

5 TAIPEI

CASE STUDY

TAIPEI - ZHONGSHAN

臺北 - 中山區

台北 - 中山区

CONTENTS

1. INTRODUCTION
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TEAM

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Practicum: Residential Planning in Global Cities | Columbia GSAPP - PLANA6121 2021 | Kate Dunham

CASE STUDY TAIPEI – ZHONGSHAN	SECTION 1] CASE STUDY INTRODUCTION	TITLE 1.1] LOCATION & OVERVIEW
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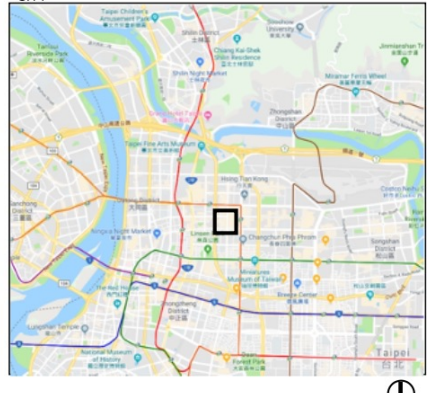
STUDY AREA



NEIGHBORHOOD



CITY



CASE STUDY TAIPEI – ZHONGSHAN	SECTION 1] CASE STUDY INTRODUCTION	TITLE 1.2] FOCUS AREA
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First Floor
(Private
parking space)

Source: Google Streetview



Sunlight
(unaccessible
to first floor)

Source: Google Streetview



First Floor
(Shop)



Fire lane
between
buildings in
one housing
complex

Source: Qulizoutoutou (video)



Jilin Road

1. Classification: two-way four lane
2. Veranda serves as one way of making a setback
3. Parking area boundary was especially drawn to avoid motorbikes parking on veranda in 2010

Source: Google Streetview



2009



2020



Lane 236

Between buildings are lanes with the east-west direction.

- Classification: single lane one-way traffic organization
- No setback
There is no building setback on those lanes so that no pedestrian system exists.
- Transportation: Motorbikes, slowly driven cars



Source: Google Streetview



Zhongyuan Street

Zhongyuan Street runs through the middle of the study area (between two blocks).

1. Classification: bi-directional single lane
2. Veranda
Veranda serves as a kind of building setback, providing pedestrian ways.

1



2



Source: Google Streetview

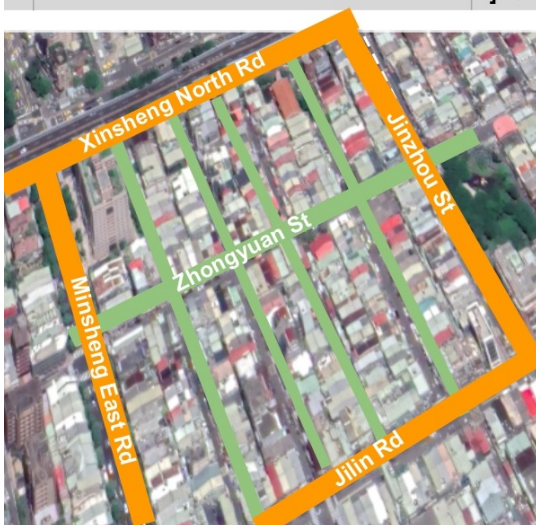


The building heights vary a lot. Roughly, the width to height ratio within the study area are in the range [1:3 -- 1:1]

