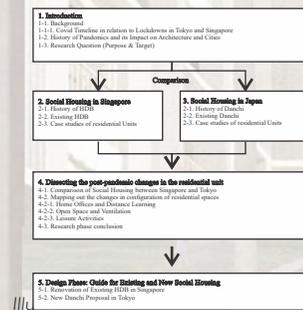
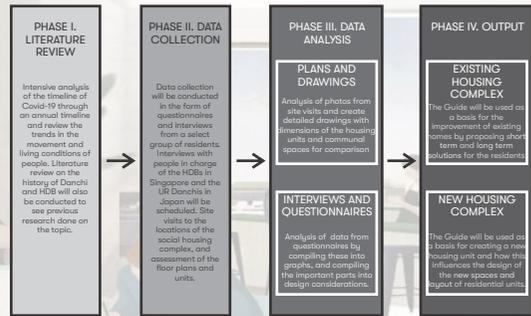


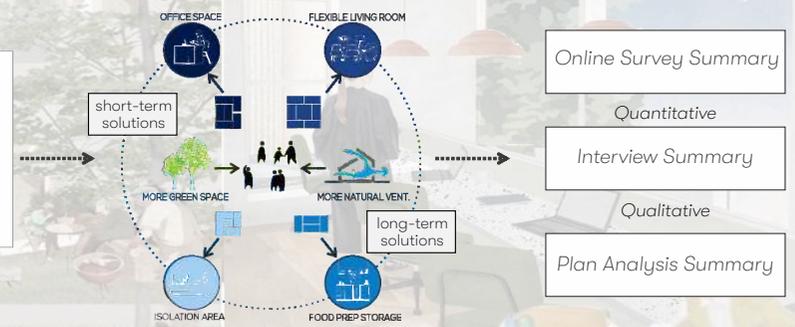
# POST-PANDEMIC RESIDENTIAL SPACES

## THE FUTURE OF JAPANESE DANCHIS, LEARNING FROM SINGAPORE HDBS

### II. Research Methodology      III. Research Diagram      IV. Detailed Methodology      V. Spatial Analysis



- I. Home Storage
- II. Work from Home
- III. Remote Learning
- IV. Exercise
- V. Leisure
- VI. Quarantine
- VII. Amenities



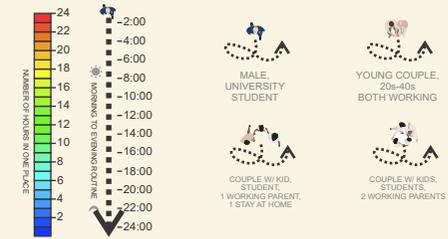
### IV. Detailed Methodology      V. Spatial Analysis

