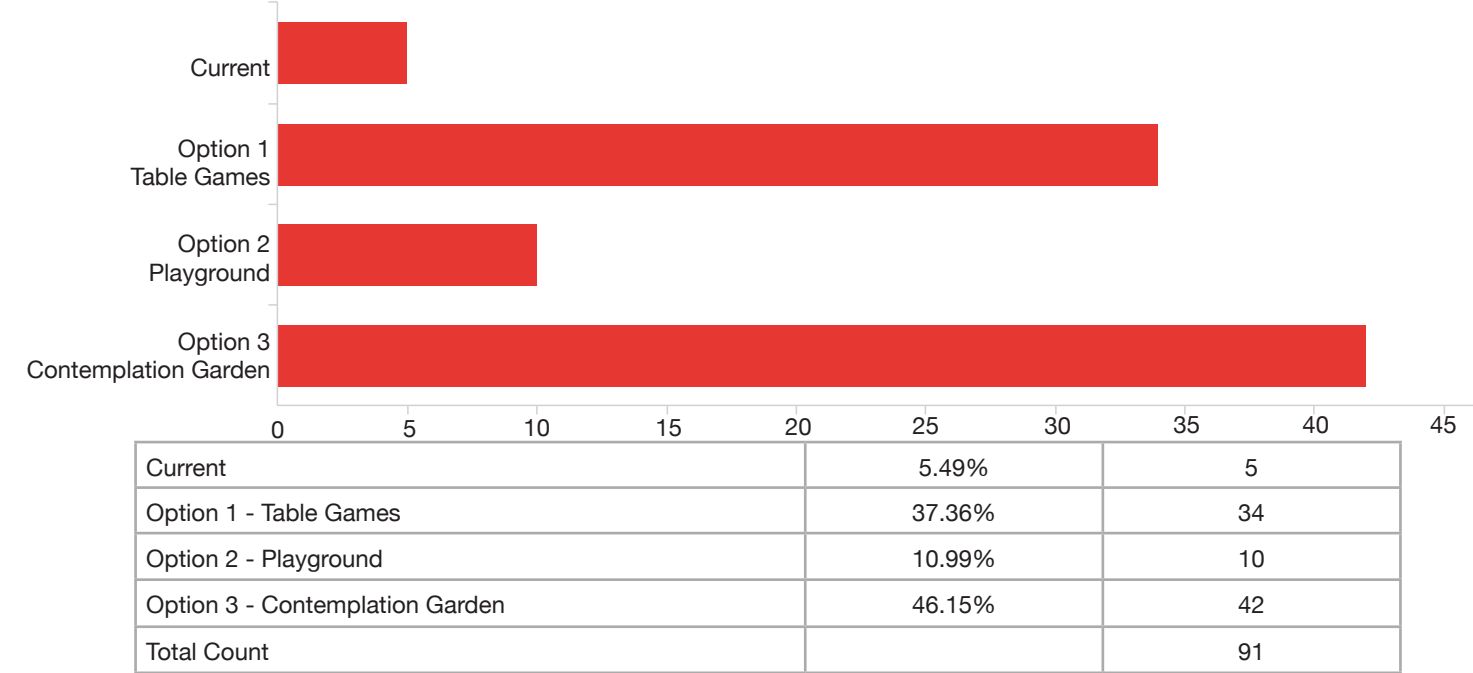


Parks & Plazas

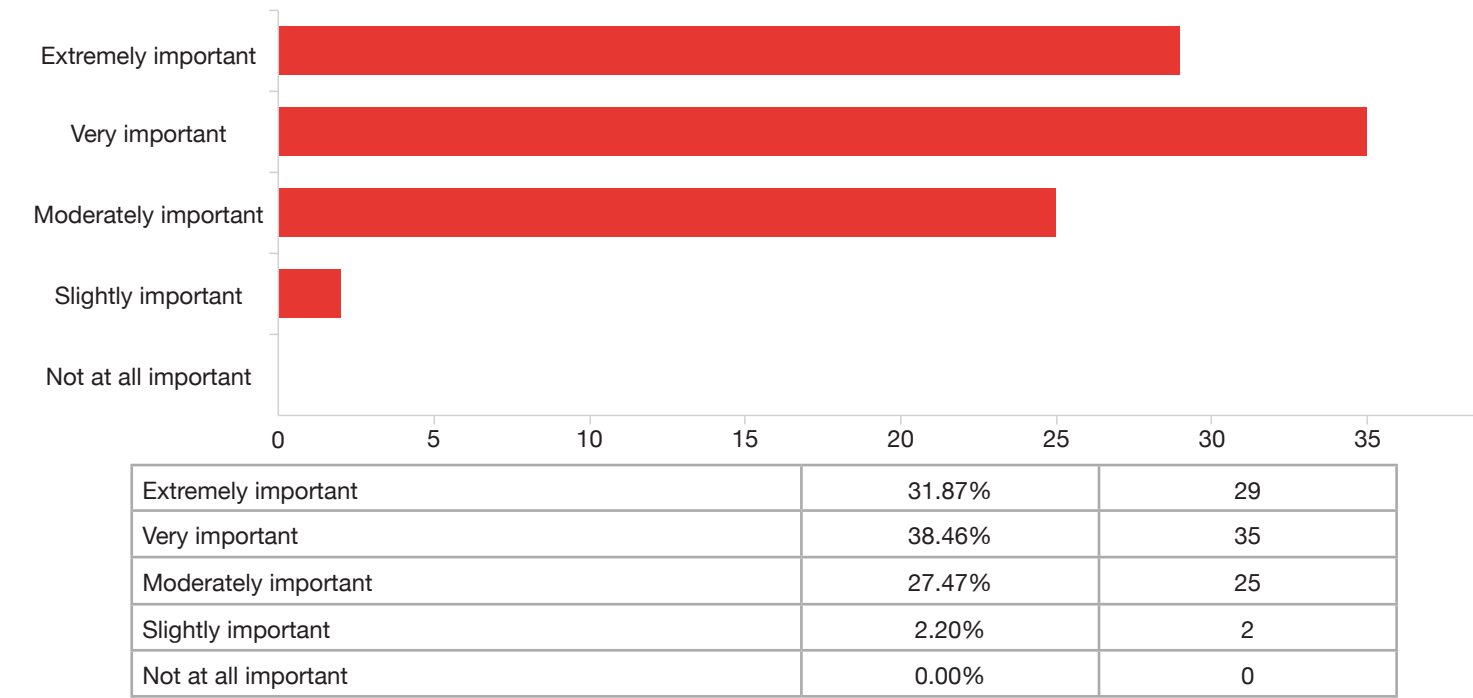
Permanent Programming



Q46 - Which photo contributes more to the character of Chinatown?



Q47 - How important is this for the character of Chinatown?



Permanent Programming

Discussion. Programing of parks and open spaces influences greatly how people perceive and use the space. There is a long list of programmable activities for a park but with the limitation of format for this survey we could only provide a couple of alternatives that could hint at a more diverse and perhaps culturally appropriate uses for the current Sien Lok Park. In the survey, 83% of respondents identify the need for additional programming in the park in the suggested forms of a contemplation garden and table games. Additional cultural programming was considered extremely/very important for the character of Chinatown.

Recommendations:

- As already mentioned, any new redevelopment/redesign initiative of Chinatown's parks should incorporate an extensive public participation process to better understand what kind of programming the community would like to see.
- Sien Lok Park has sufficient space to accommodate a diversity of uses and landscape that can address the needs of the community and its different age groups.
- Some culturally appropriate programmed activities that might find support from the community are: a contemplation garden area, table tennis tables, tables and moveable chairs for mahjong, badminton, and flexible open areas with both hardscape and softscape.
- While there was not a lot of support for traditional playground equipment, opportunities for children to play should be considered and offered during the public engagement process.
- Potential play equipment should also be an opportunity for a cultural expression of what play equipment could mean in Chinatown.
- Winter city design strategies should also be part of the considerations for the redevelopment/redesign of the parks specially Sien Lok Park.



Top: A group of men playing mahjong on an improvised moveable table and chair, while fixed furniture is not in use at Pak Tsz Lane Park, Hong Kong, China designed by Gravity Green. Photo: The Urban Lab, University of Calgary.