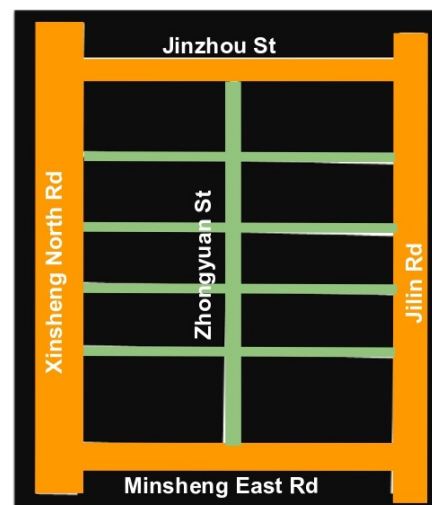
Mostly, it remains 1:1.5

In narrow lanes, it keeps 1:2

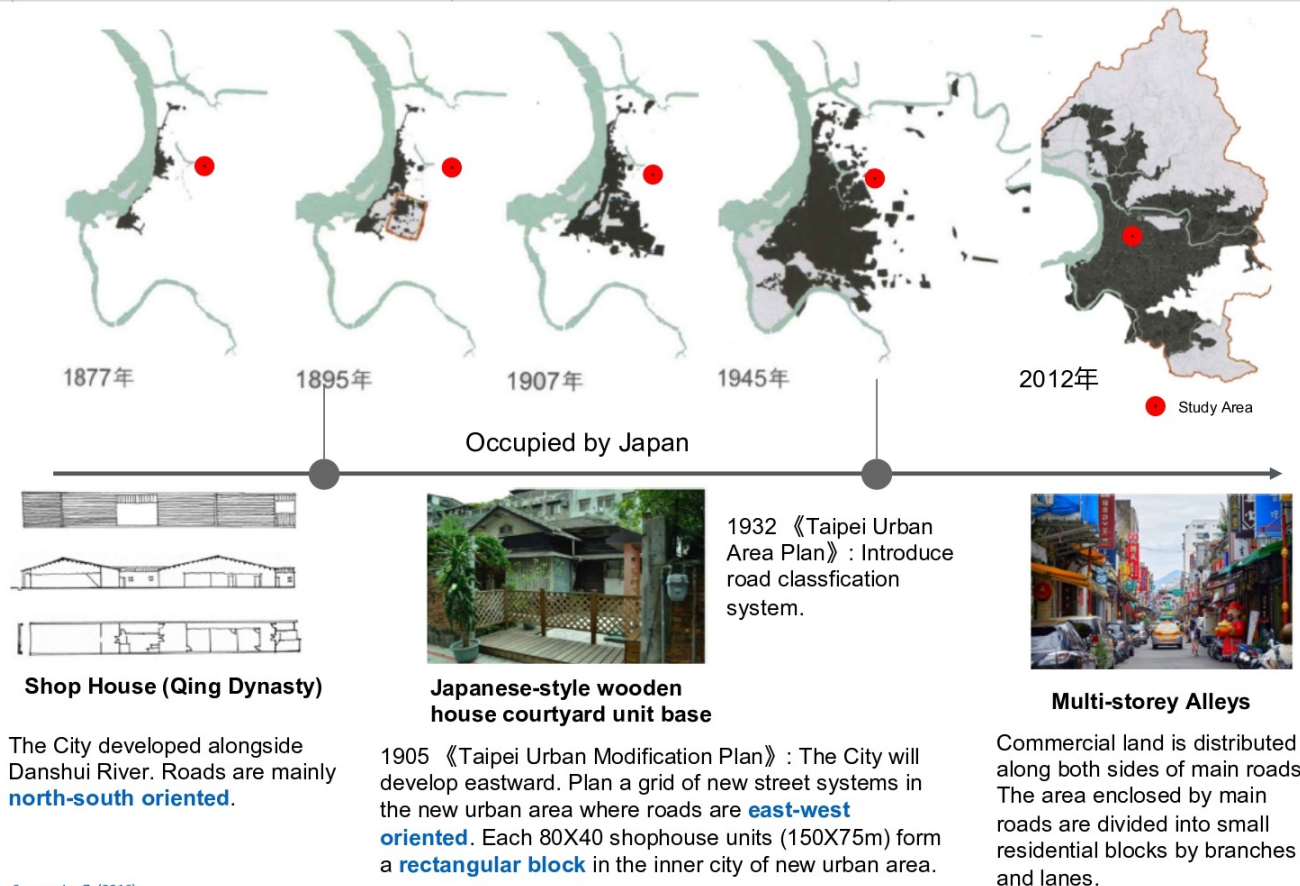
Source: Google Streetview



Source: Google Streetview



Xinsheng North Road	47m (Elevated + Ground)	Zhongyuan Street	8.5m	Lane 119, Section 2, Xinsheng North St	4m
Jinzhou Street	15m	Lane 127, Section 2, Xinsheng North St	6m	Lane 218, Jilin Road	6m
Section 2, Minsheng East Road	15m	Lane 123, Section 2, Xinsheng North St	4m	Lane 115, Section 2, Xinsheng North St	4m
Jilin Road	20m	Lane 236, Jilin Road	4m	Lane 200, Jilin Road	4m