#### 1. TRANSLATED HOUSING PLANS

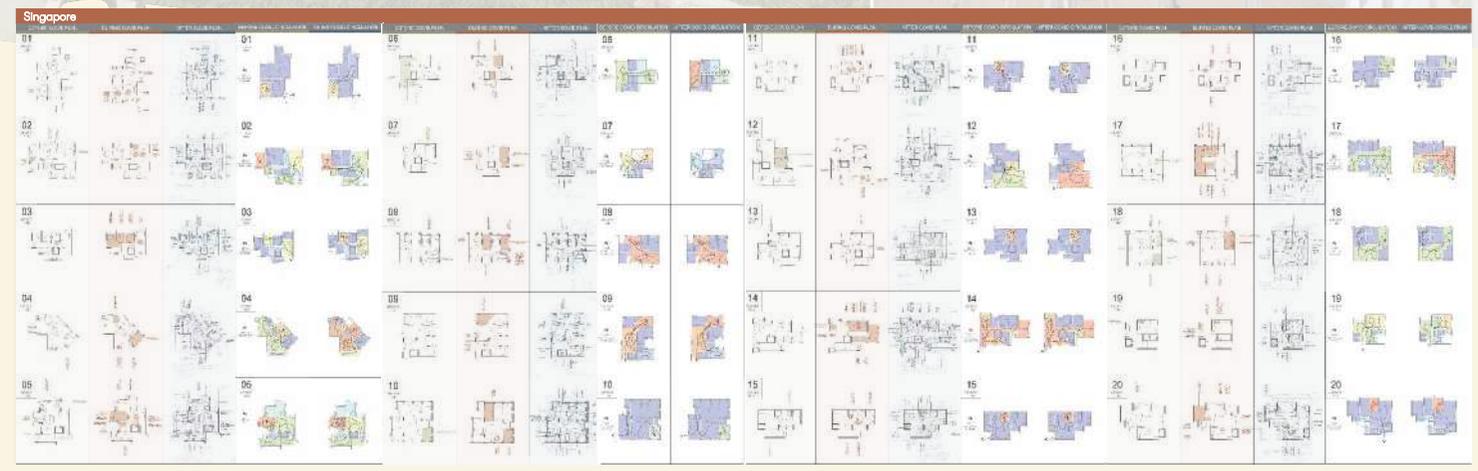


Housing plans from different HDB and Danchi unit types were translated into a living style survey with the different phases of the pandemic divided into before, during and after. Initially, these plans were hand drawn on site with 3 different pen inks used to differentiate the layout changes done in the unit. Photos were also taken on site as well as measurements of the ceiling height. Interviews with the house residents were done simultaneously to understand the qualitative aspect of their experience living with the pandemic.

#### 2. CIRCULATION MAPPING



The daily routine was translated into a circulation map. Rooms are represented by circles, and the circulation pattern was drawn connecting different rooms with the start of their day to the end of their daily activities. This graphical analysis is able to show the difference between their routine and how the central spaces such as hallways, living rooms, etc. were used before and after the pandemic. This circulation map also shows how the residents will isolate themselves when infected with covid, as the central spaces most used will be highlighted, and those plans with fewer spaces and a more used hallway would mean that the users of the unit will have to isolate as a family instead of individually.



#### 3. INTERVIEWS



The interview aspect was used to gather more in-depth data on how they used the spaces inside their homes, with a visual guide of their acquired floorplan. This method maps out the changes in the unit and their reason for these changes that reflect their own family dynamic and lifestyle. Interviews with the house residents were done simultaneously with the layout mapping to understand the qualitative aspect of their experience living with the pandemic.

#### CONCLUSIONS QUANTITATIVE, QUALITATIVE, ILLUSTRATIVE SUMMARY:

##### JAPAN SUMMARY

- 1. HOME STORAGE
- 2. WORK-FROM-HOME
- 3. ONLINE LEARNING
- 4. EXERCISE
- 5. LEISURE
- 6. CONVENIENCE
- 7. RESILIENCE
- 8. AMENITIES

##### SINGAPORE SUMMARY

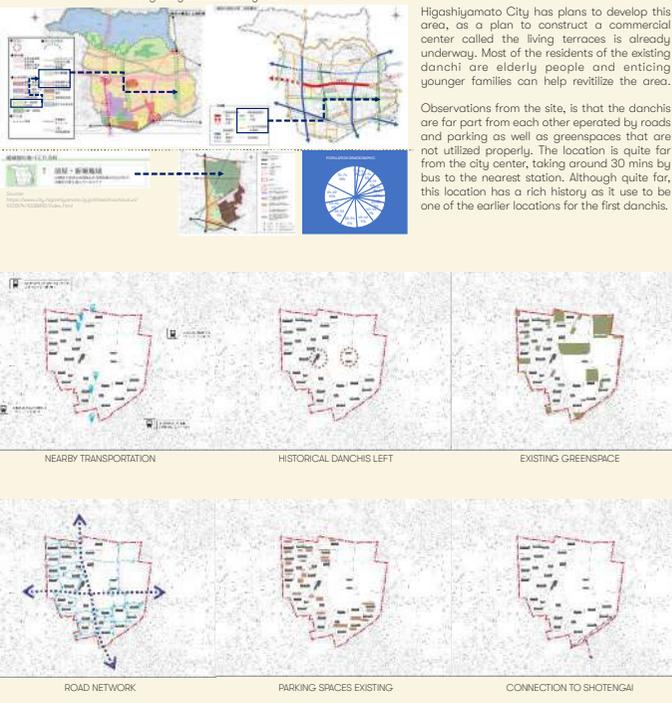
- 1. HOME STORAGE
- 2. WORK-FROM-HOME
- 3. ONLINE LEARNING
- 4. EXERCISE
- 5. CONVENIENCE
- 6. AMENITIES

#### OVERALL CONCLUSIONS

Cultural differences and other factors contribute to how Singaporeans and Japanese people live. Singapore HDBs have more open and bigger floorplans with cross ventilation being a priority in their climate, while the Japanese Danchis are smaller and more enclosed to accommodate the differences in temperature during their 4 seasons. Singaporean neighborhoods are more closely knit, with neighbors being more acquainted with each other. In comparison to the Japanese Danchi counterpart with limited interaction between neighbors. Work from home and Online learning in both cases have resorted to using the dining or living room table as a substitute for a desk in the bedroom. Much is left to be desired as the existing types of amenities and open spaces in Japan and Singapore now face a decline of usage even after the pandemic.