Bottom Left: Sitting and play structure Tetris Square Guangzhou, China design and photos by Atelier Scale / Lab D+H. Source: <http://landezine.com/index.php/2019/06/tetris-square-by-lab-dh/>

Bottom Right: Table-tennis table design and photos by ASPECT Studios near Chinatown in Sydney, Australia. Source: <http://landezine.com/index.php/2015/10/the-goods-line-by-aspect-studios/>

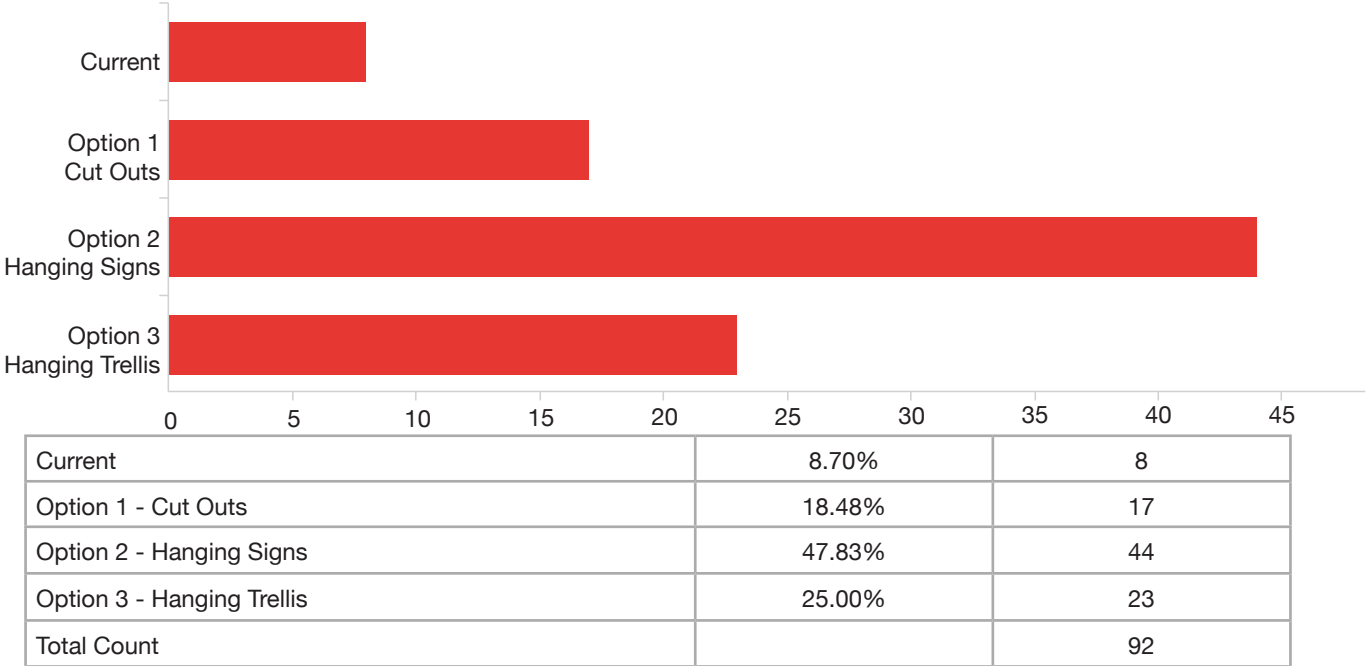


Signage

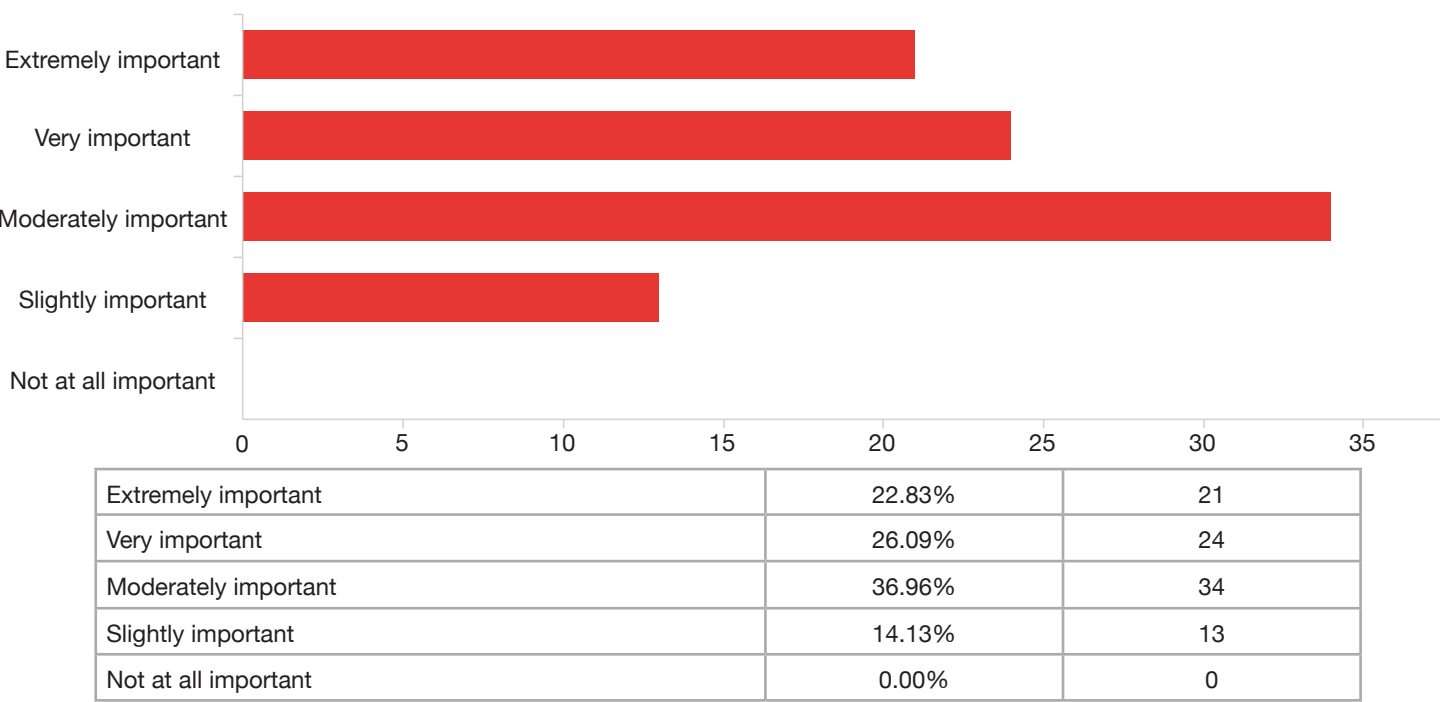
Projecting Signage



Q48 - Which photo contributes more to the character of Chinatown?



Q49 - How important is this for the character of Chinatown?



Signage

Discussion. Signage is an important component of commercial land use and can also be part of office and residential uses. There are certain elements of signage that could contribute to the sense of place and identity of Chinatown. The next six questions in the survey addressed this, inquiring about the sign type, lighting and languages used. While all aspects were considered important for the character of Chinatown the language was the most important. In our survey, 71% of the respondents preferred the use of mixed Asian language and/or Cantonese/Mandarin only. Hanging signs were the most popular with 47% while LED lighting was popular with 52%.

Recommendations:

- A new set of guidelines for signage should be developed as part of the Tomorrow's Chinatown plan. Public engagement and participation from current property owners should be part of this process.
- Hanging signs are a very common element in multiple Chinatowns across North America and should also be allowed in Calgary.
- Many original signs from the past of Chinatown have been lost but they could be brought back as was the case in Vancouver's Chinatown with Sai Woo Chop Suey (see image).
- The language use on signage should include an Asian language and be predominant as part of its design.
- Signage should be lit preferably with LED technology and take into consideration light pollution.



Left: Sign from Sai Woo Restaurant in Vancouver's Chinatown is a replica of the original sign from 1959. Photo: Chandler Walter / Daily Hive. Source: <https://dailyhive.com/vancouver/neon-rooster-sign-sai-woo-vancouver-chinatown>

Right: Hanging sign for Don Mee Restaurant Victoria's Chinatown. Photo: Rachel Rilkoff. Source: <https://www.hellobc.com/stories/exploring-victorias-chinatown/>

