

Designing for a Resistant Resilient Regenerative **Nagasaki**

Hannah Leung | MCP-MSRED 2025 | May 14th 2024

Spring 2024 | 11.S940 Resilient Cities of Japan

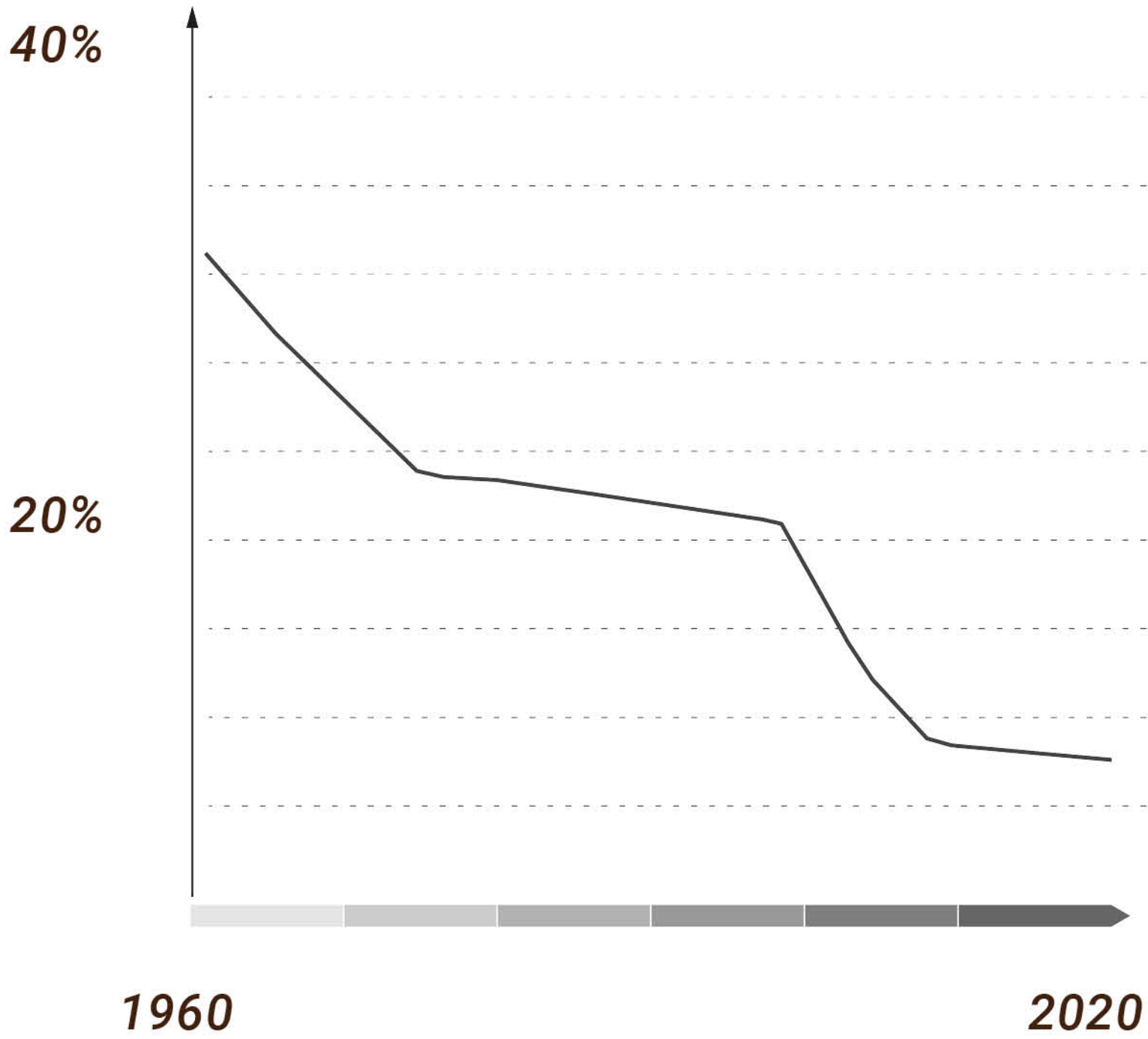
01	Context
02	Research Intent
03	Proposed Framework
04	Recommendations

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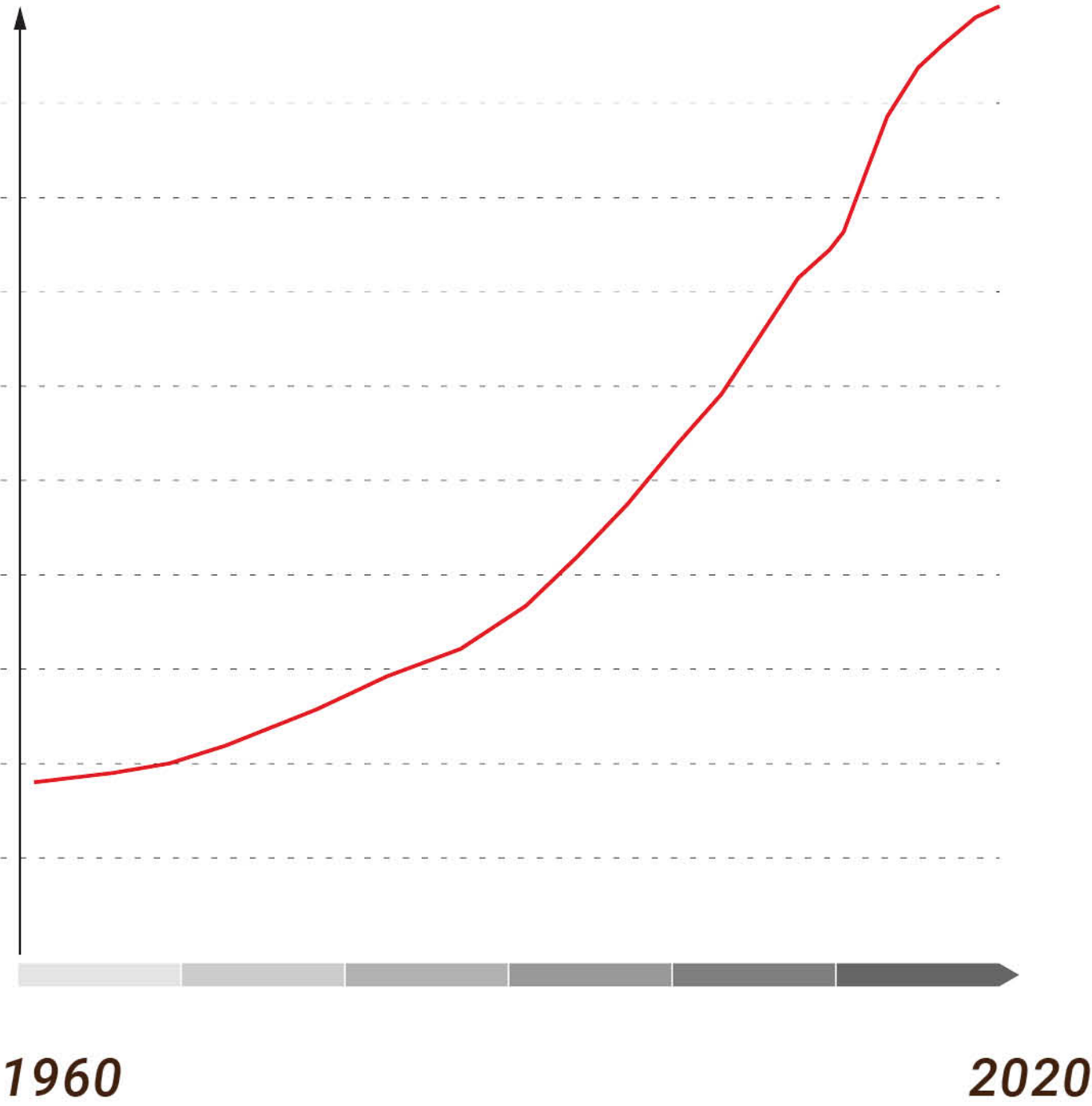
Shrinking Japan