Source: Lu, Z. (2016)

A Typical Family:

- A couple with one child
- Live in a multi-unit apartment buildings
- Have above average income
- Live closely with old neighbors
- Frequently participate in neighborhood activities



	Population density (per ha)	Aged population density (65+) (per ha)	Average number of Residents per household
Study Area Neighborhood	280	53	/
Zhongshan District	196	/	2.3
Taipei City	115	/	2.55

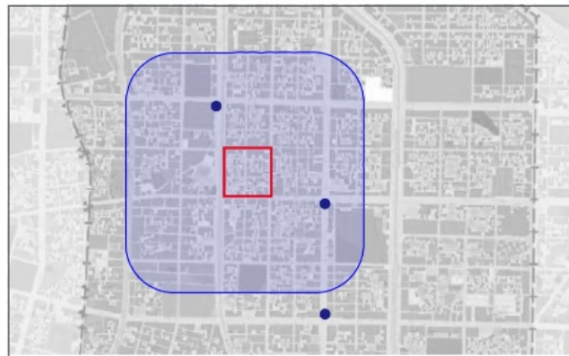
Source: Taipei City Urban Planning Commission



- ★ Metro Station
- Metro Line
- Express Way
- Main Road
- Secondary Road

Transportation Condition:

- Metro stations are one block away
- Main roads and second roads are mostly designed for automobiles
- Little space left for motorbikes and bikes



- Metro Station
- Study Area
- 5min-walk Distance Area (from study area)

Usage:

- Bus stop demand-supply ratio is 0.83 (demand less than supply)
- Motorbike parking demand-supply ratio is 1.38 (demand more than supply)
- The study area highly rely on motorbikes for commuting



Child Day Care Center



Senior Service Center



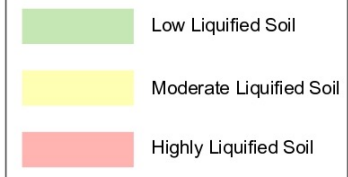
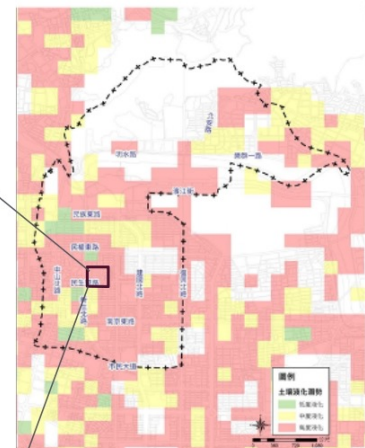
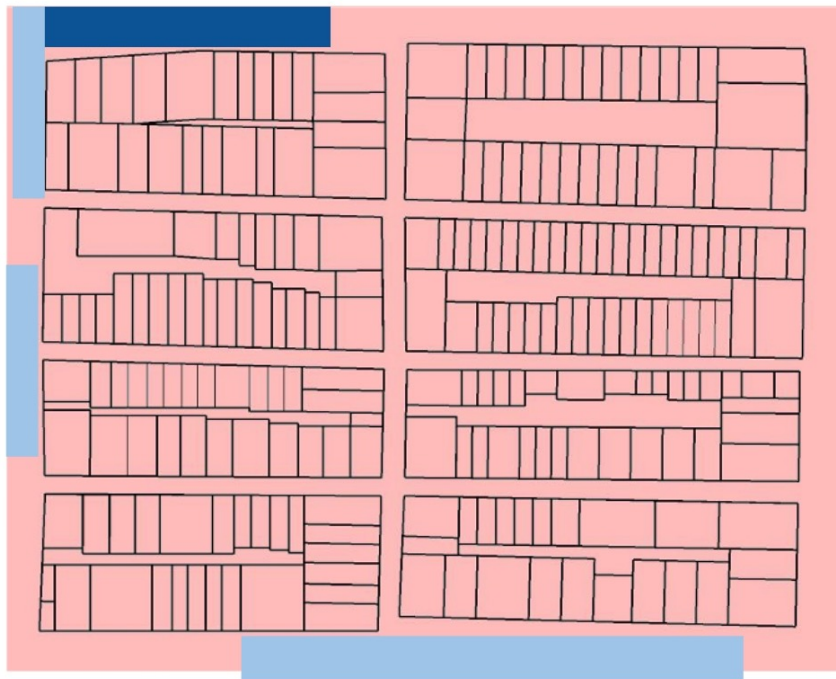
Green Space 500m Service Area