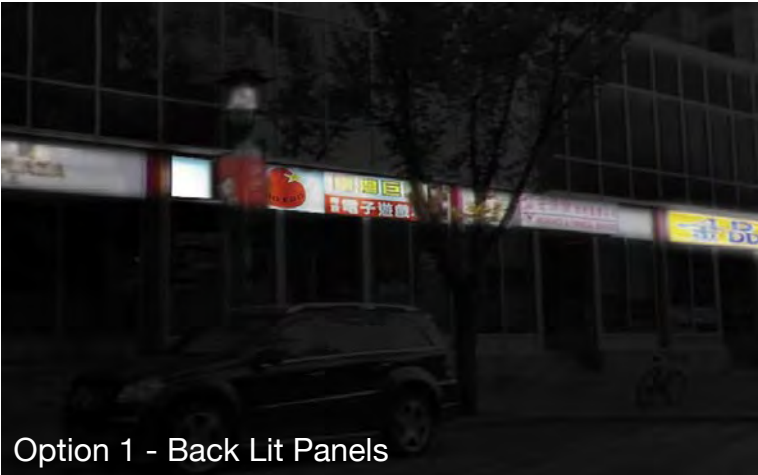


Signage

Signage Lighting



Current



Option 1 - Back Lit Panels

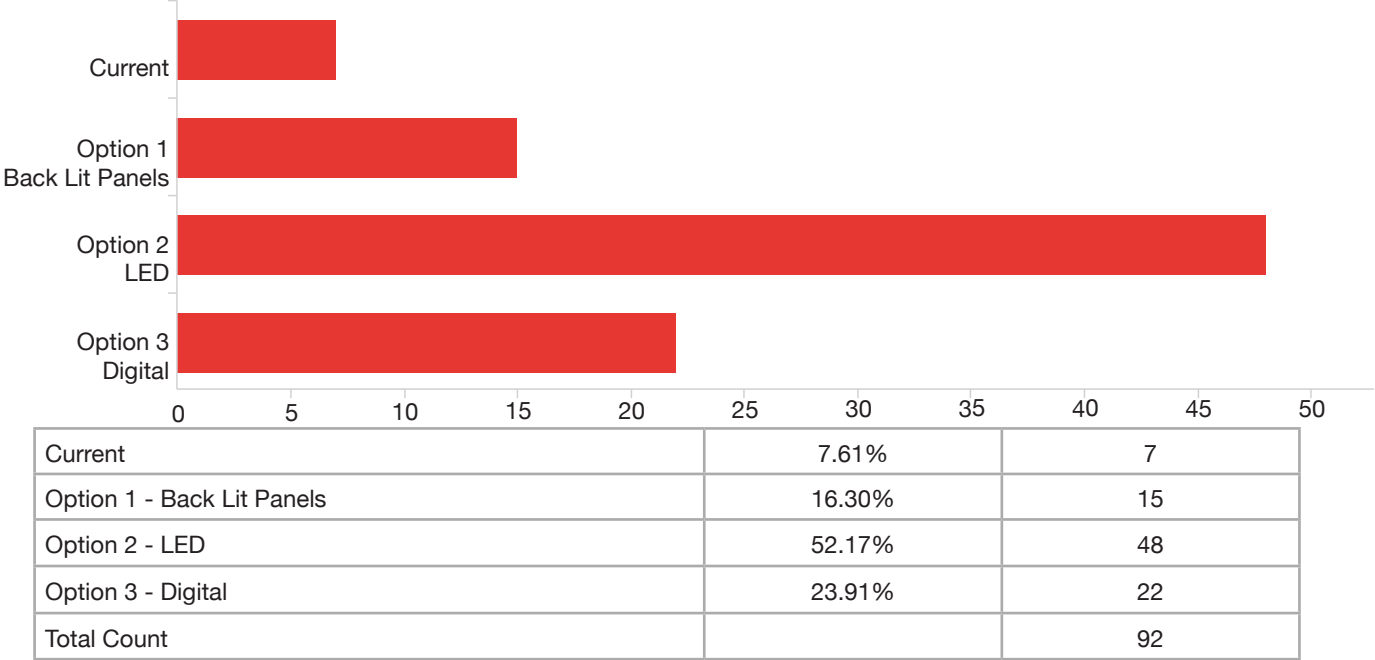


Option 2 - LED

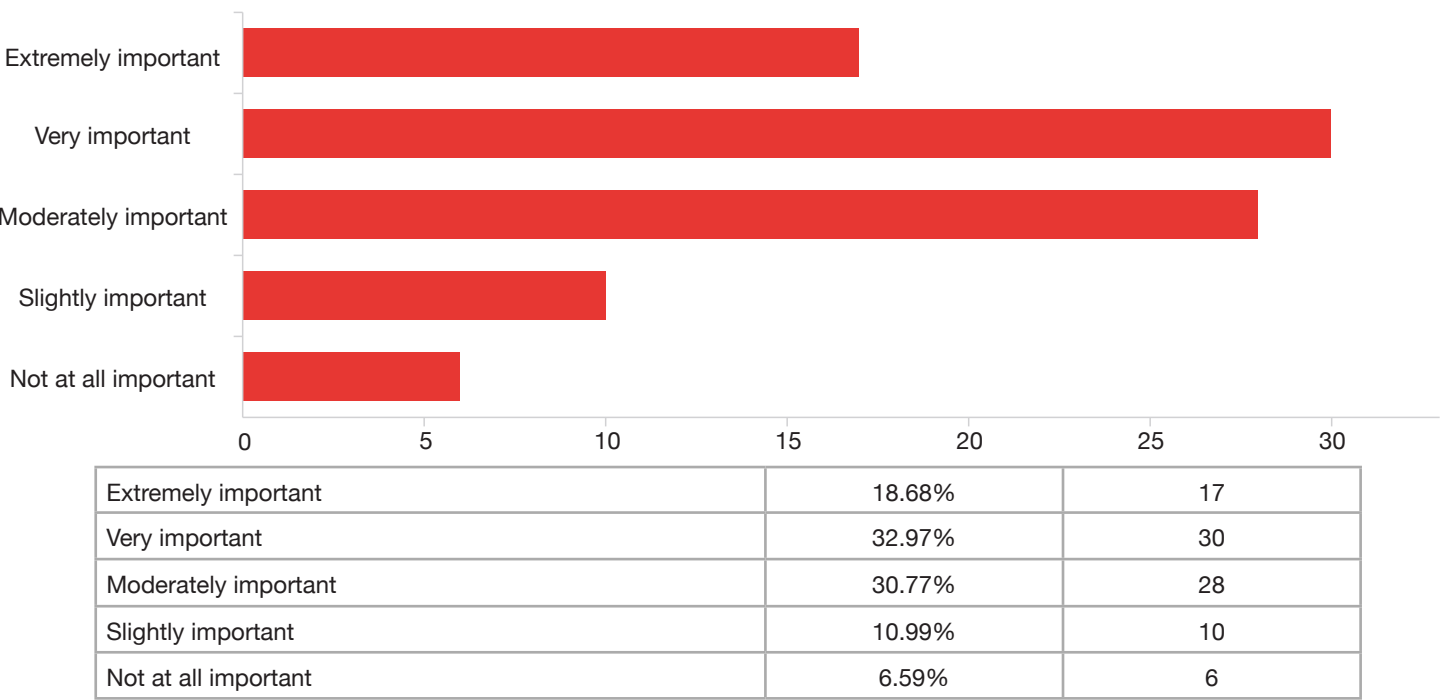


Option 3 - Digital

Q50 - Which photo contributes more to the character of Chinatown?



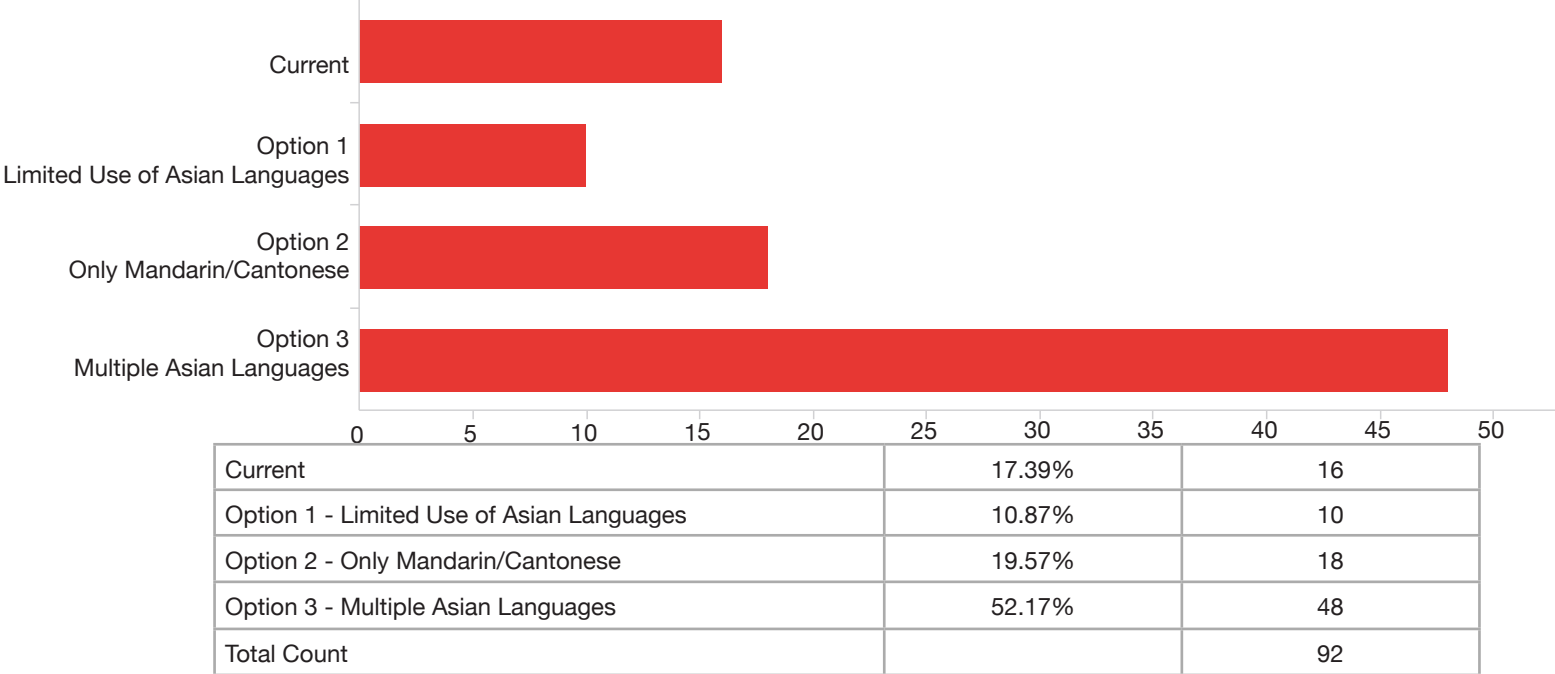
Q51 - How important is this for the character of Chinatown?