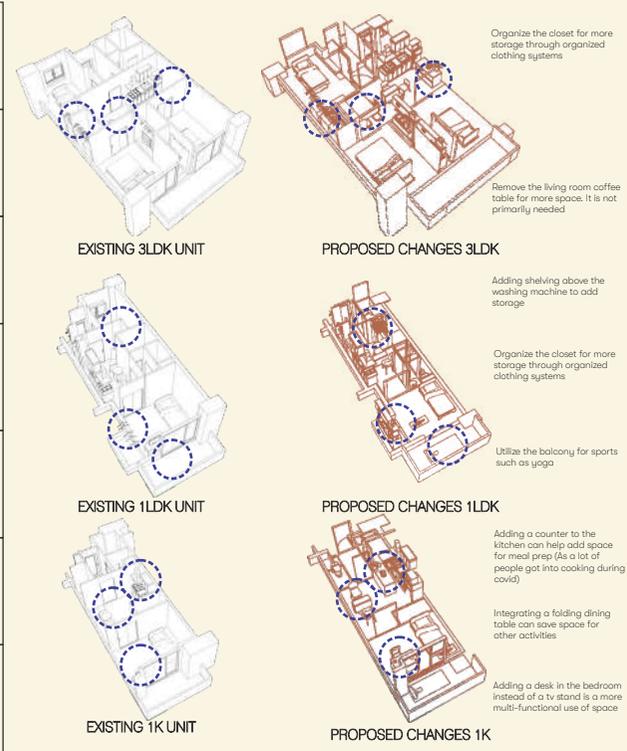
# SITE ANALYSIS

## EXISTING CONDITIONS



## EXISTING DANCHI GUIDE

<p>1. HOME STORAGE</p>	<p><b>a. Partitions as Storage</b></p> <p>Storage options such as closets can be used to separate rooms</p>	<p><b>b. Add genkan shelves</b></p> <p>As more and more people are used to online food delivery and shipping, the genkan has transformed into a integral part of entertaining people.</p>
<p>2. WORK-FROM-HOME</p>	<p><b>a. Acoustics</b></p> <p>Applying acoustic treatment to your existing room can help in the sound proofing for video calls</p>	<p><b>b. Portable zoom BG</b></p> <p>Sun shade or a privacy screen can be used to block the windows as well as used this in the absence of a blank wall for zoom meetings</p>
<p>3. ONLINE LEARNING</p>	<p><b>a. Portable desk</b></p> <p>A portable desk can be used to have remote classes anywhere in the house transforming the living room and or bedroom</p>	<p><b>b. Add a dedicated desk/ use dining table</b></p> <p>Many people during covid was able to utilize the dining table for online work and learnings, but a dedicated desk in the bedroom can help had focus spaces.</p>
<p>4. EXERCISE</p>	<p><b>a. Utilize balcony</b></p> <p>The balcony that is in every unit of the danchi can be utilized for exercise such as weights or yoga</p>	<p><b>b. Keep in between space clutter free</b></p> <p>The in-between space that is often utilized during the pandemic is an integral part of the room. Keeping this clutter free insures more space.</p>
<p>5. LEISURE</p>	<p><b>a. Movable furniture</b></p> <p>Movable furniture in the living room can ensure more or properly utilized. These are more often moved around to make more space. The removal of this furniture ensures more circulation</p>	<p><b>b. Remove the coffee table</b></p> <p>Coffee tables in Danchis are not often used or properly utilized. These are more often moved around to make more space. The removal of this furniture ensures more circulation</p>
<p>6. QUARANTINE</p>	<p><b>a. Allot medical supply storage</b></p> <p>Having a dedicated space for storage for medical/ emergency supplies can benefit the user than using the existing cabinets provided that are often only for food or clothes</p>	<p><b>b. Passive ventilation</b></p> <p>Passive ventilation can be achieved by opening more windows and doors. This is specially useful during summer months</p>
<p>7. AMENITIES</p>	<p><b>a. Utilize public spillover spaces</b></p> <p>These spaces can be used for other activities such as dance practice and walking exercises if the circulation will not be blocked.</p>	<p><b>b. Join community gatherings/ meetings</b></p> <p>Machizukuri meetings can help in the improvement of spaces around the existing danchi. This will cater to your specific need, if there is a specific area in the bldg that needs improvement</p>