*Rural Population of Japan
(population living outside of metropolitan areas)*

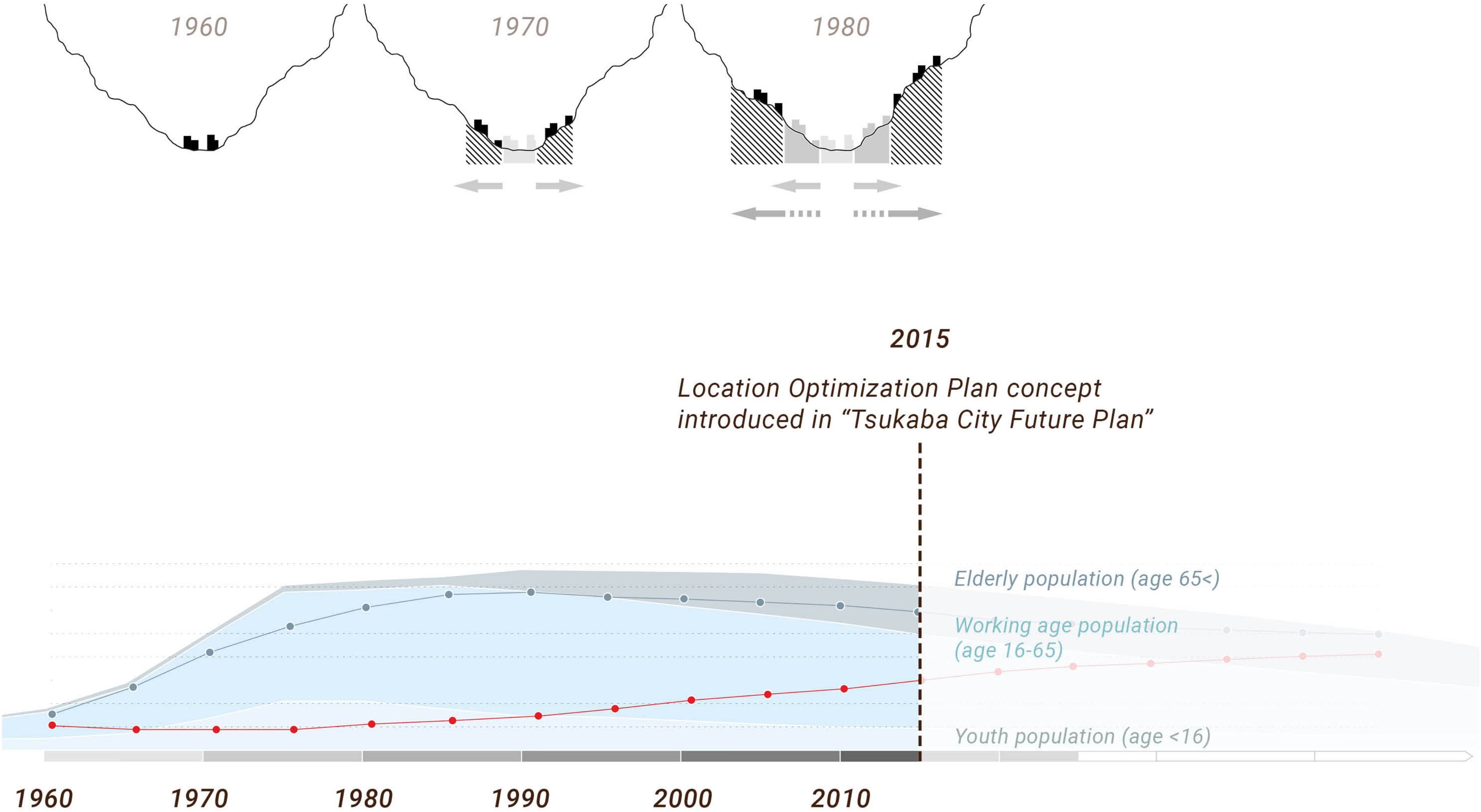


*Age-Dependency ratio of Japan
(population age 65+ / working population)*

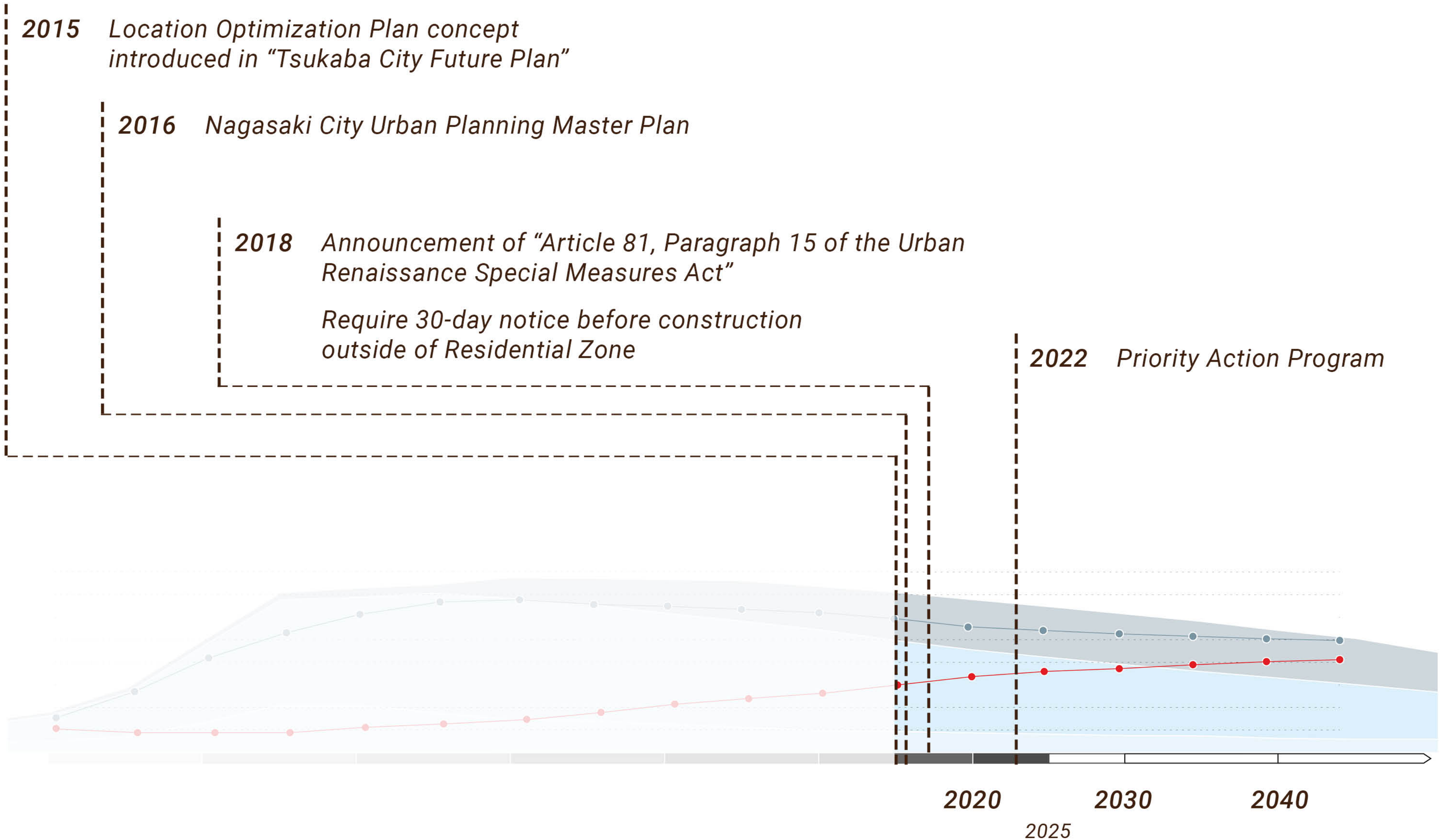
Globally ranked 2nd



Nagasaki's Development Timeline + Population trends

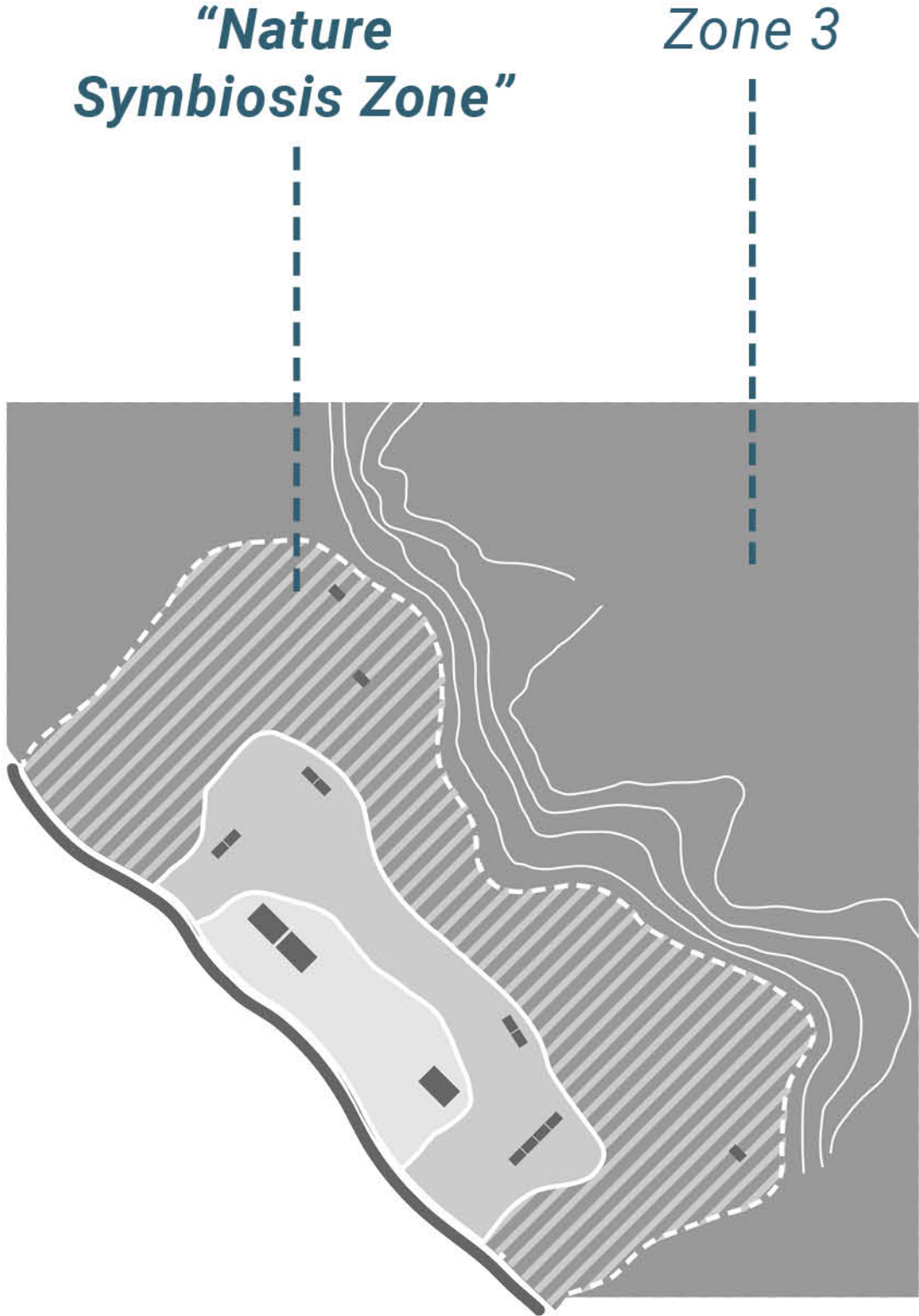


Nagasaki's Development Timeline + Population trends



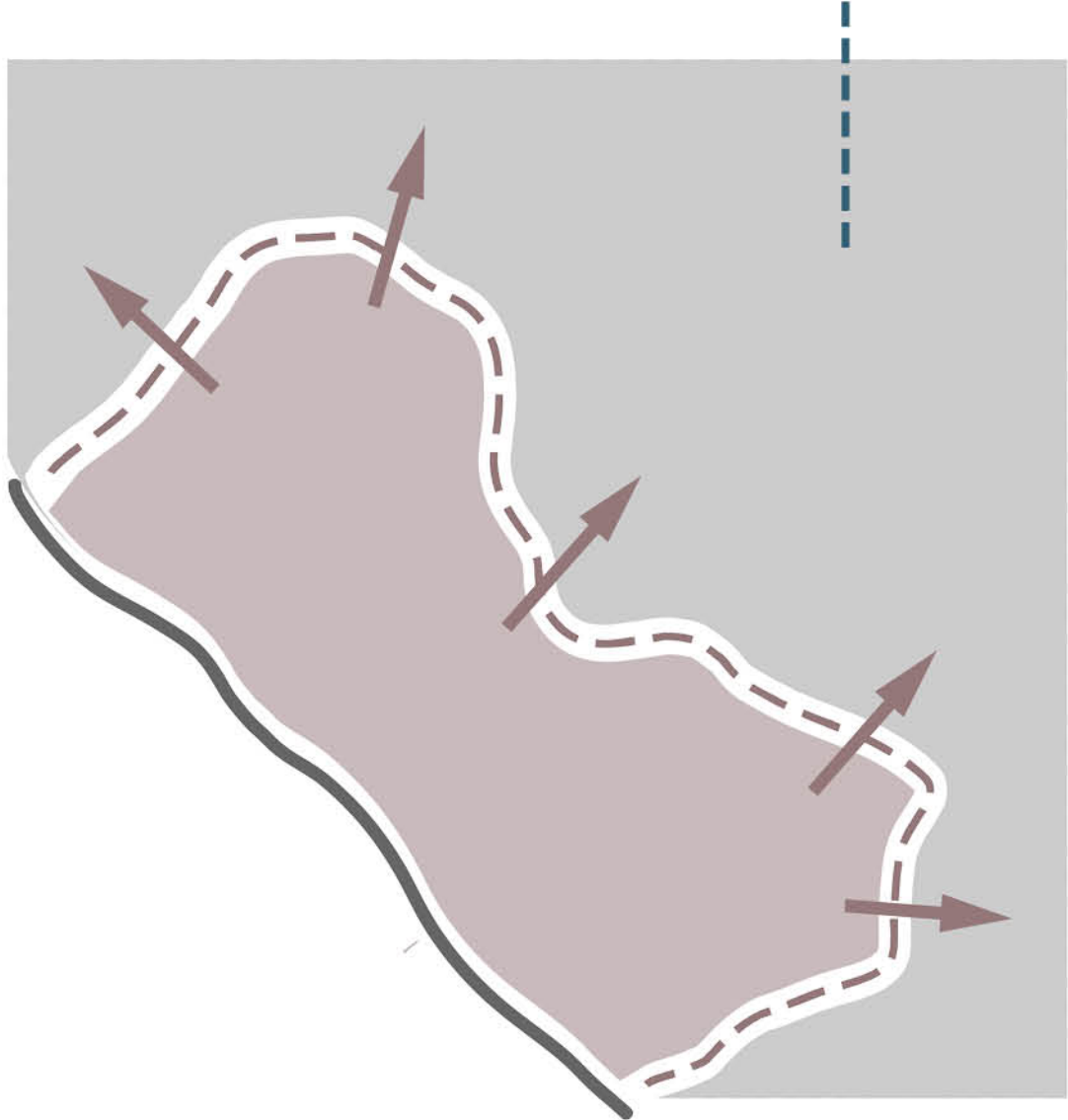