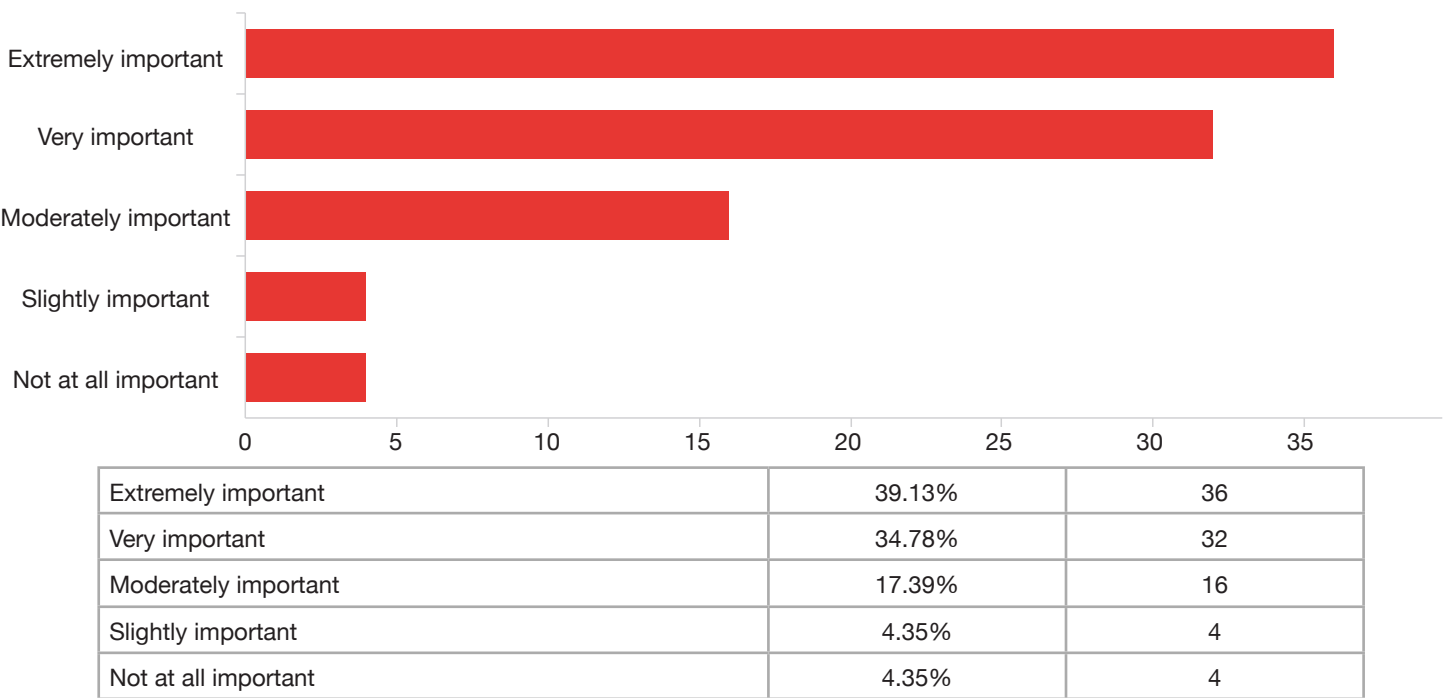
Language of Signage



Q52 - Which photo contributes more to the character of Chinatown?



Q53 - How important is this for the character of Chinatown?





Soundscapes

What are the Significant Sounds of Chinatown?

Three different clips of sounds were paired with the images of three different locations.

Option 1 - Vehicular Traffic
Sounds of vehicles driving over a road

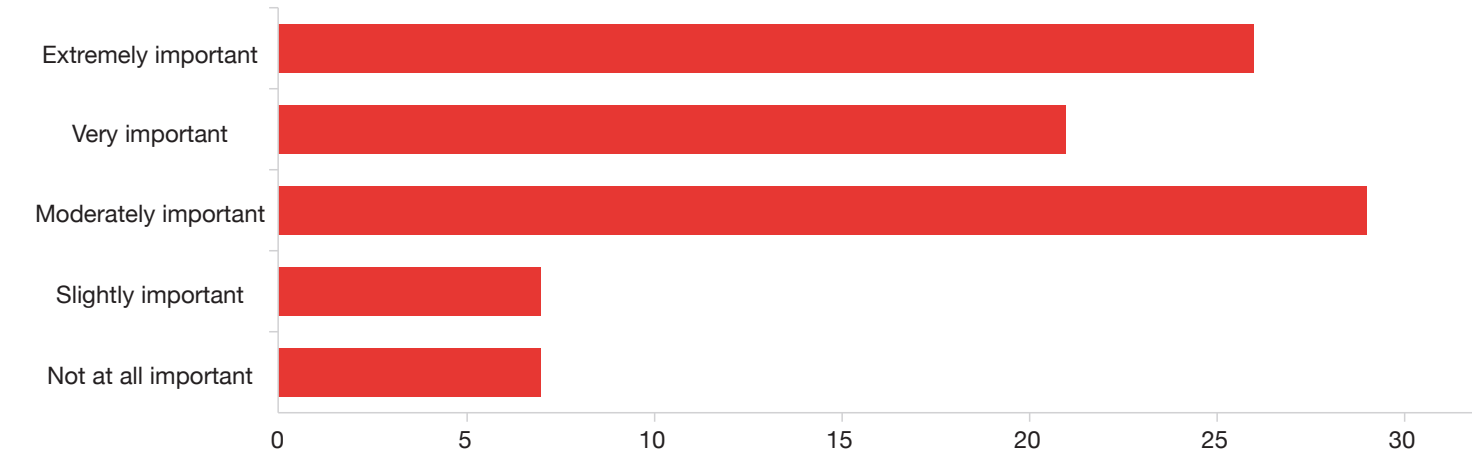
Option 2 - Cobblestone
Sounds of vehicles moving over cobblestones

Option 3 - Pedestrian Traffic
Sounds of people talking

Discussion

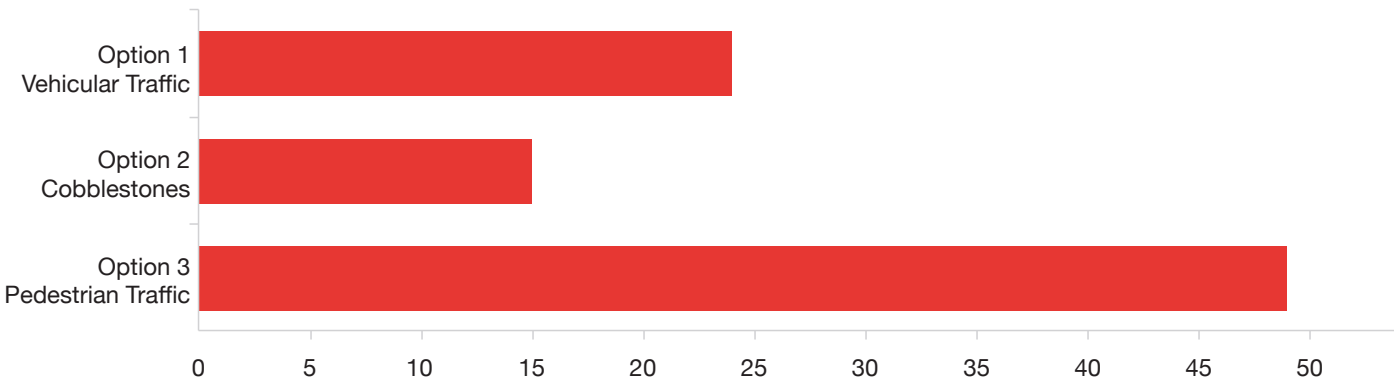
These three sets of questions were focused to try to understand if sound was a significant element of the character of Chinatown. Also, 52% considered it to be extremely/very important. As well, consistently 55% of respondents considered the sound of pedestrians on the streets as the preferred ambience. These findings support the need for future plans and developments to focus on the pedestrian environment, growing pedestrian space where possible and increasing the quality of the public realm.

Q57 - How important is soundscape to the character of Chinatown?



Extremely important	28.89%	26
Very important	23.33%	21
Moderately important	32.22%	29
Slightly important	7.78%	7
Not at all important	7.78%	7