Jinzhou Park

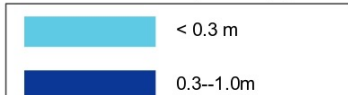


Source: Taipei City Urban Planning Commission

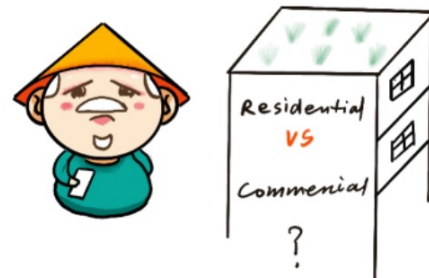
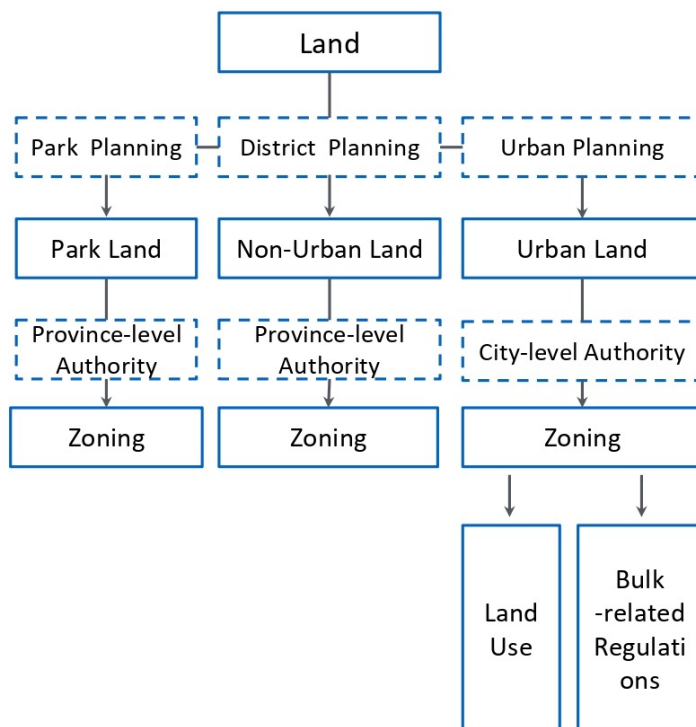
- All on highly liquified soil
- Ground floor face with the danger of flood



Possible flooding range and depth under 130mm rainfall per hour (m)