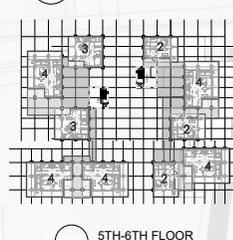
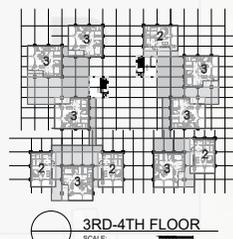
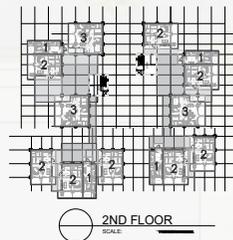
# SITE DEVELOPMENT PLAN



## SITE STRATEGIES



# FLOORPLANS



**LEGEND:**  
 1-1K unit  
 2-1LDK unit  
 3-2LDK unit  
 4-3LDK unit

# SECTIONS



CROSS SECTION

LONGITUDINAL SECTION

# PERSPECTIVES:



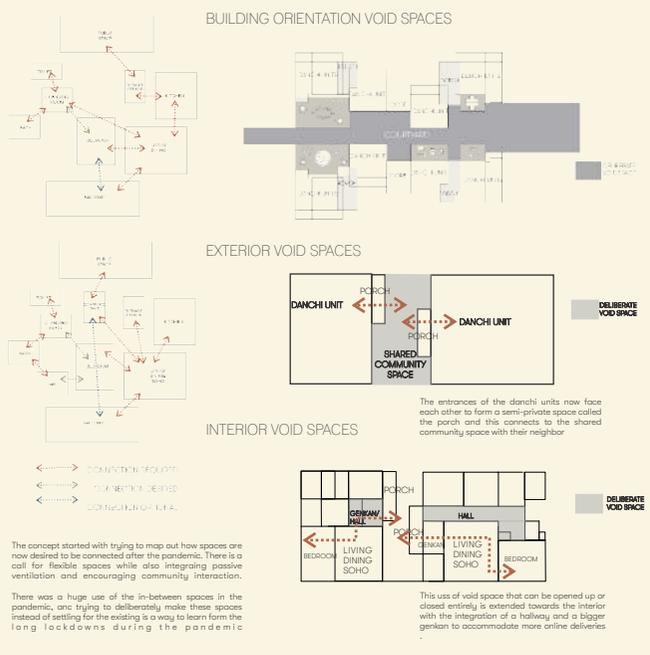
Courtyard perspective



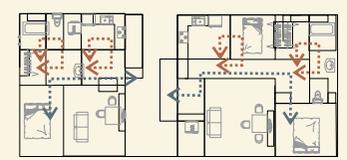
Shared Community Space between porch



# CONCEPT: "DELIBERATELY MAKING THE IN-BETWEEN SPACE"

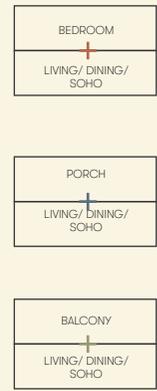


# CIRCULATION



This layout of spaces acts as a way that each component can function on its own, with its own circulation, should the user choose to close the living dining soho for online work or learning.

# COMBINED CONFIGURATION

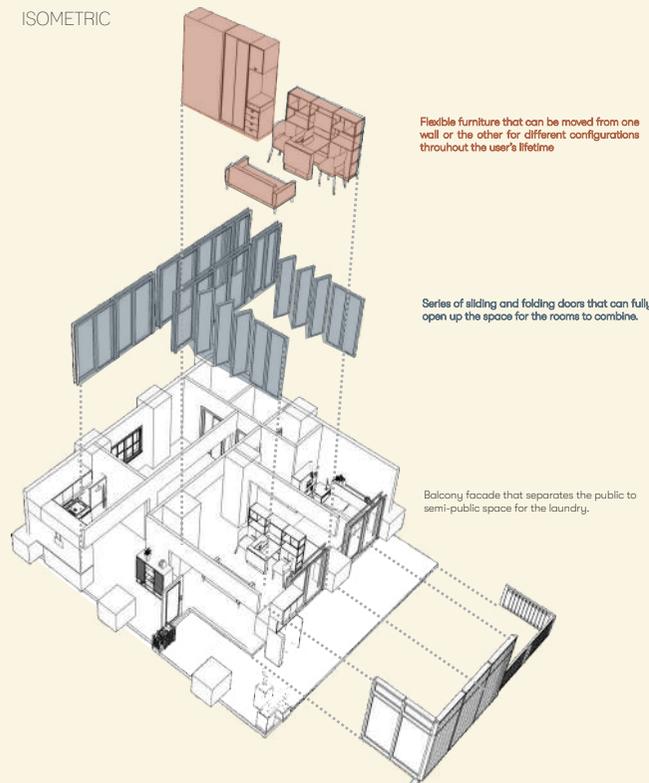


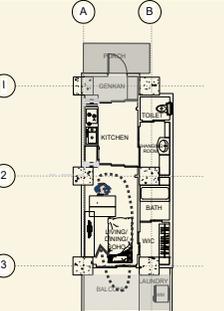
This can be used as a bedroom extension for when guests are over, and a bigger room is required to house them. Leisure can also extend towards the living room such as watching a movie from bed

Opening the porch opens up the studio space to the public shared community space. This can be used when 2 neighbors are having a party or a BBQ.