Q54 - 2nd Avenue

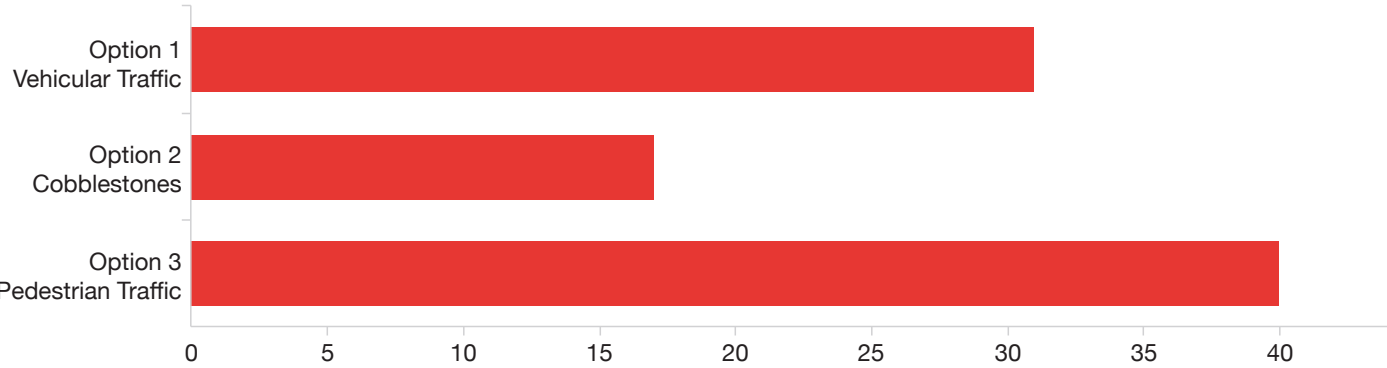
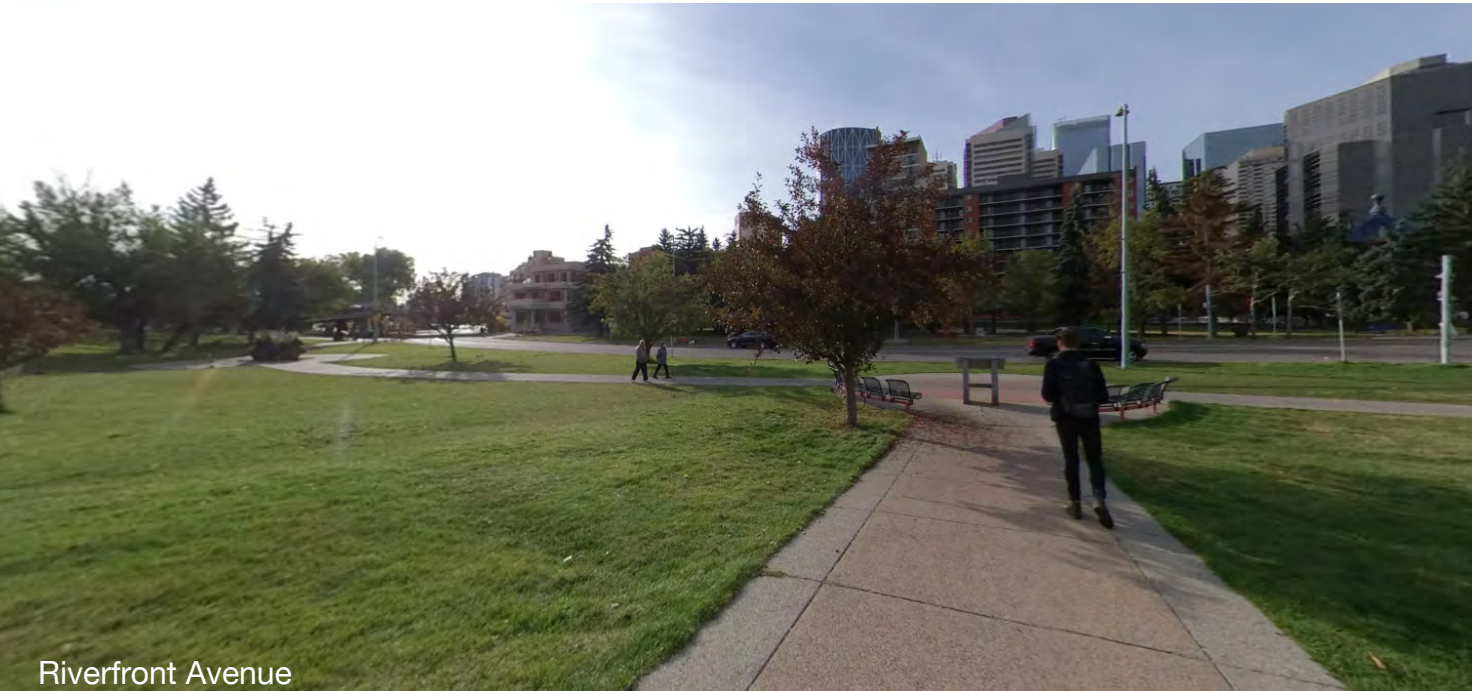


Option 1 - Vehicular Traffic	27.27%	24
Option 2 - Cobblestones	17.05%	15
Option 3 - Pedestrian Traffic	55.68%	49
Total Count		88

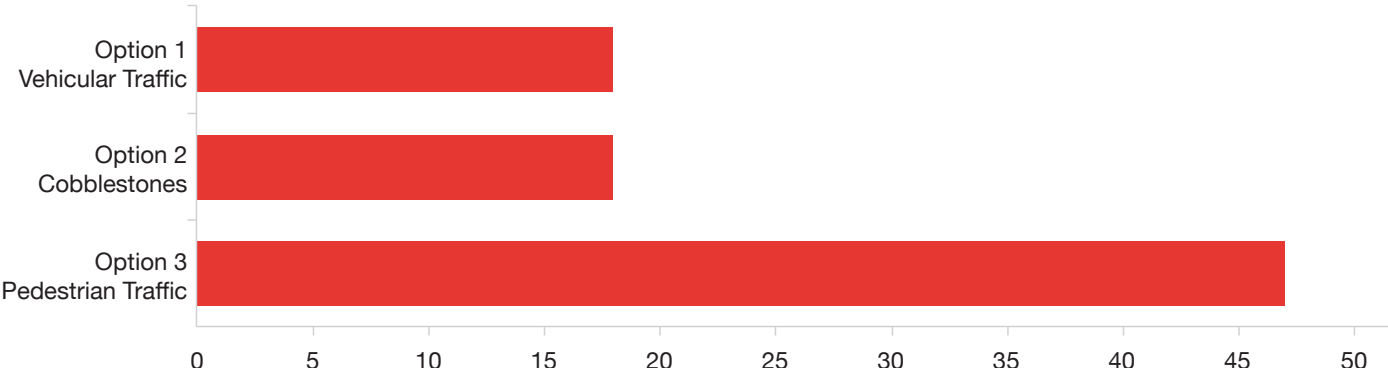
Q55 - Centre Street



Q56 - Riverfront Avenue



Option 1 - Vehicular Traffic	27.27%	24
Option 2 - Cobblestones	17.05%	15
Option 3 - Pedestrian Traffic	55.68%	49
Total Count		88



Option 1 - Vehicular Traffic	21.69%	18
Option 2 - Cobblestones	21.69%	18
Option 3 - Pedestrian Traffic	56.63%	47
Total Count		83



Discussion and Conclusions

Introduction

As part of the lessons learned from this process a larger review of the findings and the recommendations is included in this section. Some of the findings from the survey present special challenges for implementation and require further discussion. A reflection on the process and the overall experience of this research project is also included at the end of this section.

2016 Development Guiding Principles

Triggered by pressure for redevelopment, at the end of 2015 Calgary’s City’s Council called for an extensive public engagement process that involved many different sectors of Chinatown’s community. The purpose of this engagement was to identify key objectives, issues and opportunities for land use and development based on public engagement. This process included online and in-person input opportunities for the community and resulted in a wide set of ideas that could be summarized in major topics of concern and a clear direction for further land use and development planning stages.

Consequently eight planning principles were drafted which were presented to Council and approved at the end of 2016. These Development Guiding Principles were drafted to help direct future development and to provide a framework for a Chinatown Cultural Plan and a Local Area Plan. The Principles are important because they have originated within the community, with extensive public input and this kind of support is crucial for any future development in Chinatown.

This research project and its findings will help draft further detailed recommendations and guidelines that will become part of the Local Area Plan for Chinatown that will constitute the statutory document for the final implementation of the Development Guiding Principles completing a full cycle from public engagement to land use and development regulation.

Public Realm Improvements

Many of the questions in this survey focused on different elements of the public realm. The recommendations that followed from the responses to these questions include measures and strategies that require significant resources for implementation. While the public realm improvement recommendations represent a significant investment they contribute greatly to the quality of the public realm and sense of place of Chinatown. They also show the commitment of our City to the preservation and support of one of our city’s heritage communities. This investment will be a visible example of the value our city holds for the Chinese-Calgarian community, and the efforts to strengthen their presence at the core of our city.

These improvements can be implemented at an incremental pace, phased in and in coordination with other infrastructure projects. New developments can contribute to this process and perhaps provincial and federal funding can be sourced to help finance them. The public realm is where people enjoy and connect with the sense of place of a community and should be a priority for the future of Chinatown.

The Public Realm and the Plus15

Its location in downtown Calgary positions Chinatown as a potential area for expansion of the Plus15 network. We strongly discourage the extension of the Plus15 system into Chinatown. The system tends to privatize the public realm, has limited access, and takes away pedestrian traffic from the street. It also shifts the relationship and symbiosis between pedestrian traffic and commercial land uses that support the vibrancy of the community.

By focusing on the street level the set of recommendations in this report can ensure that the commercial units, so essential to Chinatown’s sense of place, will capture the entirety of the potential customer traffic while having a higher chance of remaining successful and expanding.

Traditional Motifs

A clear definition of motif is necessary to frame this set of recommendations. In this particular case we are referring to architectural motifs, these are decorations and architectural detailing that are repeated within a style of architecture. This repetition happens across multiple buildings, scales and eras, and it helps create an identity. They can be structural in nature (roof lines, column and support beams, door lintels, etc.), ornamental (window screens, building corner detailing, tile wall finishes, etc.) or in some cases combine both types.

New developments in Chinatown that incorporate Chinese motifs into their design, be it traditional

or contemporary expressions, need to be able to draw a link between their design and the Chinese motifs. If this link is too abstract then the meaning will be lost in the built form and will not contribute to the sense of place. This link should be easily identifiable by the public.

In addition, the Chinese motifs need to be part of the exterior treatment of the development that faces the public realm to ensure they are observable and experienced at the street level so they can contribute to the sense of place. This detailing should focus on the first four to six storeys of the building, at a human scale and where pedestrians can appreciate them.

When using roof lines as part of the Chinese motifs in the development, these need also to be part of the detailing in the first few storeys of the development. For example they could be the crowning element of the podium in a tower-podium configuration or a projecting roof line for a building’s main entrance.

Materials in themselves are not motifs but in conjunction with motifs and used as traditional structures they can contribute to the expression of a Chinese architectural style.

When discussing the use of traditional motifs, often a question arises around authenticity versus mimicry. What is authentic? In the history of design and architecture, cultures have taken ideas and artistic expressions from each other, gradually

and over time making them their own. In the case of architectural motifs a test of authenticity could be to answer the question is the motif being used in the traditional way even if it is a contemporary interpretation? For example is the used of traditional roof lines according to the appropriate angles and curvatures? Or is the used of interlocking column-beam wood structures based on the traditional principles?

Perhaps another test would be to define and identify what could constitute mimicry. Mimicry pretends to be something that is not, for example imitating a traditional motif with errors from its traditional form or copied from a not-Chinese source lacking historic and traditional integrity. The repetition and use of motifs is not in itself mimicry and does not lack authenticity if it follows and reflects the traditions behind that particular motif.