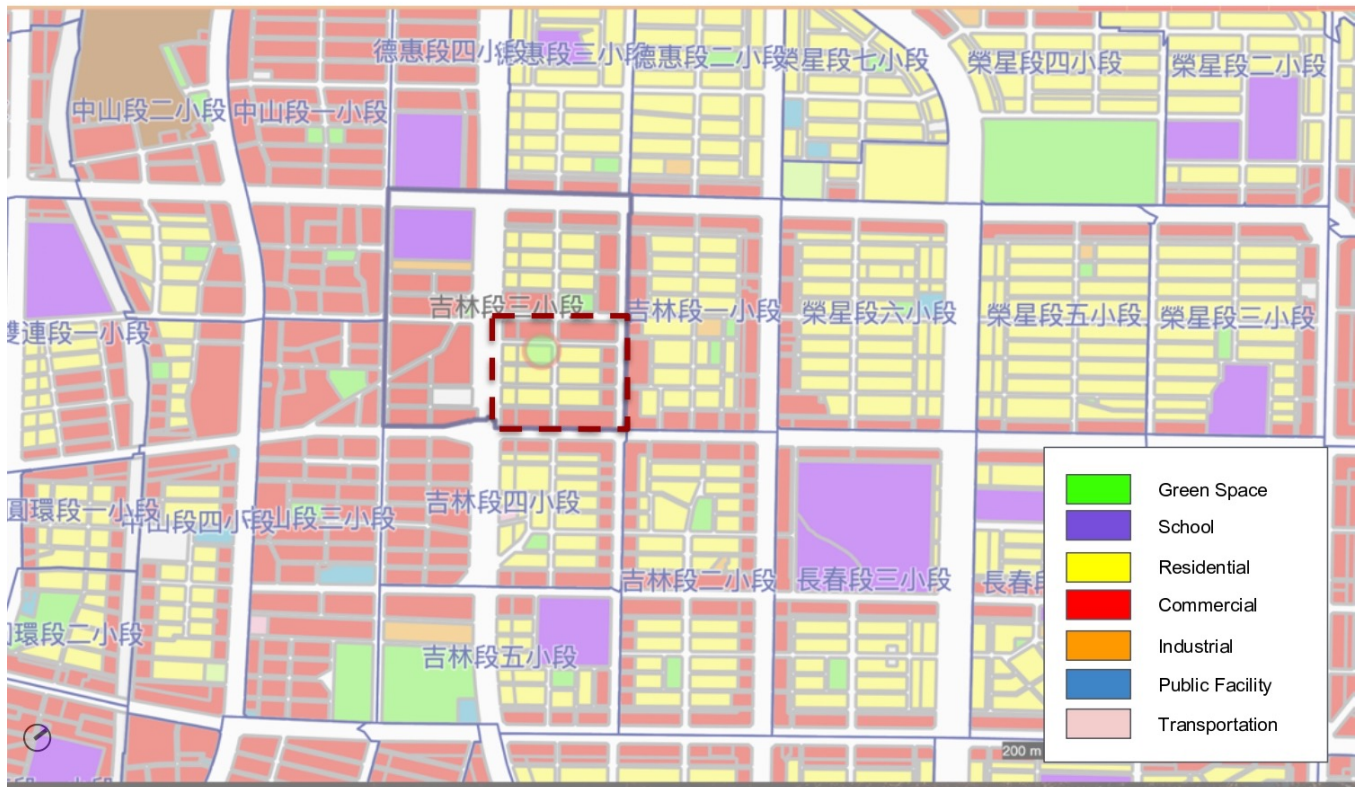


Source: Taipei City Urban Planning Commission

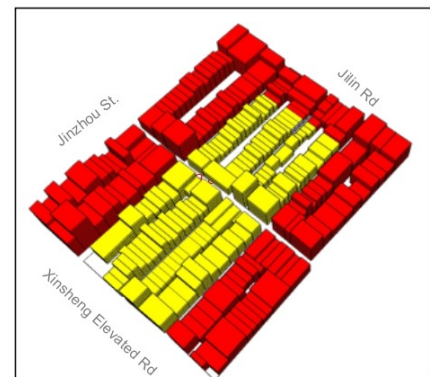
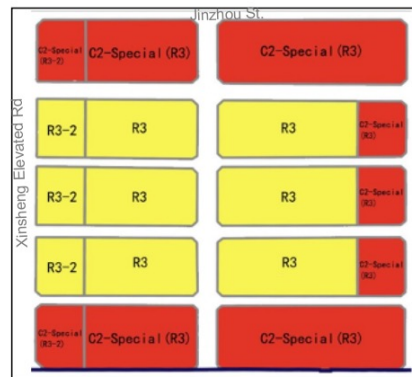


How to change zoning?

- **Individual** - Land owners who have land that matching requirements can apply for zoning modification (to Urban Planning Commission)
- **Authority** - Taipei Urban Planning Commission enact Urban Redevelopment Plan to rezone areas



Source: Taipei City Urban Planning Commission

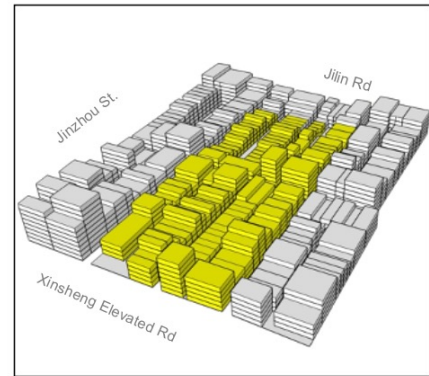
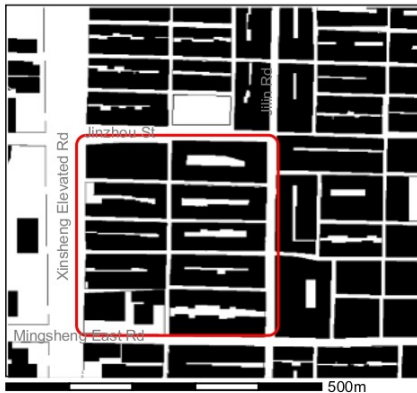