Location Optimization Plan

Location Optimization Plan ("LOP")



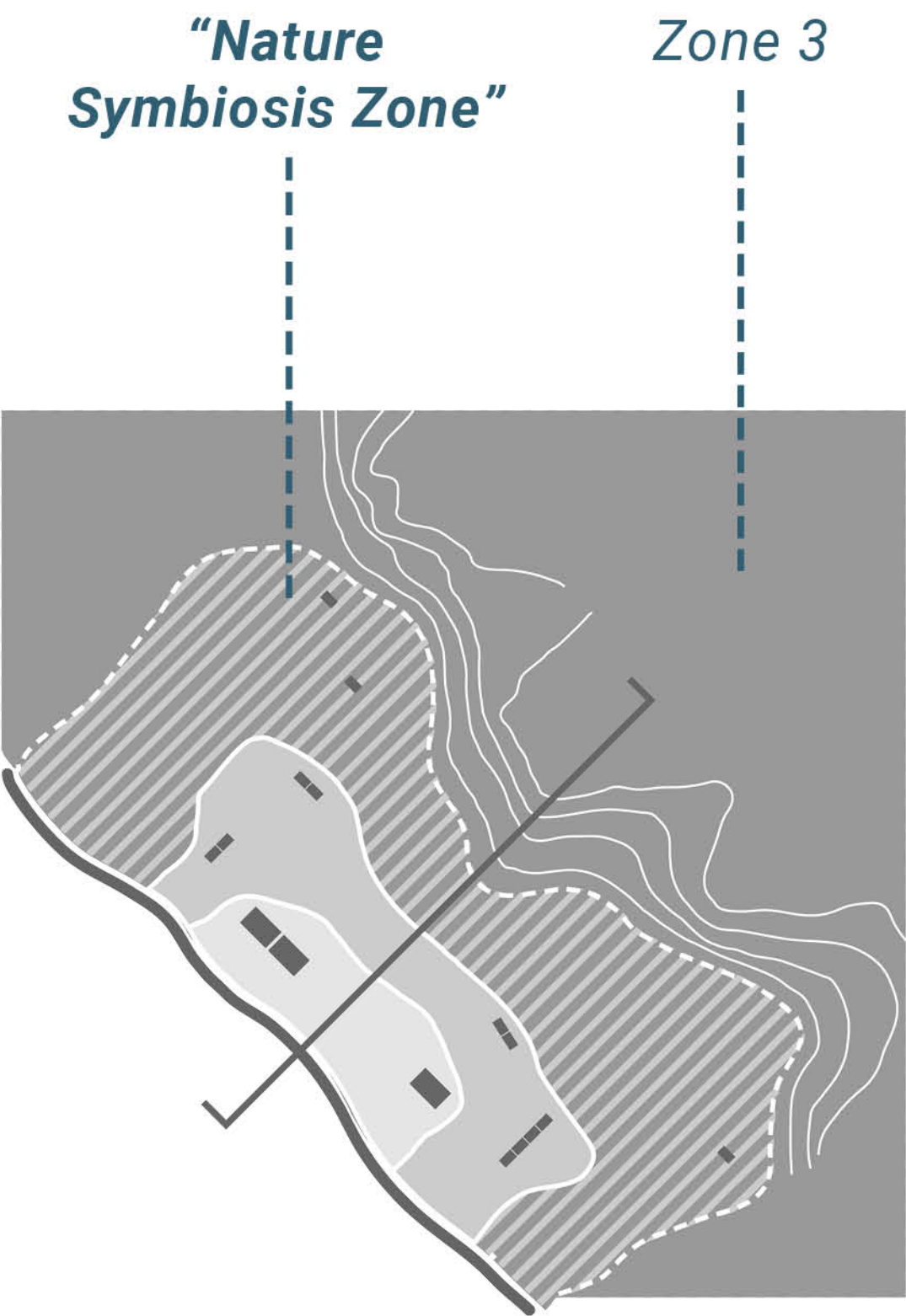
Economic Growth to support a shrinking economy / city / population

High Risk Zone
 Aging Infrastructure
 (Retaining walls, geotechnical support etc.)
 Outdated roads
 (servicing, evacuation, emergency etc.)



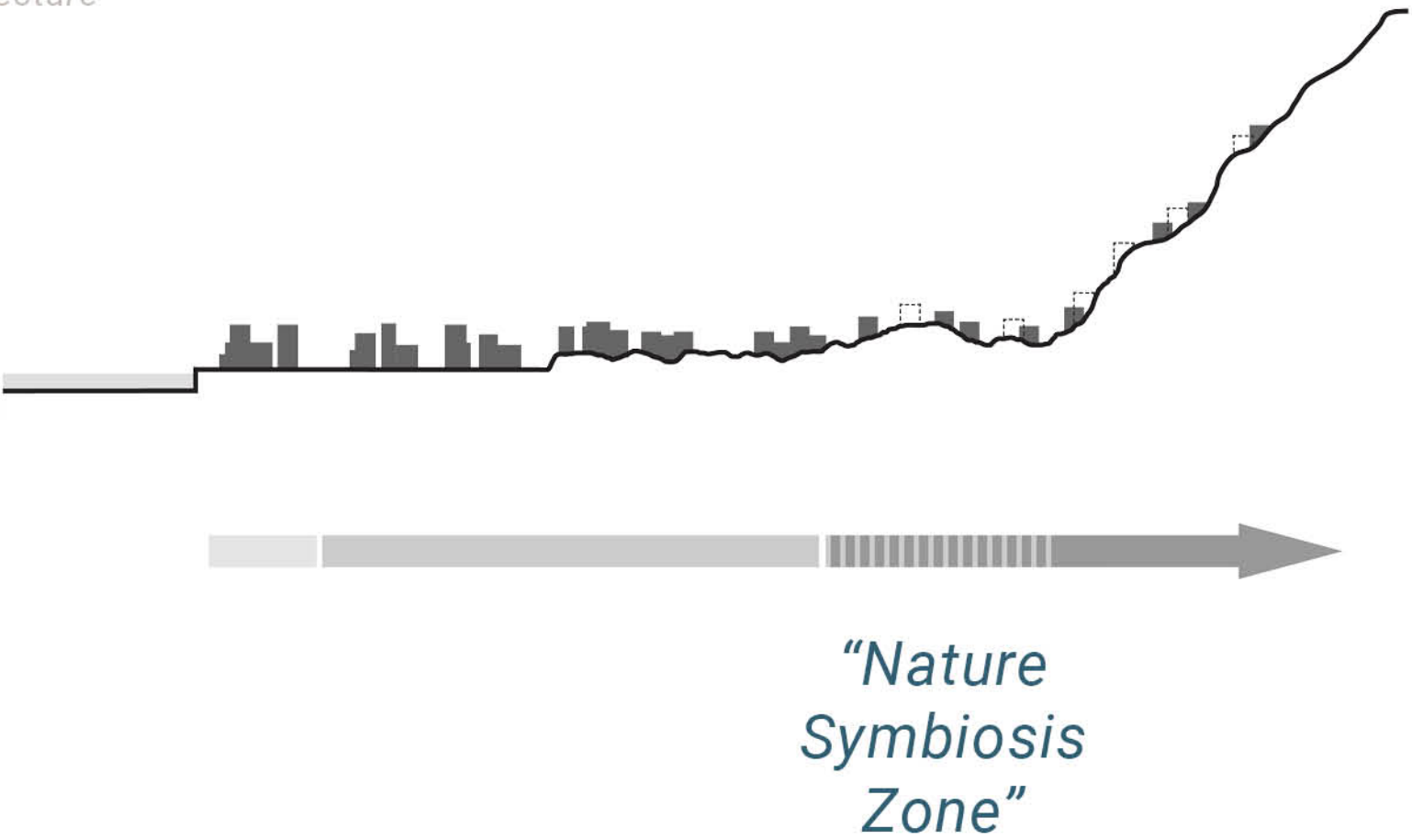
Urban Sprawl + Nature Symbiosis Zone

Location Optimization Plan (“LOP”)