It should be the responsibility of the developer and the designer to establish the authenticity and integrity of their use of Chinese motifs in the design of new buildings. This needs to be communicated during the application and approval process and should be shared with the community during the public engagement process for new developments.

Traditional Motifs and Calgary's Chinatown
The early buildings in Chinatowns rarely included the use of motifs in their designs. Often the buildings followed the local architecture and building traditions. The only identifiers as part of Chinatown was the land use (traditional commercial

offerings from the Chinese community), signage (language, typography and overall design) and the population frequenting these places. The use of motifs and specific traditional Chinese designs appeared in the later stages of development and continued to increase as Chinatowns grew and matured.

It is apparent in Calgary's Chinatown there is a combination of local architecture and the inclusion of traditional Chinese designs and motifs. The use of red brick in some of its heritage buildings reflects an era of development that it's represented across the city and not exclusive of Chinatown, but with the addition of signage and motifs, these buildings contribute to a unique sense of place of Calgary's Chinatown. New development should continue to contribute and include Chinese motifs as part of its design.

Density and Sense of Place
Density and the height of buildings is an important element of sense of place. The scale of the built form is immediately perceived by a person even before arriving at a place. It can have many positive and also negative impacts on the experience of a place. This impact is dependant on many factors associated with the building design and it is not solely dependent on building height.

Today's height restrictions are 46 metres for the majority of the community, the rough equivalent of 14-16 storeys. There are a couple of exceptions that allow for a much greater height. The Condor

lands on the corner of 1st Street NW and 3rd Avenue NW where current zoning allows for 97 metres, or between 30-32 storeys, and the Dragon City Mall site where current zoning allows for 22 storeys.

It is not possible to down-zone from the existing allowable building heights of 14-16 storeys to six storeys, as preferred by the participants, but knowing how people perceive the scale of buildings as an important factor of sense of place emphasizes how new development needs to pay close attention to the first storeys of a building and provide the necessary human scale to the public realm. The podium-tower building type can address the community's concerns, help maintain the human scale and support the sense of place.

It was not the intention of this study, with the inclusion of the building scale question, to create an unrealistic expectation regarding the height and density of new developments. The intent was to better understand the perception of scale, density and building height so that it can be addressed in the Local Area Plan with more detailed recommendations and design guidelines.



Conclusions

From the start this research project was of great interest to the team. A collaboration between academic researchers and municipal planners with a joint objective to develop a deep understanding of what makes Calgary’s Chinatown sense of place important and meaningful to its people. A challenge was to develop an improved way of consulting with the public where better and more detailed information can be communicated to enable the public to develop both well-informed and meaningful participation.

To achieve these goals it was clear from the beginning that a more immersive and visual process was needed. Sense of place is spatial in nature and to discuss it and understand it, it is necessary to utilize visual communication tools. The structure of a visual preference survey was the chosen as the main tool of engagement but the goal was to develop a process that was highly immersive and user-friendly. This was one of the initial challenges that over time became more complicated with the arrival of the global pandemic of Covid-19.

The need to transition from an in-person process to an online process added a layer of complexity and limitation for achieving a highly immersive experience. Initially the concept was to host in-person focus groups in a multi-screen immersive room where participants would feel a level of virtual reality of being in the location with the different scenarios.

Due to social distancing restrictions being implemented in the middle of March 2020 the

decision was made to redesign the process to be a completely online platform. New technical methods were designed and additional work-hours were added to the project for the implementation of these new methods. The close collaboration between the research team and the City of Calgary planning team allowed for comprehensive problem solving of foreseeable barriers for the online implementation.

With the use of new 360° photography the idea of impressiveness and user-friendly interface was achieved. Participants were able to visualize the different scenarios and imagine potential changes. We continued to host focus groups online and this allowed for a friendlier environment especially for those participants who were uncomfortable or not familiar with the technology. There was also the opportunity for individual completion of the survey. Both settings allowed the participants to look at the 360° photos and to choose their preferred option. The anecdotal feedback provided by participants showed an appreciation for the platform and an ease in understanding the visual scenarios.

In any research project and in any public engagement process there are limitations and complexities that need to be recognized. In a visual preference survey there is always the limitation of the number of images and scenarios that can be offered. The selection of the images was careful and made with the intention to provide feasible scenarios based on precedents and the current built form of Calgary’s Chinatown. Nevertheless there will always be room for additional scenarios and options.

The length of the survey was another limitation. There is a limit to how much time participants are willing to dedicate to answering a survey. Thus we had to be selective of the number of questions asked and the number of options and scenarios provided for each question since participants had to compare the images to make a decision on which one they preferred. The focus groups varied from one hour to one and a half hours long. All the participants of the focus groups stayed through the whole session so that was a good indication that the process worked and the time allotted was appropriate. In the case of the online survey, individuals did not always complete all the questions and in those instances perhaps the survey was too long.

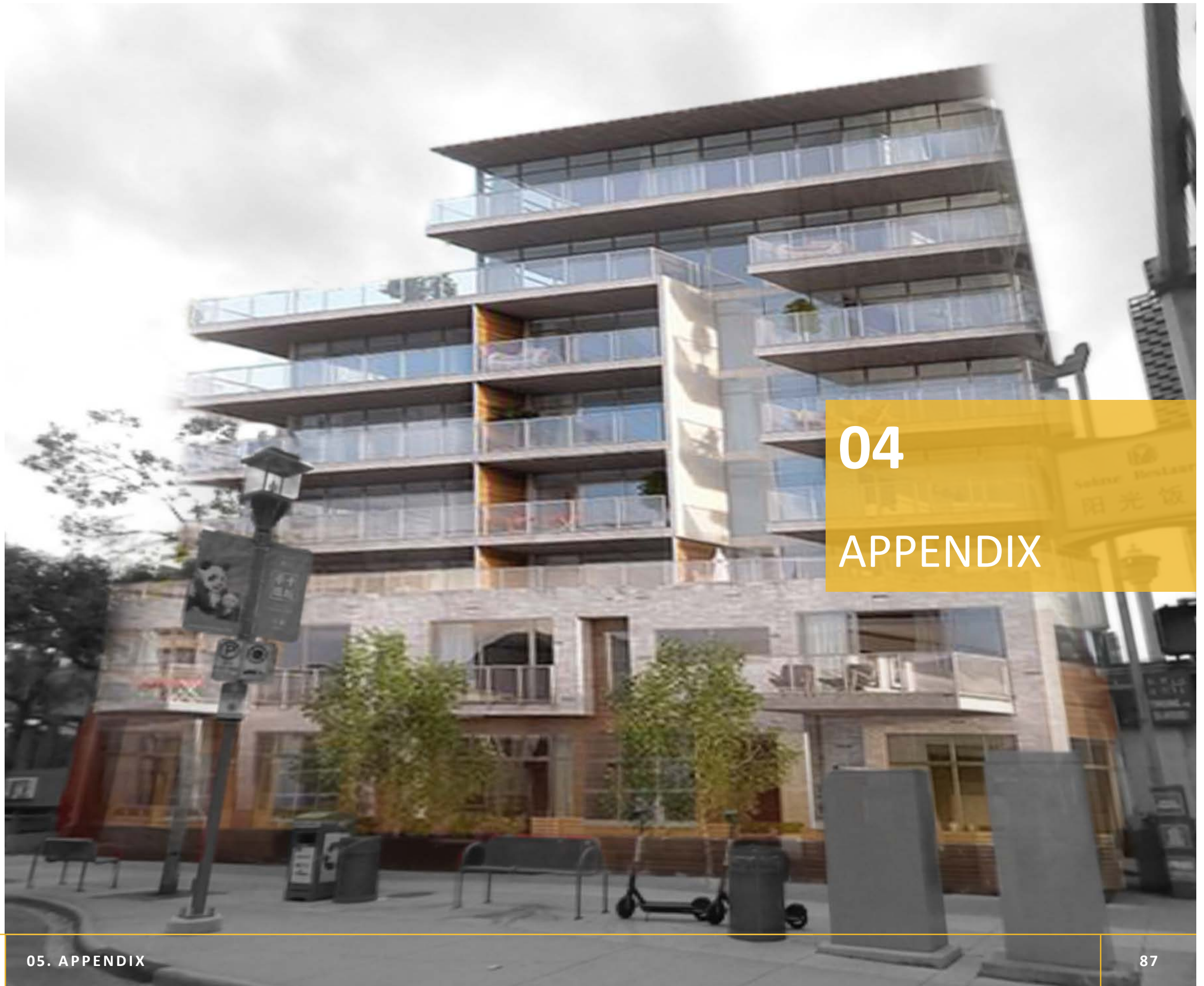
A second significant limitation was time. We provided a generous time-frame for potential participation. The focus groups were well advertised a month in advance of the first session and the survey remained available for completion for over three months. Even with these measures we recognize that the responses represent a limited sample of the community but we believe it to be a rich sample.

We think that the methods used were successful and the innovations did make the experience more immersive and highly visual even when being fully online. We are confident that the feedback provided over the two platforms offers very rich input to the overall planning process and to the recommendations in particular.

The recommendations derived from this feedback are complex and are characterized by certain limitations. In some cases there is a need for further analysis for on site implementation. The set of recommendations were drafted based on the participants’ preferences, best practices, precedents and previous research work from the Urban Lab. Some of them are ambitious in nature and might require complex implementation but they are feasible.