SUMMARY OF ZONING REGULATIONS *(See Appendix for supporting research)*

1	ZONING DISTRICTS	R3	R3-2	C2-Special (R3)	C2-Special (R3-2)
2	LAND USE	Residential*	Residential*	Commercial*	Commercial*
3	FAR	2.25	4.00	2.25	4.00
4	SITE COVERAGE	45-50%	45-50%	45-50%	45-50%
5	SETBACKS	Front: 3m, Rear: 2.5m, Side:3m			
6	HEIGHT	4 Floors			

* Mix used are allowed, mostly are in first floor

Source: Taipei City Urban Planning Commission



SUMMARY OF ZONING REGULATIONS (See Appendix for supporting research)

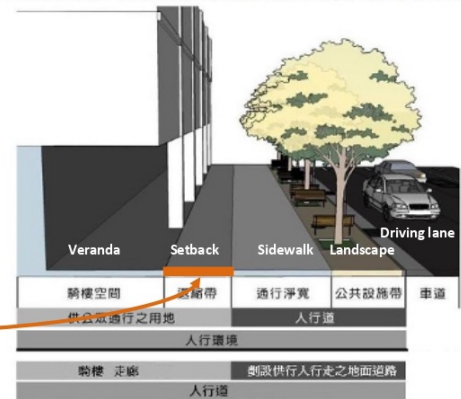
1	ZONING DISTRICTS	R3	R3-2
2	LAND USE	Residential*	Residential*
3	FAR	2.25	4.00
4	SITE COVERAGE	45-50%	
5	YARD DEPTH (SETBACK)**	Front: 3m, Rear: 2.5m, Side: 3m **	
6	HEIGHT	minimum: 4	

Source: Taipei City Urban Planning Commission; Bureau of Civil Affairs

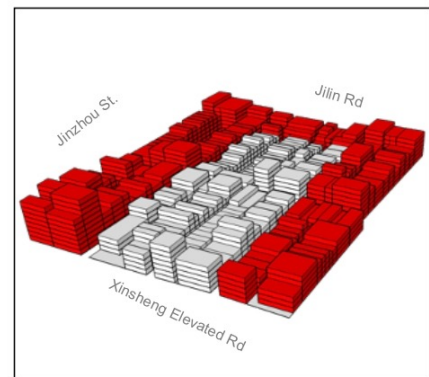
* Mixed use are allowed.

** Setbacks and veranda can be each other's alternative in some residential districts

* 內政部營建署 都市本交通道路規劃設計手冊(第二版 2018年11月)



* 道路交通管理處罰條例第3條第3項



SUMMARY OF ZONING REGULATIONS (See Appendix for supporting research)

1	ZONING DISTRICTS	C2-Special (R3)	C2-Special (R3-2)
2	LAND USE	Commercial*	Commercial*
3	FAR	2.25	4.00
4	SITE COVERAGE	45-50%	
5	YARD DEPTH (SETBACK)	Front: 3m, Rear: 2.5m, Side: 3m	
6	HEIGHT	4 Floors	4 Floors

Source: Taipei City Urban Planning Commission; Bureau of Civil Affairs

* Mixed use are allowed.