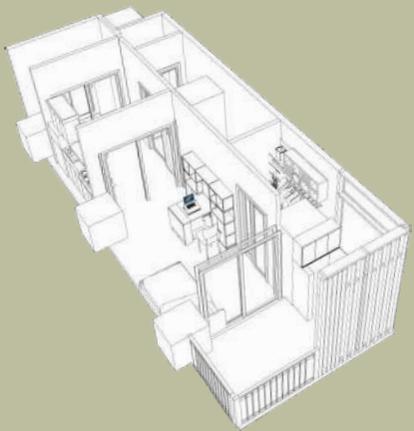
Opening the balcony can extend the area for more spacious activities such as exercises. This also allows for more passive cooling

# ISOMETRIC

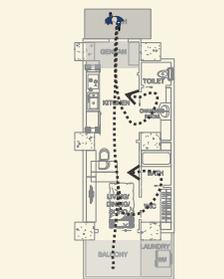




CLOSED CONFIGURATION  
Sample Circulation



1K



OPEN CONFIGURATION  
Sample Circulation



MALE,  
UNIVERSITY  
STUDENT  
  
Sample user demographic



COUPLE W/ KID,  
STUDENT,  
1 WORKING PARENT,  
1 STAY AT HOME  
  
Sample user demographic

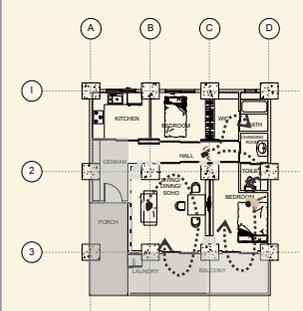


Genkan to living room opening

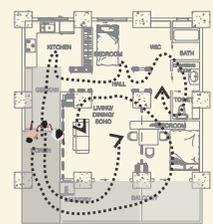
Bedroom to living room opening



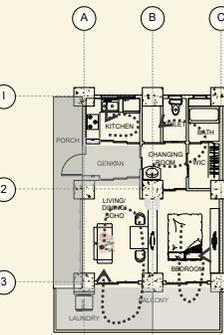
2LDK



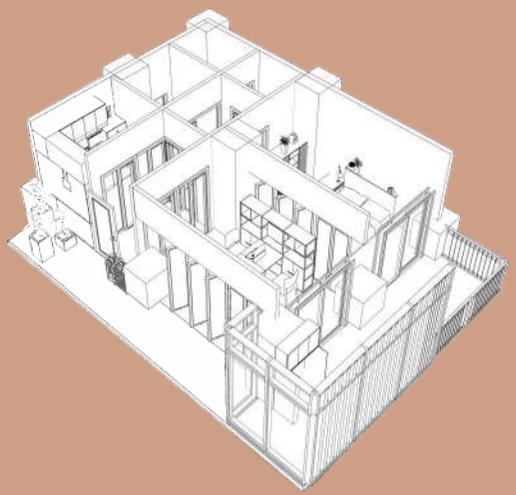
CLOSED CONFIGURATION  
Sample Circulation



OPEN CONFIGURATION  
Sample Circulation



CLOSED CONFIGURATION  
Sample Circulation



1LDK



OPEN CONFIGURATION  
Sample Circulation



YOUNG COUPLE,  
20s-40s  
BOTH WORKING  
  
Sample user demographic



COUPLE W/ KIDS,  
STUDENTS,  
2 WORKING PARENTS  
  
Sample user demographic

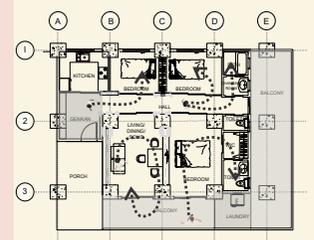


Kitchen to hallway opening

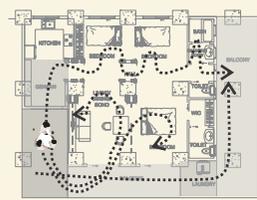
Living to porch opening



3LDK



CLOSED CONFIGURATION  
Sample Circulation



OPEN CONFIGURATION  
Sample Circulation