This project proved to be a productive collaboration between the University of Calgary’s Urban Lab team and the City of Calgary Tomorrow’s Chinatown team. It tackled a complex task and gathered valuable material that will help guide future development in the community. It also provided an opportunity to implement a new public engagement process that could be replicated in other communities. It was our pleasure to contribute to this important project that will have a positive lasting impact in one of the historical communities in our city.

We are grateful for the opportunity to work with the City of Calgary and its team, and we extend a special thanks to all the participants and facilitators from the Chinatown community. Without their enthusiastic participation this project would not have been possible. We thank you and wish that this work contributes to the continued success of your community. It offers a humble but meaningful contribution to the future thriving of tomorrow’s Chinatown.



04

APPENDIX



Visual Preference Survey - Questionnaire

DEMOGRAPHICS

Q1 What is your year of birth?

o Drop down selection of years

Q2 Gender?

- o Female
- o Male
- o Non-Binary
- o Other
- o Prefer not to say

Q3 How long have you lived in Calgary?

o Numerical response up to 20

Q4 In which neighbourhood do you live?

o List of Calgary neighbourhoods

Q5 In which neighbourhood do you work?

o List of Calgary neighbourhoods

Q6 What is you highest level of education completed?

- o No formal education
- o High School
- o Vocational training
- o Bachelors
- o Masters
- o Doctorate
- o Other

Q7 What is your primary language?

- o Cantonese
- o Mandarin
- o English
- o Vietnamese
- o Korean
- o Other_____

Q8 Do you own a car?

- o Yes
- o No

Q9 How do you get to Chinatown?

- o Car (Driver)
- o Car (Passenger)
- o Uber/Taxi
- o CTrain
- o MAX(rapid transit)
- o Bus
- o Motorcycle
- o Bike
- o Walk
- o Other_____

STREETSCAPE

Street Dimensions

Q10 Which photo contributes more to the character of Chinatown?

- o 1 - Current
- o 2 - Half Pedestrian
- o 3 - Full Pedestrian

Q11 How important is this for the character of Chinatown?

- o Extremely important
- o Very important
- o Moderately important
- o Slightly important
- o Not at all important

Q12 Street Lighting

Which photo contributes more to the character of Chinatown?

- o 1 - Traditional
- o 2 - String Lights
- o 4 - More String Lights

Q13 How important is this for the character of Chinatown?

- o Extremely important
- o Very important
- o Moderately important
- o Slightly important
- o Not at all important

Q14 Urban Furniture

Which photo contributes more to the character of Chinatown?

- ☐ Current
- ☐ Option 1 Moveable Furniture
- ☐ Option 2 - Artistic Furniture

Q15 How important is this for the character of Chinatown?

- ☐ Extremely important
- ☐ Very important
- ☐ Moderately important
- ☐ Slightly important
- ☐ Not at all important

Sidewalk Materials

Q16 Which photo contributes more to the character of Chinatown?

- ☐ Current
- ☐ Option 1 - Red Brick
- ☐ Option 2 - Grey Cobblestone

Q17 How important is this for the character of Chinatown?

- ☐ Extremely important
- ☐ Very important
- ☐ Moderately important
- ☐ Slightly important
- ☐ Not at all important

Q18 Roadway material

Which photo contributes more to the character of Chinatown?

- ☐ Current
- ☐ Option 1 - Red Brick
- ☐ Option 2 - Grey Cobblestone

Q19 How important is this for the character of Chinatown?

- ☐ Extremely important
- ☐ Very important
- ☐ Moderately important
- ☐ Slightly important
- ☐ Not at all important

Q20 Temporary Closure and Use of Roadway

Which photo contributes more to the character of Chinatown?

- ☐ Current
- ☐ Option 1 - Partial Closure of Parking Spots
- ☐ Option 2 - Full Closure for Festivals

Q21 How important is this for the character of Chinatown?

- ☐ Extremely important
- ☐ Very important
- ☐ Moderately important
- ☐ Slightly important
- ☐ Not at all important

STREET PROGRAMMING AND USE

Q22 Sidewalk Use

Which photo contributes more to the character of Chinatown?

- ☐ Current
- ☐ Option 1 - Patios
- ☐ Option 2 - Patios and Markets

Q23 How important is this for the character of Chinatown?

- ☐ Extremely important
- ☐ Very important
- ☐ Moderately important
- ☐ Slightly important
- ☐ Not at all important

Q24 Street Vendors/Products on Sidewalks

Which photo contributes more to the character of Chinatown?

- ☐ Current - No Vendors
- ☐ Option 1 - Some vendors and food trucks
- ☐ Option 2 - More vendors and food trucks

Q25 How important is this for the character of Chinatown?

- ☐ Extremely important
- ☐ Very important
- ☐ Moderately important
- ☐ Slightly important
- ☐ Not at all important



Q26 Street Trees

Which photo contributes more to the character of Chinatown?

- ☐ Current - Click for image
- ☐ Option 1 - 25% Increase
- ☐ Option 2 - 50% Increase

Q27 How important is this for the character of Chinatown?

- ☐ Extremely important
- ☐ Very important
- ☐ Moderately important
- ☐ Slightly important
- ☐ Not at all important

BUILDINGS

Q28 Scale of Buildings

Which photo contributes more to the character of Chinatown?

- ☐ Current
- ☐ Option 1 - Straight Tower
- ☐ Option 2 - Mid-rise 6 Story
- ☐ Option 3 - Podium and Tower

Q29 How important is this for the character of Chinatown?

- ☐ Extremely important
- ☐ Very important
- ☐ Moderately important
- ☐ Slightly important
- ☐ Not at all important

Traditional Chinese Motifs

Q30 Which photo contributes more to the character of Chinatown?

- ☐ Current
- ☐ Option 1 - None
- ☐ Option 2 - Traditional
- ☐ Option 3 - Modern

Q31 How important is this for the character of Chinatown?

- ☐ Extremely important
- ☐ Very important
- ☐ Moderately important
- ☐ Slightly important

Permeability

Q32 Which photo contributes more to the character of Chinatown?

- ☐ Current
- ☐ Option 1 - Low
- ☐ Option 2 - High

Q33 How important is this for the character of Chinatown?

- ☐ Extremely important
- ☐ Very important
- ☐ Moderately important
- ☐ Slightly important
- ☐ Not at all important

Awnings and Balconies

Q34 Which photo contributes more to the character of Chinatown?

- ☐ Current
- ☐ Option 1 - Awnings
- ☐ Option 2 - Awnings and Balconies

Q35 How important is this for the character of Chinatown?

- ☐ Extremely important
- ☐ Very important
- ☐ Moderately important
- ☐ Slightly important
- ☐ Not at all important

Q36 Material / Colour of Buildings

Which photo contributes more to the character of Chinatown?

- ☐ Current
- ☐ Option 1 - Red Brick
- ☐ Option 2 - Red Terracotta
- ☐ Option 3 - Ceramic Tile Accents

Q37 How important is this for the character of Chinatown?

- ☐ Extremely important
- ☐ Very important
- ☐ Moderately important
- ☐ Slightly important
- ☐ Not at all important

Q38 Land Use

Which photo contributes more to the character of Chinatown?

- o Current
- o Option 1 - Office
- o Option 2 - Residential
- o Option 3 - Mixed Use

Q39 How important is this for the character of Chinatown?

- o Extremely important
- o Very important
- o Moderately important
- o Slightly important
- o Not at all important

PARKS AND PLAZAS

Q40 Hardscape vs Softscape (in plaza)

Which photo contributes more to the character of Chinatown?

- o Current
- o Option 1 - Softscape
- o Option 2 - Hardscape

Q41 How important is this for the character of Chinatown?

- ☐ Extremely important
- ☐ Very important
- ☐ Moderately important
- ☐ Slightly important
- ☐ Not at all important

Q42 Urban Furniture

Which photo contributes more to the character of Chinatown?

- o Current
- o Option 1 - Fixed
- o Option 2 - Moveable
- o Option 3 - Fixed and Moveable

Q43 How important is this for the character of Chinatown?

- o Extremely important
- o Very important
- o Moderately important
- o Slightly important
- o Not at all important

Q44 Hardscape Material (in park)

Which photo contributes more to the character of Chinatown?

- o Current
- o Option 1 - Red Brick
- o Option 2 - Grey cobble
- o Option 3 - Stamped wood concrete

Q45 How important is this for the character of Chinatown?

- ☐ Extremely important
- ☐ Very important
- ☐ Moderately important
- ☐ Slightly important
- ☐ Not at all important

Q46 Permanent Programming (in park)

Which photo contributes more to the character of Chinatown?

- o Current
- o Option 1 - Table Games
- o Option 2 - Playground
- o Option 3 - Contemplation Garden

Q47 How important is this for the character of Chinatown?

- o Extremely important
- o Very important
- o Moderately important
- o Slightly important
- o Not at all important

SIGNAGE

Q48 Projecting Signage

Which photo contributes more to the character of Chinatown?

- o Current
- o Option 1 - Cut outs
- o Option 2 - Hanging Signs
- o Option 3 - Hanging Trellis

Q49 How important is this for the character of Chinatown?

- o Extremely important
- o Very important
- o Moderately important
- o Slightly important
- o Not at all important



Q50 Signage Lighting

Which photo contributes more to the character of Chinatown?

- ☐ Current
- ☐ Option 1 - Back Lit Panels
- ☐ Option 2 - LED
- ☐ Option 3 - Digital

Q51 How important is this for the character of Chinatown?

- ☐ Extremely important
- ☐ Very important
- ☐ Moderately important
- ☐ Slightly important
- ☐ Not at all important

Q52 Language of Signage

Which photo contributes more to the character of Chinatown?