** Setbacks and veranda can be each other's alternative in some residential districts



Veranda

Sidewalk

CASE STUDY TAIPEI – ZHONGSHAN	SECTION 4] ZONING ANALYSIS	TITLE 4.3] EVALUATION
<p>PROS</p> <ul style="list-style-type: none"> • Streets: A crisscross, hierarchical road network make the neighborhood walkable • Buildings : Regulations encourage to take advantage of green roof to address water issue • Open space: <ul style="list-style-type: none"> - Green space are accessible within 500m (Jinzhou Park) - In front of the shops on the crossroads, a small area can be used for informal interaction • Climate adaptation: The terraces and roofs of buildings should be greened, and the greening area should reach 50%. 		<p>Cons</p> <ul style="list-style-type: none"> • Street: Trash and other stuff piles up on the lanes; Does not meet current requirement about setback • Parking: Delimit parking areas on the road, compressing motor vehicles use, pedestrian use space • Building: cannot ensure sufficient sunlight; D/H is not comfortable • Veranda: Regulations are not clear
CASE STUDY TAIPEI – ZHONGSHAN	SECTION 4] ZONING ANALYSIS	TITLE 4.4] RECOMMENDATIONS

Environmentally

- **Green space**
Evaluate buildings based on conditions regarding building safety, building age, land suitability. If buildings are in a dangerous condition, then consider transforming buildings into a green space
- **Veranda**
Veranda affects the load-bearing of the building, stipulating the width of the veranda and building requirements; promote urban style, highlighting the pedestrian space under the veranda
- **Sunlight**
For buildings located inside the neighborhood, add special review for adding floor

Economically

- **Setback**
Improve setback regulations to make gourmet business district (including food vendors and food stores) more attractive via allowing adequate space

5A] APPENDIX - BIBLIOGRAPHY

REFERENCES:

- Department of Urban Development, Taipei City. (2017). Urban Design Guidelines for the Public Housing Project of Jinzhou Street, Zhongshan District. <https://www.udd.gov.taipei/assets/162-8555/Documents/%E4%B8%AD%E5%B1%B1%E5%8D%80%E9%8C%A6%E5%B7%9E%E8%A1%97%E9%83%BD%E5%B8%82%E8%A8%AD%E8%A8%88%E6%BA%96%E5%89%87.pdf>
- Department of Urban Development, Taipei City. (2021). 5E-Oriented Development by Integration and Utilization of Urban Buildings and Land Use in Taipei City. <https://www.udd.gov.taipei/events/f3gxcu9-10635>
- Lu, Z. (2016). The Study on Shaping Strategy of Livable Streets of Taipei Based on Inclusion. Master Thesis of South China University of Technology
- Lv, C, T., et al. (2017). Thirty Years of Regulatory Detailed Planning: Gains and Losses, and Prospects. *City Planning Review: Annual Conference Forum*. Vol 41(3): 110-116
- Taipei City Government. (2011). Taipei City Land Use Zoning Control Autonomous Ordinance. http://www.laws.gov.taipei/lawsystem/wfLaw_ArticleContent.aspx?LawID=P13B1002-20110722&RealID=13-02-1002&PN=ALL
- Taipei City Government. (2018). Comprehensive review (main plan) of the Zhongshan District Urban Plan in Taipei City. <https://www-ws.gov.taipei/Download.ashx?u=LzAwMS9VcGxvYWQvMzczL3JlbGZpbGUvMTg5NzAvODA1NzMyNC9iYzYxZjcwOC0yZjllLTRjYTETyJl3NC1iNDM2OGVhMzQ0ODcucGRm&n=OC7kuK3IsbHjYDpgJrmqgLkuLvopoHoqljnlavmm7go5YWws5bGV54mlKS5wZGY%3D&icon=.pdf>
- Taipei City Government. (2018). Comprehensive review (detailed plan) of the Zhongshan District Urban Plan in Taipei City. [http://www.udd.taipei.gov.tw/overall-review/documents/district_3/1070928%E4%B8%AD%E5%B1%B1%E5%8D%80%E9%80%9A%E6%AA%A2%E7%B4%B0%E8%A8%88\(%E5%85%AC%E5%B1%95%E6%9D%BF\).pdf](http://www.udd.taipei.gov.tw/overall-review/documents/district_3/1070928%E4%B8%AD%E5%B1%B1%E5%8D%80%E9%80%9A%E6%AA%A2%E7%B4%B0%E8%A8%88(%E5%85%AC%E5%B1%95%E6%9D%BF).pdf)
- Taipei Bureau of Civil Affairs. (2018). Urban People-based Traffic Road Planning and Design Manual (2nd edition). <https://myway.cpami.gov.tw/wiki/wikimain>