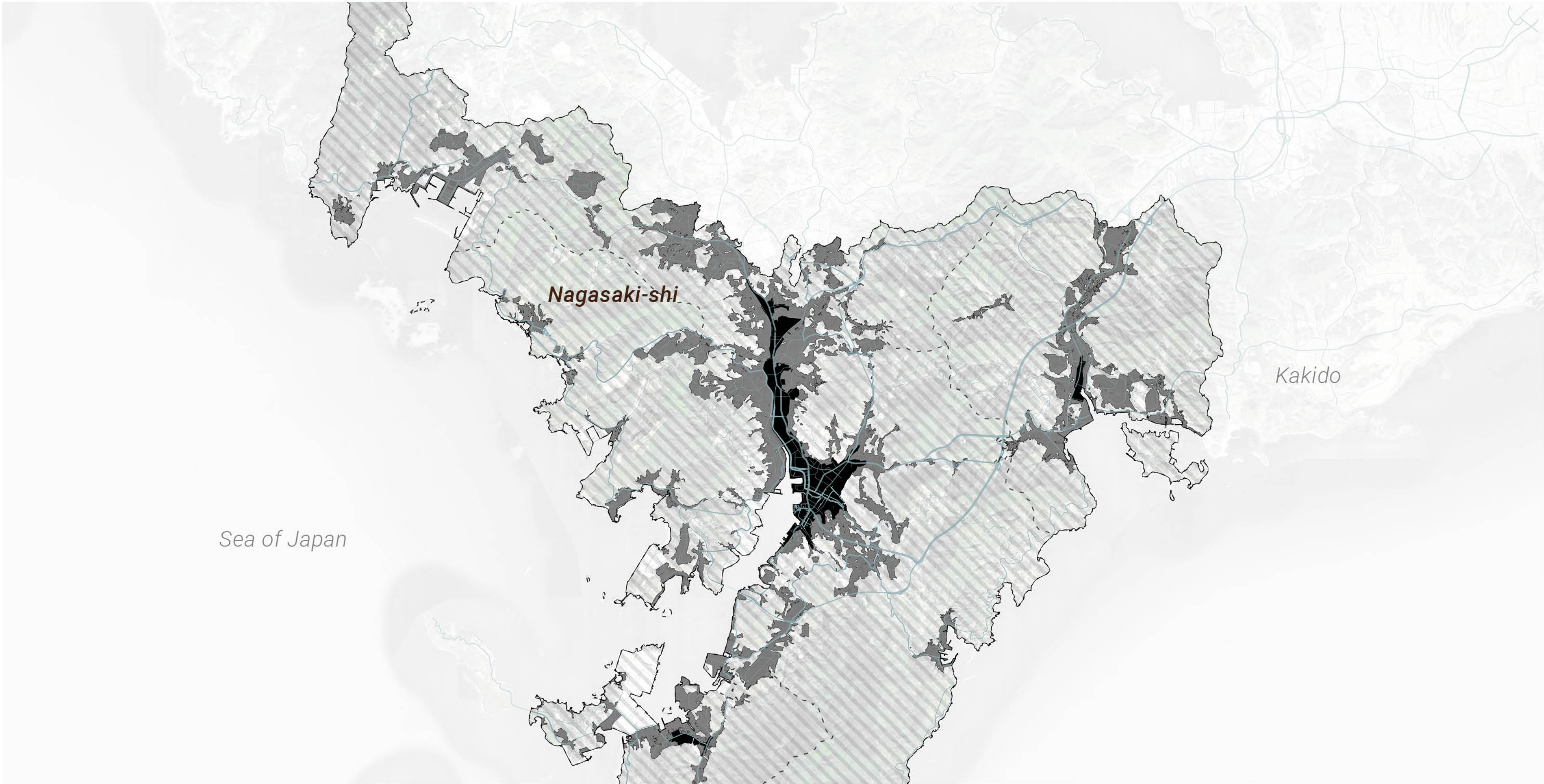


Section - Nagasaki’s Population distribution

% land	8%	69%	18%	13%
population density	81.4	66.0	51.4	29.4
person / hectare				



Urban Sprawl + Nature Symbiosis Zone

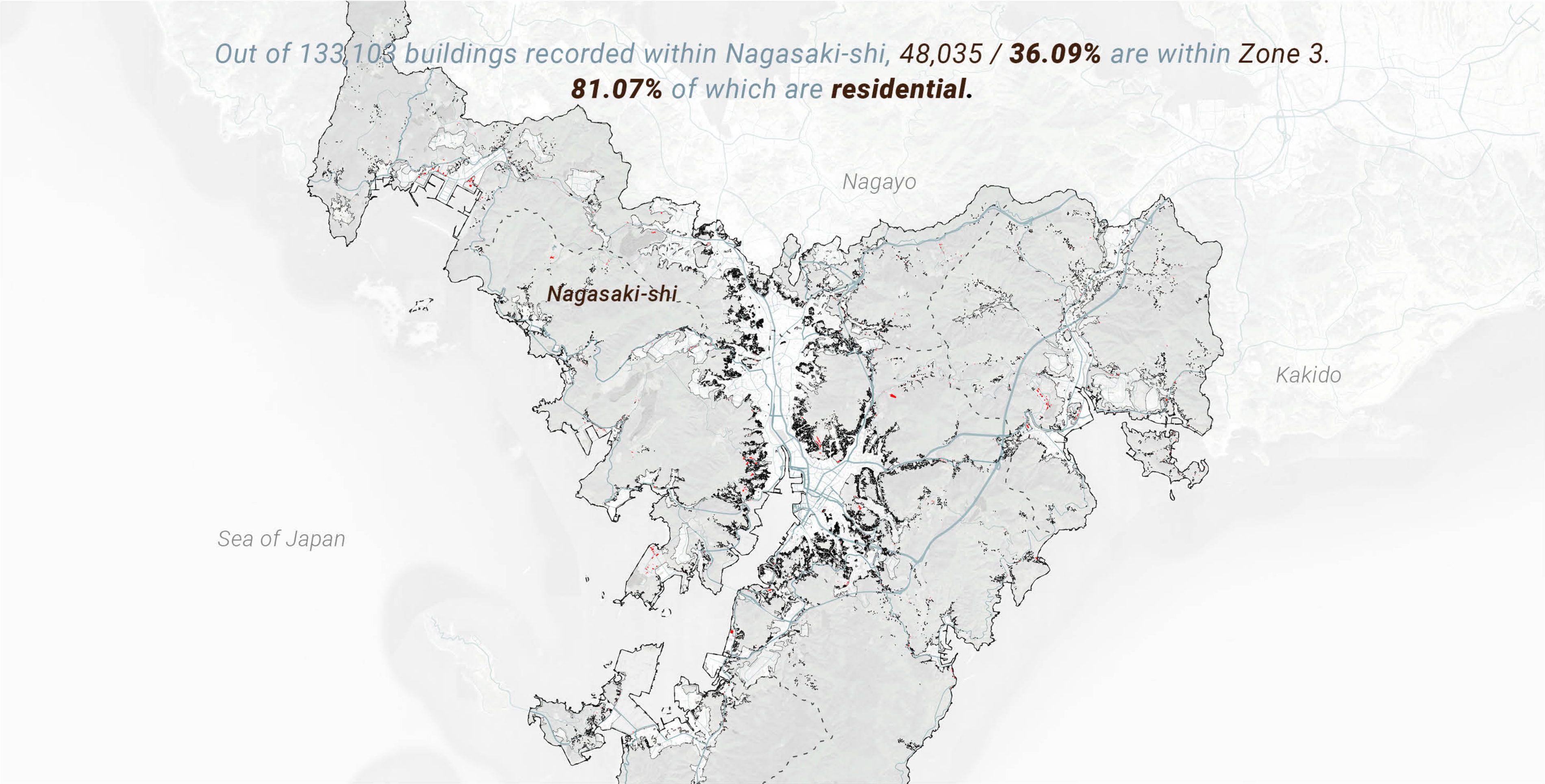


location optimization plan

Zone 1 - Urban Commercial Zone
 Zone 2 - Residential Zone
 Zone 3 - Outside Residential Zone