- ☐ Current
- ☐ Option 1 - Limited Asian Language
- ☐ Option 2 -Only Mandarin/Cantonese
- ☐ Option 3 - Multiple Asian Languages

Q53 How important is this for the character of Chinatown?

- ☐ Extremely important
- ☐ Very important
- ☐ Moderately important
- ☐ Slightly important
- ☐ Not at all important

SOUNDSCAPES

Q54 Soundscape

2nd Avenue

What are the significant sounds of Chinatown?

- ☐ Option 1 - Vehicular traffic
- ☐ Option 2 - Cobblestone
- ☐ Option 3 - Pedestrian traffic

Centre Street

Q55 What are the significant sounds of Chinatown?

- ☐ Option 1 - Vehicular traffic
- ☐ Option 2 - Cobblestone
- ☐ Option 3 - Pedestrian traffic

Riverfront Avenue

Q56 What are the significant sounds of Chinatown?

- ☐ Option 1 - Vehicular traffic
- ☐ Option 2 - Cobblestone
- ☐ Option 3 - Pedestrian traffic

Q57 How important is soundscape to the character of Chinatown?

- ☐ Extremely important
- ☐ Very important
- ☐ Moderately important
- ☐ Slightly important
- ☐ Not at all important

Chinatown Design Guideline Comparison Matrix

Materials	Victoria	Vancouver	Edmonton	Portland	San Francisco	Washington DC	Los Angeles	Honolulu	Boston 22	Philadelphia
Use of gold and red, polychrome colours	Yes	Yes	Yes 5	Yes	No	Yes 5	No 26	No	No	No
Red brick	Yes	Yes 2	Yes	Yes 2	No	No	No	No	No	No
Terra cotta	No	Yes	No	Yes	No	No	No	No	No	No
Ceramic tile	No	Yes	No	Yes	No	No	No	No	No	No
Stone	Yes	Yes	Yes	Yes	No	No	No	No	No	No
Cloth *Banners and awnings	No	No	No	Yes	No	Yes	Yes	Yes	No	No
Wood	Yes	Yes	No	Yes	No	No	No	Yes	No	No
Park / Open space	Victoria	Vancouver	Edmonton	Portland	San Francisco	Washington DC	Los Angeles	Honolulu	Boston	Philadelphia
Sculptures	No	No	No	No	No	No	No	No	No	No
Seating: benches,steps, terraces, ledges	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Raised Planting bed edges / comfortable seating for seniors	No	No	No	No	No	Yes	Yes	No	Yes	No
Large trees	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Gazebo /Pagoda/pavilion	No	No	No 6	No	No	No	No	No	Yes	No
Open hardscape plaza	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes



Social Activities	Victoria	Vancouver	Edmonton	Portland	San Francisco	Washington DC	Los Angeles	Honolulu	Boston	Philadelphia
Gambling - mahjong	Yes	No	No	No	No	No	No	No	No	Yes
Play for children	No	Yes	No	No	No	Yes	No	Yes 16	Yes	Yes
Political material distribution	No	No	No	No	No	No	No	No	No	No
Night market – food and cultural performances	No	No	Yes	No	No	Yes	No	Yes	No	Yes 24
Dragon boat festival	No	No	No	No	No	No	No	Yes	No	No
Music	No	No	No	No	No	Yes	No	Yes	No	Yes
Morning exercises	No	No	No	No	No	Yes	No	Yes	Yes	Yes
Enjoying views to the river/water	No	No	No 7	No	No	No	No	Yes	No	No
Bible / religious studies	No	No	No	No	No	No	No	No	No	No
Martial arts - Tai chi, kung fu, etc.	No	No	No	No	No	Yes	No	Yes	No	Yes
Chess	No	No	No	No	No	No	No	No	No	Yes 10
Informal Chinese orchestra	No	No	No	No	No	Yes 10	No	Yes 17	No	No

Street Programming	Victoria	Vancouver	Edmonton	Portland	San Francisco	Washington DC	Los Angeles	Honolulu	Boston	Philadelphia
Year round street vendors	No	No	Yes	No	No	Yes	No	Yes 19	No	Yes
Stores occupying the sidewalks	Yes	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes
Temporary occupation of sidewalks, including architectural elements such as furnishing and awnings	Yes	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes
Festival Streets	No	Yes	Yes	Yes	No	Yes	No	Yes 20	No	Yes

Streetscape	Victoria	Vancouver	Edmonton	Portland	San Francisco	Washington DC	Los Angeles	Honolulu	Boston	Philadelphia
The plan, incorporating the grid of urban blocks with interconnecting interior lane-ways	Yes	Yes	Yes	No 13	Yes	Yes	No	No	Yes	Yes 24
Structural Gateways to the neighbourhood	No	No	Yes	Yes	No	Yes	No	No	Yes	Yes
Storefronts at ground level, flush to the sidewalk, tend to be highly visually permeable through a bay window	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes
Buildings usually abutting/adjacent to one another	Yes	Yes	Yes	Yes	No	No	No	No	No	No
Laneways also considered as a public realm for store fronts	Yes	Yes	Yes	No	No	No	No	No	No	Yes 24
Chinese street names and/or Multilingual Street name	No	No	No	No	No	No	No	No	Yes	No
Symbolic designs and decorum/ornament	Yes	Yes	Yes	Yes	No	Yes	No	Yes 18	Yes	Yes 24
Chinese art murals	Yes	Yes 3	Yes 8	Yes	No	No	No	No	Yes	No
Banners	No	No	Yes	Yes	No	Yes	No	Yes	Yes	No
Decorated crosswalks	No	No	Yes	No	Yes	No	No	No	Yes	No
Decorated sidewalks	No	Yes	Yes	No	Yes	No	No	No	Yes	Yes 24
Decorum on Street lamps/light fixture	No	Yes	Yes	No	Yes	Yes	Yes 10	Yes 18	Yes	Yes
Decorum on waste bins	No	No	No	No	Yes 14	No	No	No	Yes	No
Hanging lanterns - general emphasis on lighting the ground level, muted lighting above 2 storeys	Yes	No	Yes	Yes	No	Yes 10	No	Yes	No	Yes
Recessed entrance	Yes	Yes	No	Yes	No	No	Yes 10	No	No	No



Architectural Adaptations	Victoria	Vancouver	Edmonton	Portland	San Francisco	Washington DC	Los Angeles	Honolulu	Boston	Philadelphia
Projecting signage - typically larger than standard North American, brightly lit and non-plastic materials	Yes	Yes	Yes	Yes	No	Yes 10	Yes 10	No	Yes	Yes
Signage written in Chinese	Yes	Yes 4	Yes 9	Yes	No	Yes 10	No	Yes 21	Yes	Yes
Tiled, hipped and hooked roofs, upturned eaves	Yes	No	No	Yes	No	No	Yes 10	No	Yes	No
Glazing on façade	Yes	Yes	No	No	No	No	No	No	No	No
Awnings	Yes	No	Yes	Yes	No	No	Yes 10	No	No	No
Upper storeys with recessed balconies	Yes	Yes	No	Yes	No	No	No	No	No	No
Heavily worked bracketing	Yes	No	No	No	No	No	No	No	Yes 23	No
Architectural edges with Chinoiserie motifs, roof ornaments, domes, parapets, cornices, and flagpoles	Yes	Yes	No 11	Yes	No	Yes	Yes	No	Yes	No
Interior courtyard space	Yes	Yes	No	Yes 13	No	Yes 25	Yes 10	No	Yes	No
Transom windows over door	Yes	Yes	No	Yes	No	No	No	No	No	No

- Notes:**
1. Mentions awnings does not specify arched awnings/ type of awning

2. Does not specify red brick, does recommend brick

3. Does not specify Chinese art

4. Not explicitly ‘Chinese signage’

5. Does not call out which colours are ‘Chinese colours’

6. Mentions gazebos to be removed

7. Suggests adding water feature

8. Does not specify Chinese art

9. Not explicitly ‘Chinese signage’

10. Implied with broader terms

11. Does not mention any specific architectural façade treatment “Encourage business owners to take advantage of the City’s façade Improvement Program and improve the aesthetic qualities of building façades.”

12. Very small area, may not require more physical integration

13. “Some of the original buildings in the district had rear courtyards or light wells, but these were private spaces that could not be seen from the street. Proposals for additions or new construction that include breaks or gaps in the street wall should be carefully considered so as not to detract from the defining sense of urban enclosure along the street.”

14. Mentions addition of bins, does not specify decorum

15. Not specify which colours

16. Implied not explicit “Keiki to kupuna activities – senior centre, after school care for children, after school arts programs, Chinese school”

17. Implied not explicit “Music – festivals, live music, ethnic music, classical music, lunchtime/after work performances”

18. Only instance of decorum mentioned with preservation of light fixtures

19. Implied not explicit “Markets – farmers markets, night markets, made in Hawaii product fairs, craft fairs, Art + Flea”
20. Implied not explicit “Special events – Christmas events, Chinese festivals, Dragon Boat Festival, flower exhibition (Goyang, Korea), other ethnic festivals, other holidays”
21. Implied not explicit “important elements of a wayfinding system... Accessible, multilingual, and designed for both pedestrians and drivers”
22. Has an Unofficial plan and a Analysis report by students from Harvard School of Design
23. Implied ‘Asian-style ornamentation’
24. Implied with precedence
25. Suggestion to use Kogod Courtyard as a partner for venue space
26. Mentions the use of colour, does not specify any relation to culture