 5km

Urban Sprawl + Nature Symbiosis Zone



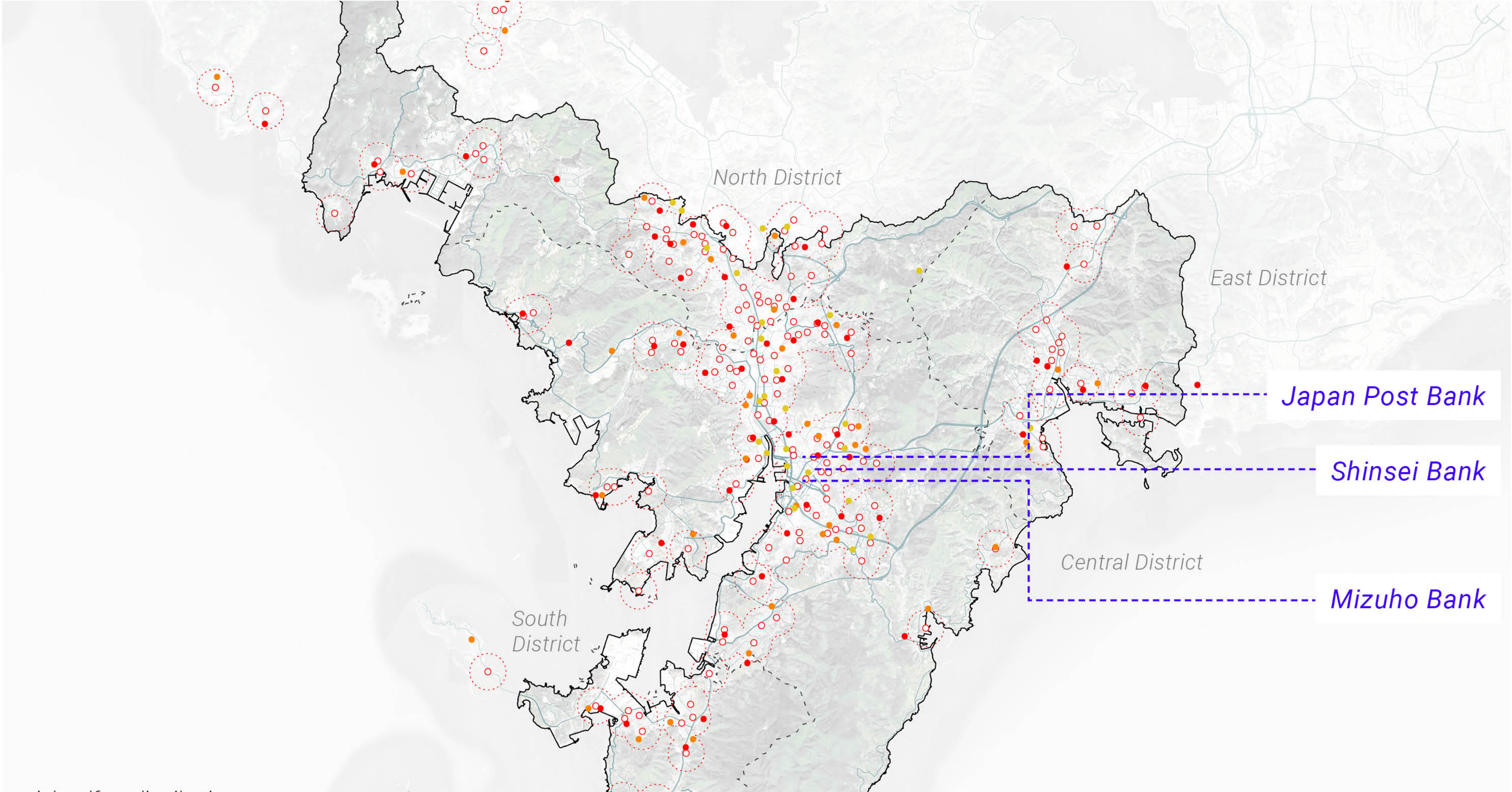
location optimization plan

 Zone 3 - Outside Residential Zone

 Residential Buildings within Zone 3

 5km

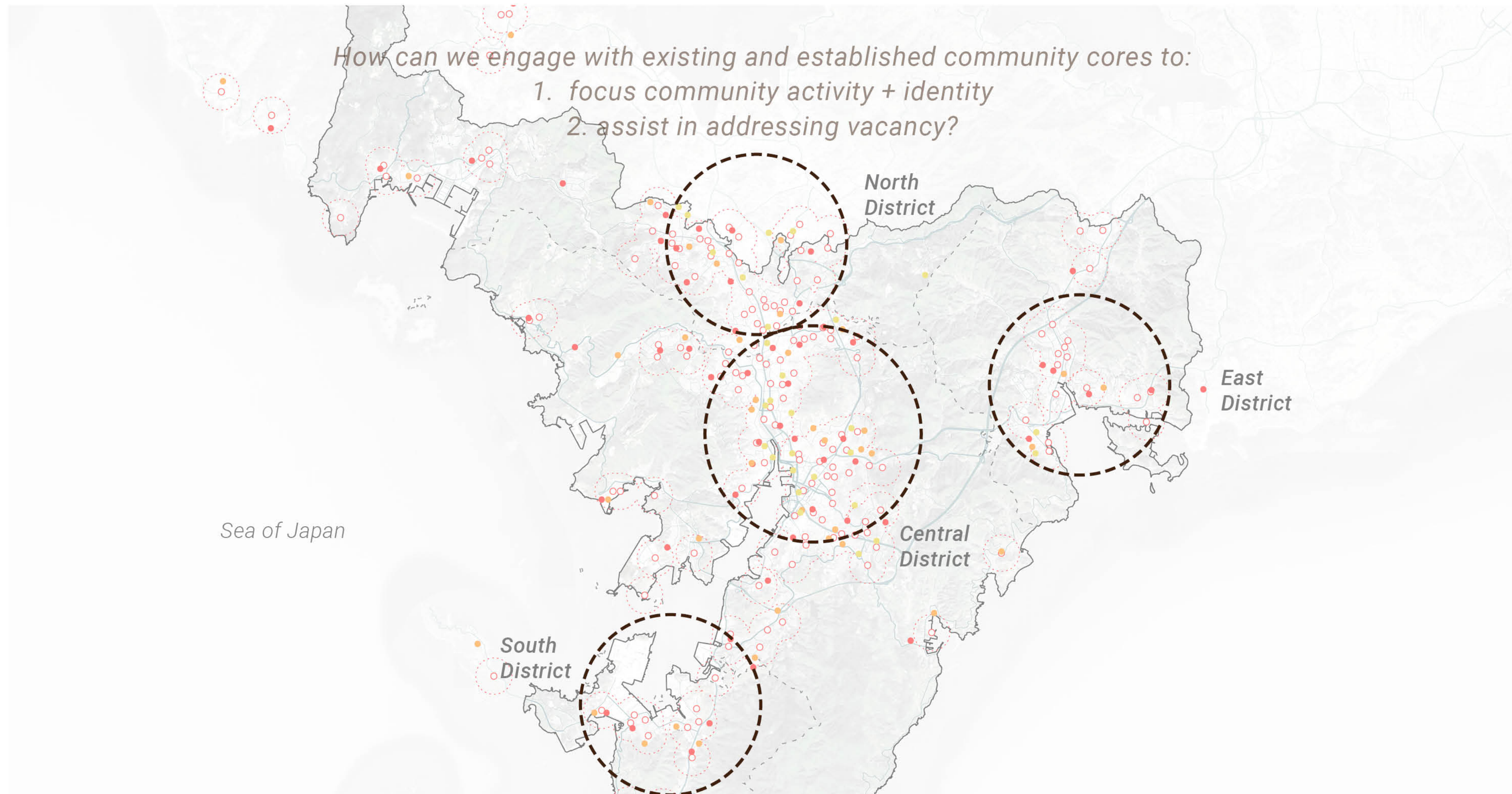
Nagasaki's Social Welfare Distribution



social welfare distribution

- elderly walking radius
- childcare facilities
- primary schools
- secondary schools
- higher education
- 5km

Nagasaki's Social Welfare Distribution



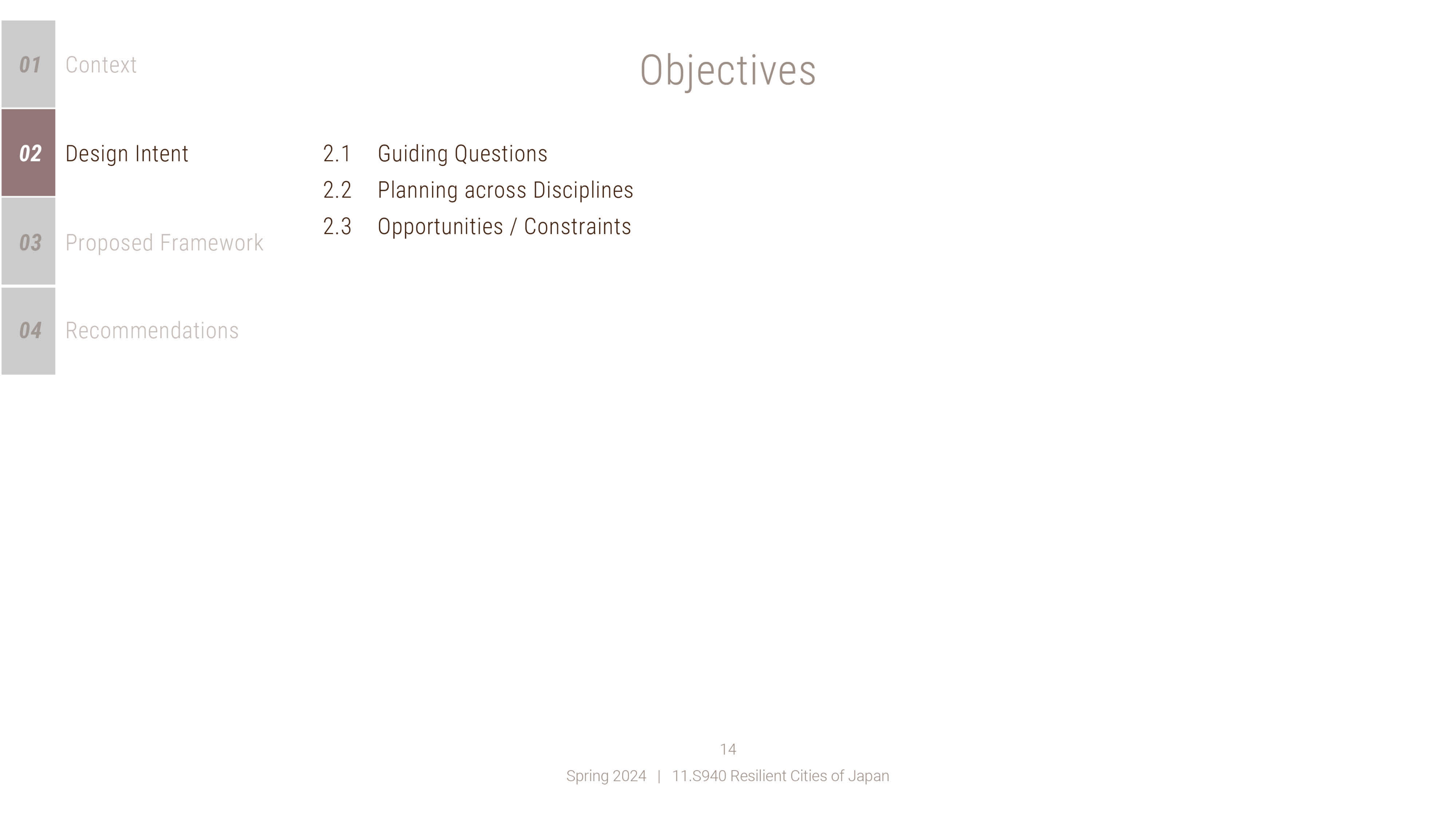
5km

Site Visit / Key Takeaways

Vacant Lots & Parcels , Challenging Topography , Poor Road Infrastructure (General Accessibility for Services, Emergency)



If existing institutional / government strategies (such as the Location Optimization Plan) are ineffective, how can we engage with other actors (such as the real estate market) to scale up community efforts?



Objectives

01

Context

02

Design Intent

2.1 Guiding Questions

2.2 Planning across Disciplines

2.3 Opportunities / Constraints

03

Proposed Framework

04

Recommendations

Site Visit / Key Takeaways

Vacant Lots & Parcels , Challenging Topography , Poor Road Infrastructure (General Accessibility for Services, Emergency)



*If existing **institutional / government strategies** (such as the Location Optimization Plan) are ineffective, how can we engage with other actors (such as the **real estate market**) to scale up **community efforts**?*

Guiding Questions

2.1



Institutions



Community



Real Estate Market

How can we reframe the Nagasaki's "Nature Symbiosis" zone to combat depopulation?

What are some of government inefficiencies that could be done by community groups or development market?
And in doing so, nurture land stewardship for a more resilient community?

Planning across disciplines

Working alongside existing, local actors to transition mindset around development + encourage foreign (National and International) homeownership



Community

*e.g. Nagasaki-null,
Nagasaki 2045*



長崎都市・景観研究所
Nagasaki Urban and Landscape Laboratory



*Young leaders with aspirations
for sustainable economic
development*

Planning across disciplines



Institutions

e.g. Bank of Japan,
Nagasaki-shi Planning Department



City department; guidelines,
risk assessment & regional
development plans

*pictured: Zero Carbon City, Development
Plans, Climate Change Plans*



Community

e.g. Nagasaki-null,
Nagasaki 2045



Young leaders with aspirations
for sustainable economic
development



Real Estate Market

e.g. Nagasaki's land
market, property market



Mature development market
with established agencies and
infrastructure

Planning across disciplines



Institutions

*e.g. Bank of Japan,
Nagasaki-shi Planning Department*



*Robust, comprehensive
policies on risk mitigation*
*Incentives to attract
new families (tax break,
funding etc.)*



*Complicated to navigate
as outsider*
*Inefficiency (land bank
takes years)*
Lenient penalty system

Community



Institutions



Real Estate
Market



Planning across disciplines

Community



Institutions



Real Estate Market



Institutions

*e.g. Bank of Japan,
Nagasaki-shi Planning Department*



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Real Estate Market

*e.g. Nagasaki's land
market, property market*



*Easy homeownership
for Japanese nationals*
*Excess supply /
cheap houses*



*Outdated infrastructure
(hence reluctance to take
on Akiya land banks)*
*Difficult for foreigners to
navigate homeownership
and money lending*

Planning across disciplines

Community



Institutions



Real Estate Market



Institutions

*e.g. Bank of Japan,
Nagasaki-shi Planning Department*



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Community

*e.g. Nagasaki-null,
Nagasaki 2045*



*Enthusiastic and active
community groups*



*Efforts contained at
community scale*

*Separated from
government efforts /
initiatives*

*Existing homeowners
resistant to change
(bequest motives, hence
inefficient use of space)*



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Planning across disciplines

Community



Institutions



Real Estate
Market



community engagement

Likes

- Transit Systems
- Convenience**
- Access to Nature

Future aspirations

- Vibrant Community cores
- City for children to grow up in**
- More jobs for younger generations

*General unfamiliarity with development plans,
low proactivity with community (no groups)*



Community

*e.g. Nagasaki-null,
Nagasaki 2045*



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*"Rate your sense of
community where you
live? Are you proud of
where you live?"*

5.4 / 10

Opportunities / Constraints

Community



Institutions



Real Estate Market



Institutions

*e.g. Bank of Japan,
Nagasaki-shi Planning Department*



Robust, comprehensive policies on risk mitigation
Incentives to attract new families (tax break, funding etc.)



Complicated to navigate as outsider
Inefficiency (land bank takes years)
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Community

*e.g. Nagasaki-null,
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Separated from government efforts / initiatives
Existing homeowners resistant to change
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Real Estate Market

e.g. Nagasaki's land market, property market



Easy homeownership for Japanese nationals
Excess supply / cheap houses



Outdated infrastructure (hence reluctance to take on Akiya land banks)
Difficult for foreigners to navigate homeownership and money lending

01	Context	
02	Research Intent	
03	Proposed Framework	<ul style="list-style-type: none">3.1 Project Goals3.2 Framework Overview3.3 Real Estate - Guidebook3.4 Institution - Funding3.5 Community - Spatial Strategy
04	Recommendations	

Project Goals

Establish framework that encourages collaboration and accountability across disciplines



Institutions

Phase out
“Nature Symbiosis Zone” in
Location Optimization Plan.



Community

Ensure community group
established in each district.

Supported transition of
vacant lot ownership to local
community groups.



Real Estate Market

Create guidebook for foreign
investors, families, immigrants
to encourage homeownership.

Community



Institutions



Real Estate
Market



Framework Overview

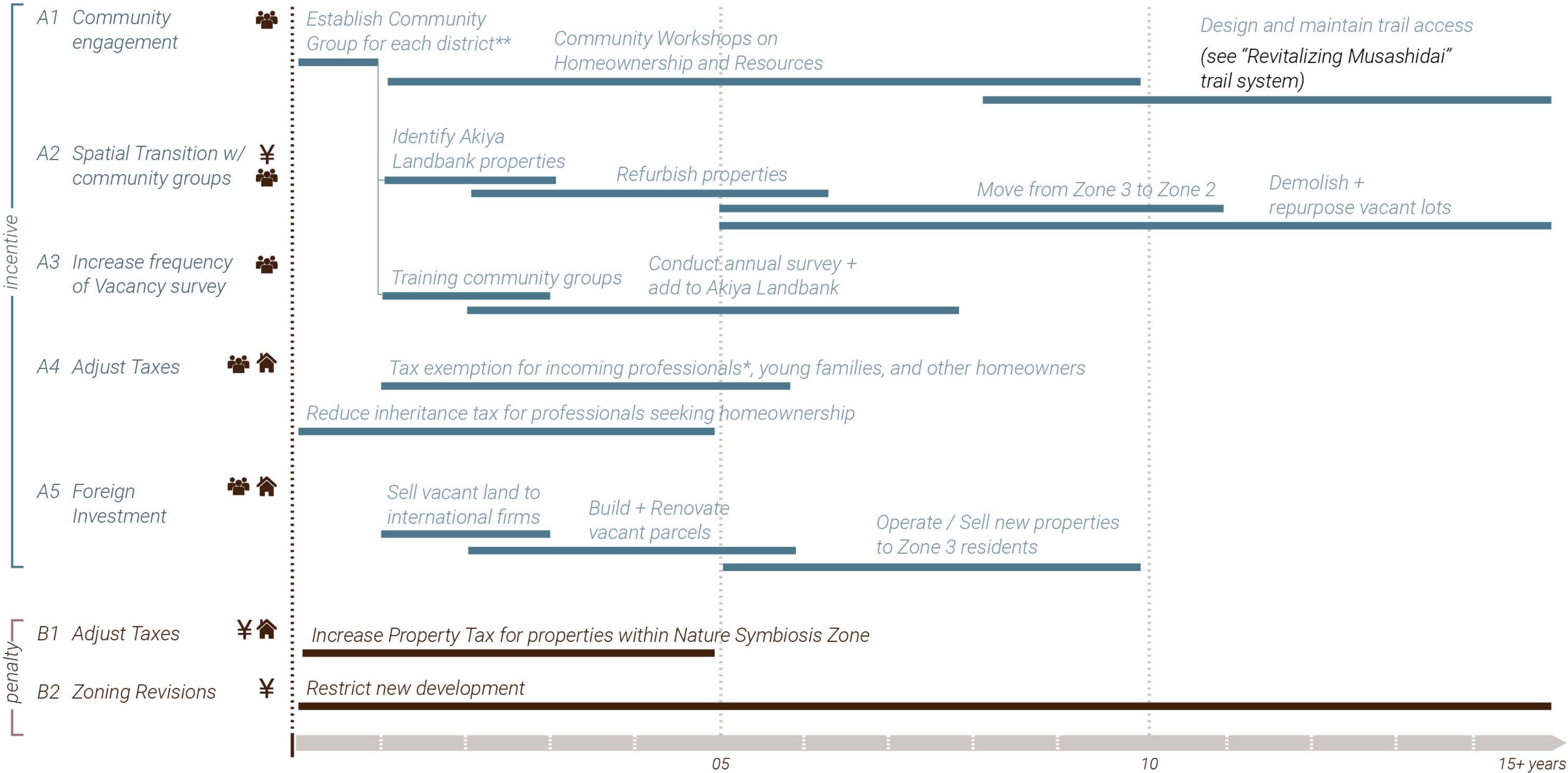
Community



Institutions



Real Estate Market



* only applies to healthcare, service, industry and technological sectors
** if not already established

...but how is it funded?

Community



Institutions



Real Estate
Market



(Year 0-5)

(Year 5 onward)

Adjust Property Tax for
properties within NSZ
 $\text{Appraised value} \times 1/3$

Sell land to established
international firms

Build-Own-Operate-Transfer

Government Budget

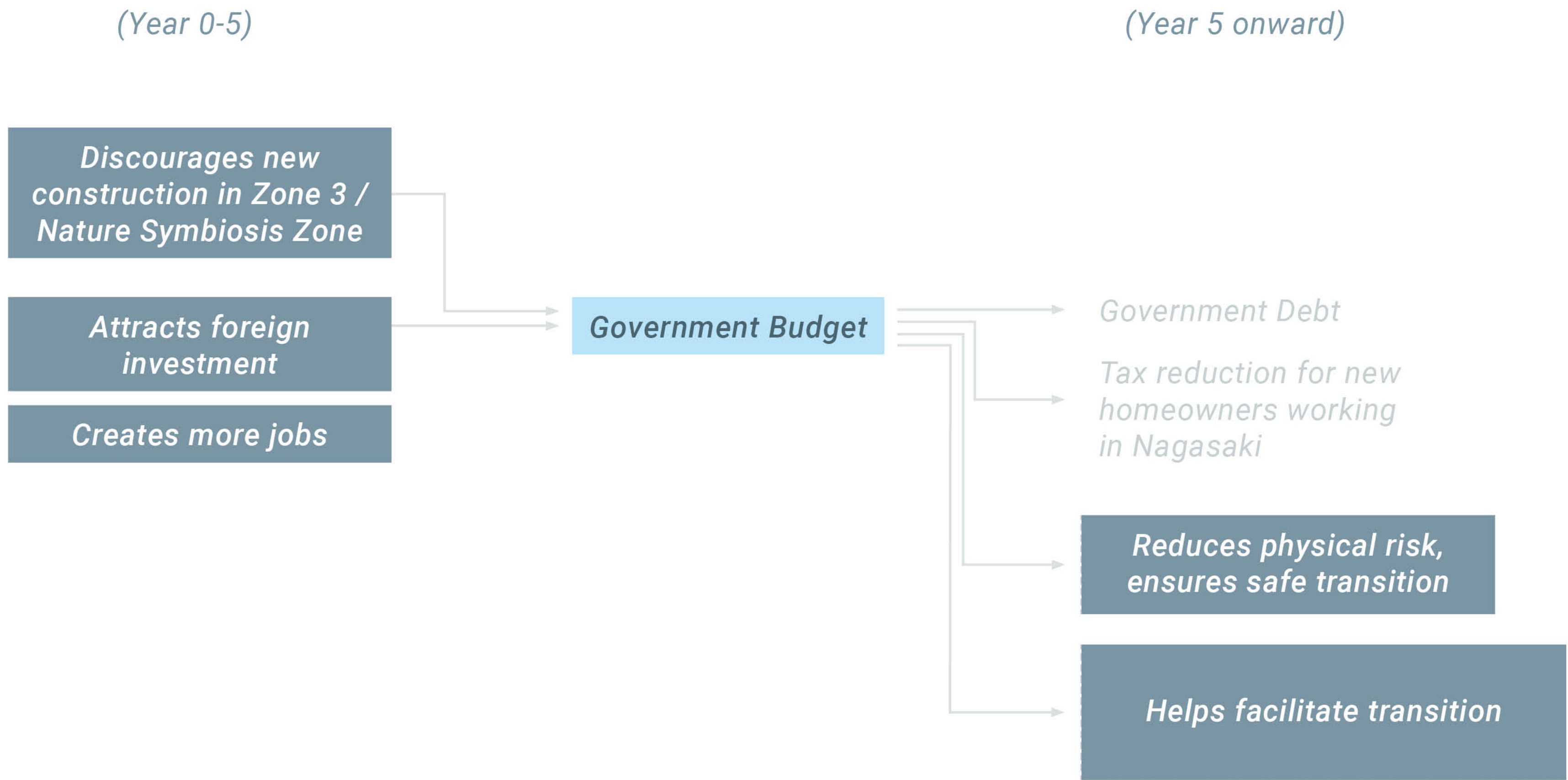
Government Debt

Tax reduction for new
homeowners working
in Nagasaki

Construction Budget:
Prioritize ongoing projects

Civil Engineering Budget
Allocate additional funds (+5%)
to demolition

...but how is it funded?



Community



Institutions



Real Estate Market



Spatial Strategy

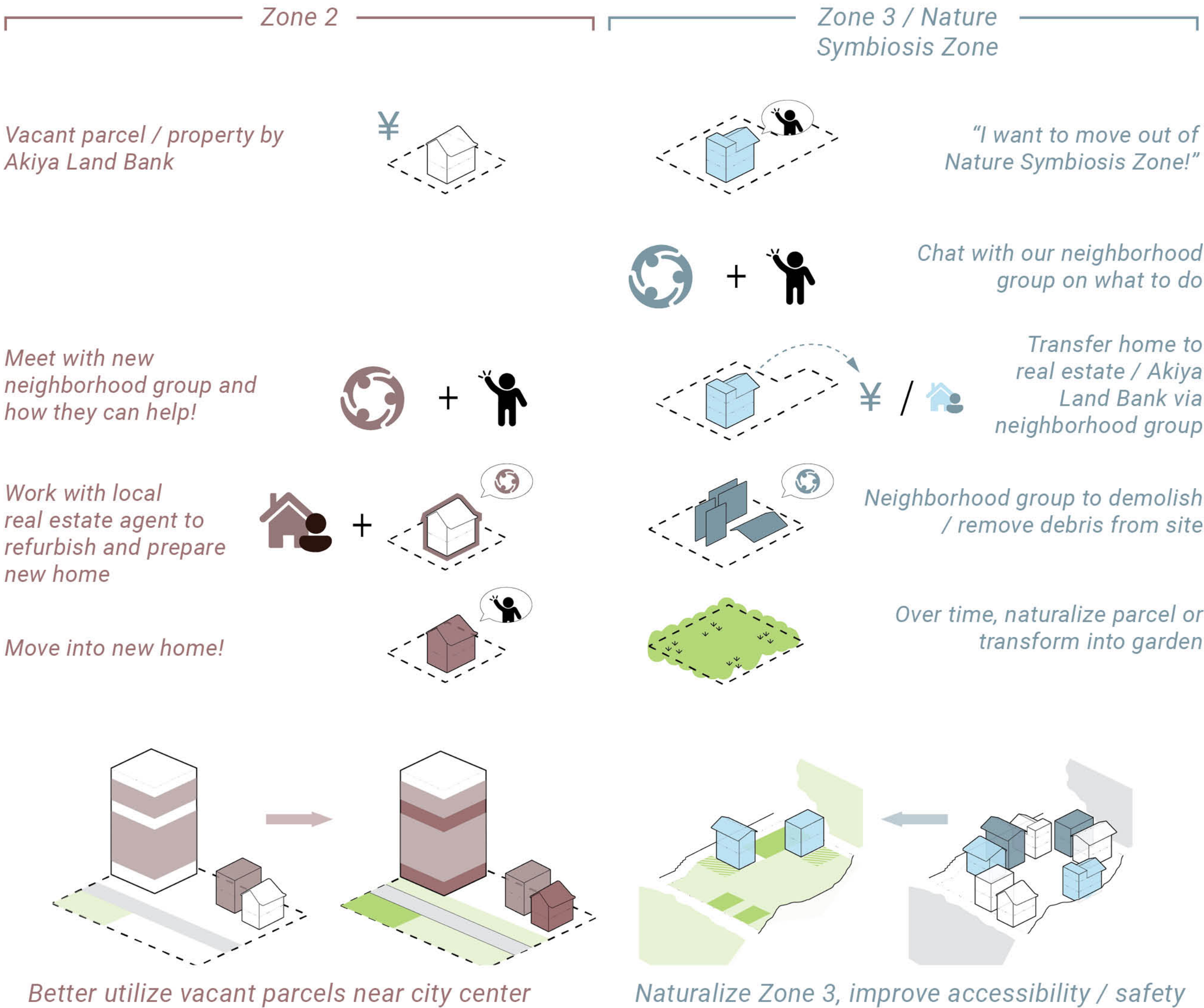
Community



Institutions



Real Estate Market



(This could also apply to business owners, AirBnB hosts, recently popular dankan's, or other

Spatial Strategy

Community



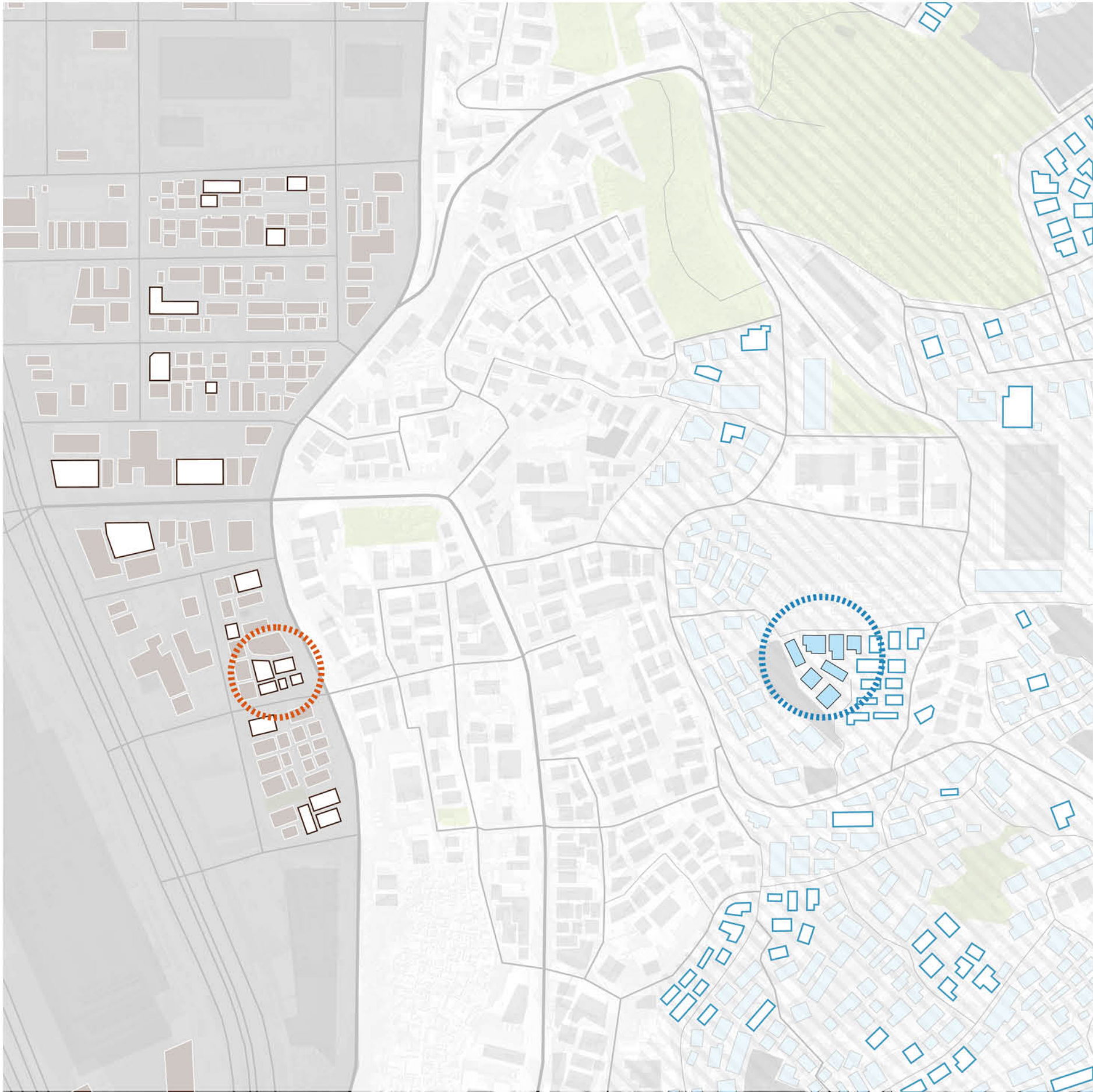
Institutions



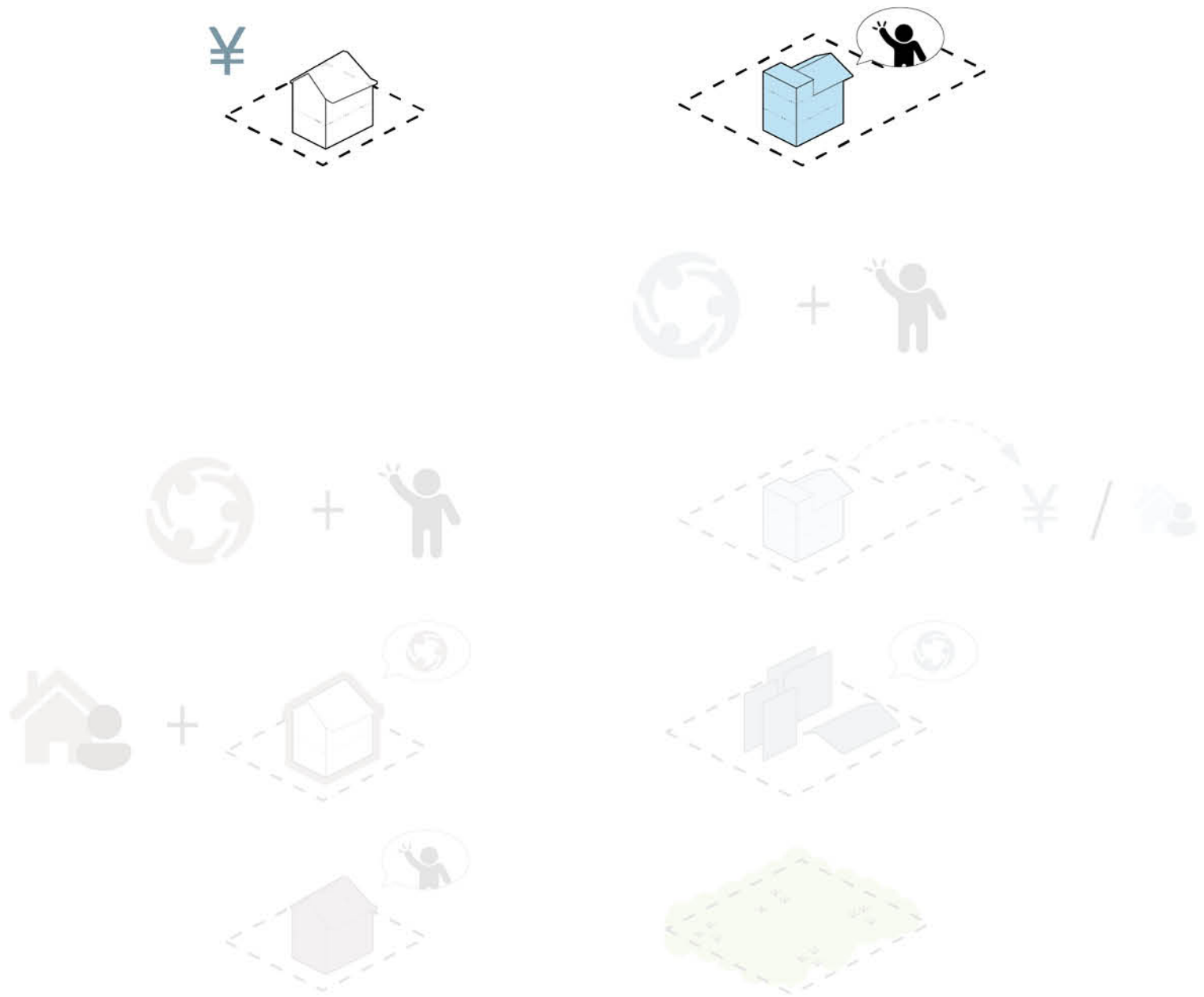
Real Estate
Market



Spatial Strategy



Zone 2 Zone 3



Community



Institutions



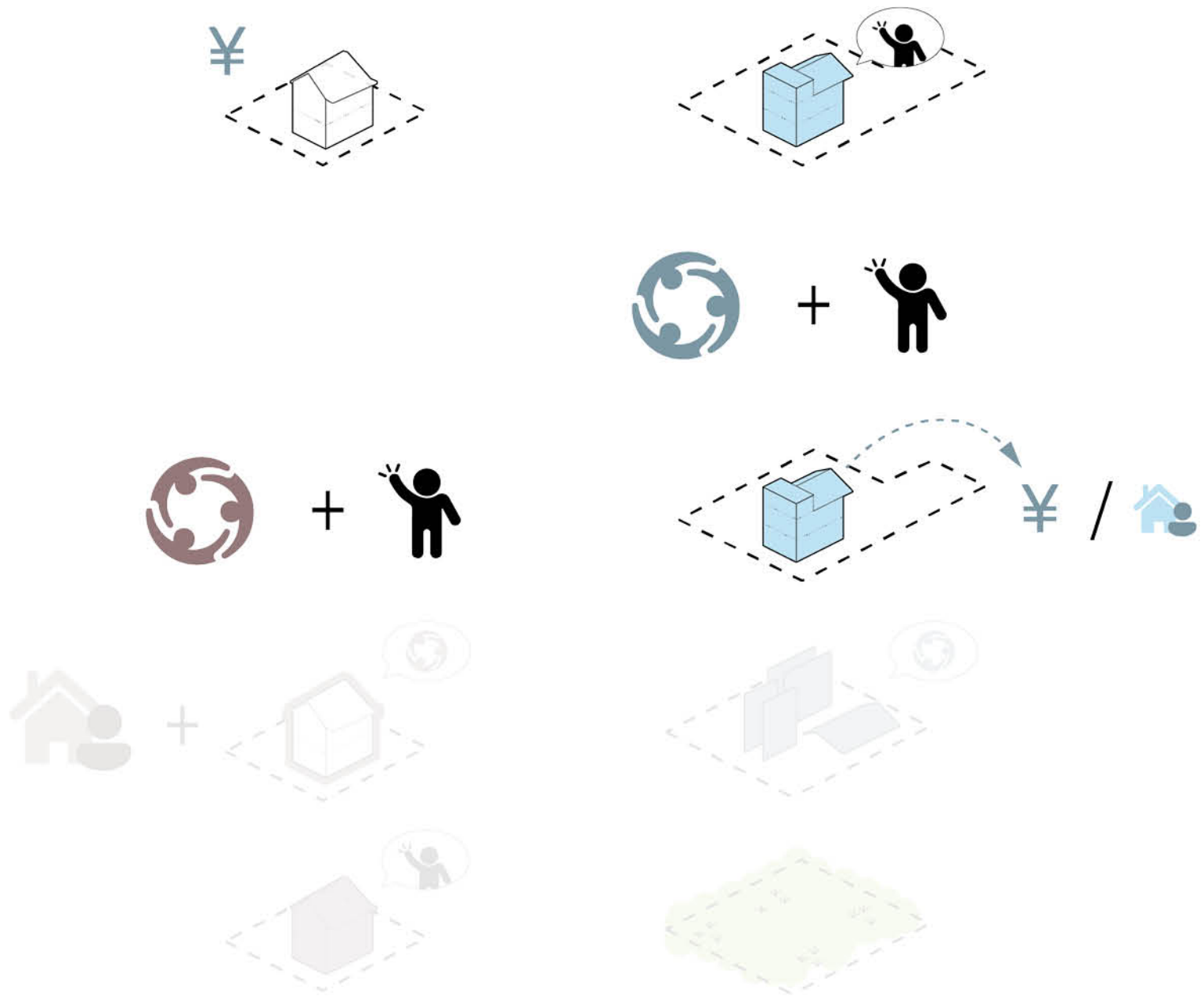
Real Estate Market



Spatial Strategy



Zone 2 Zone 3



Community



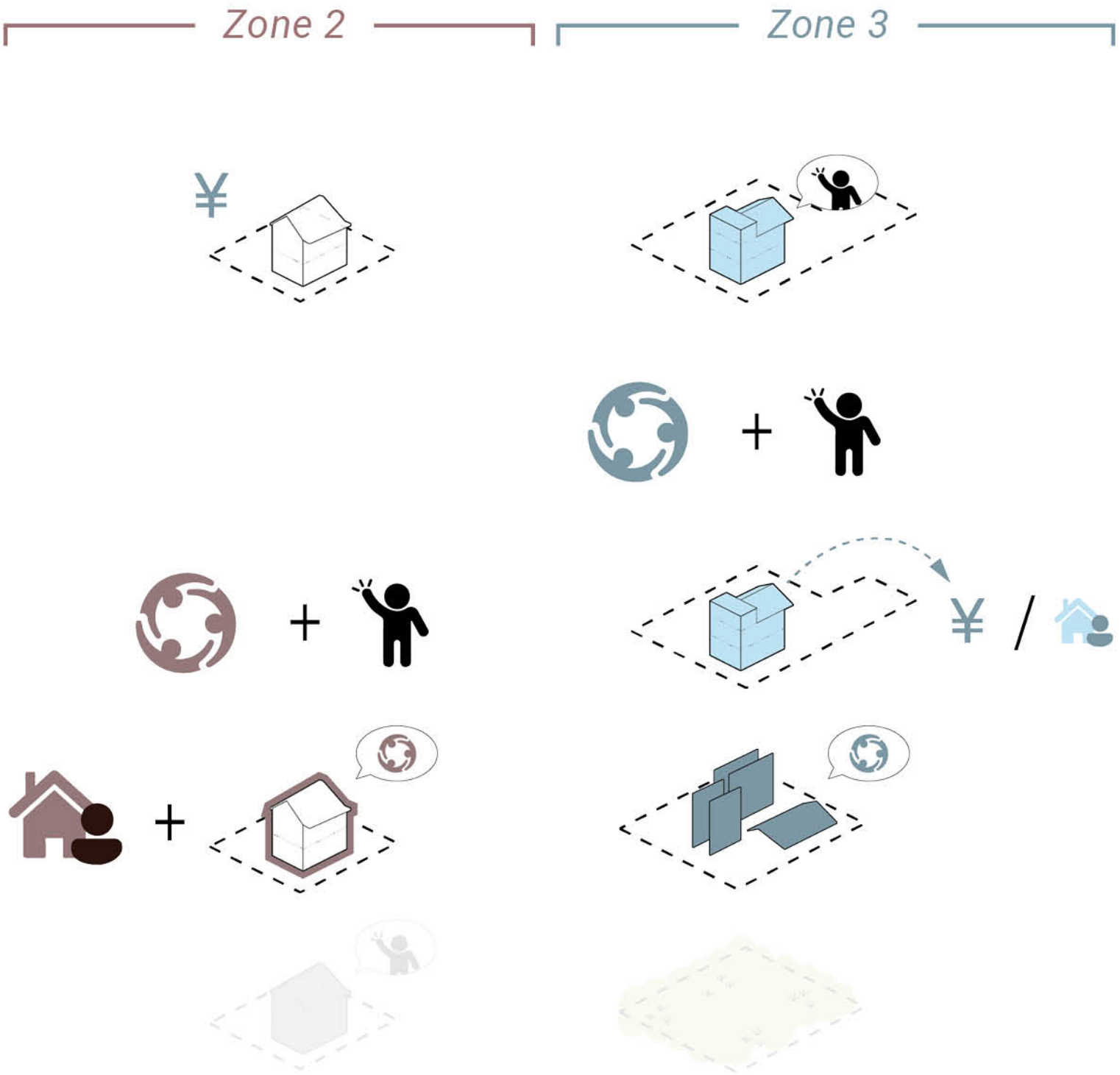
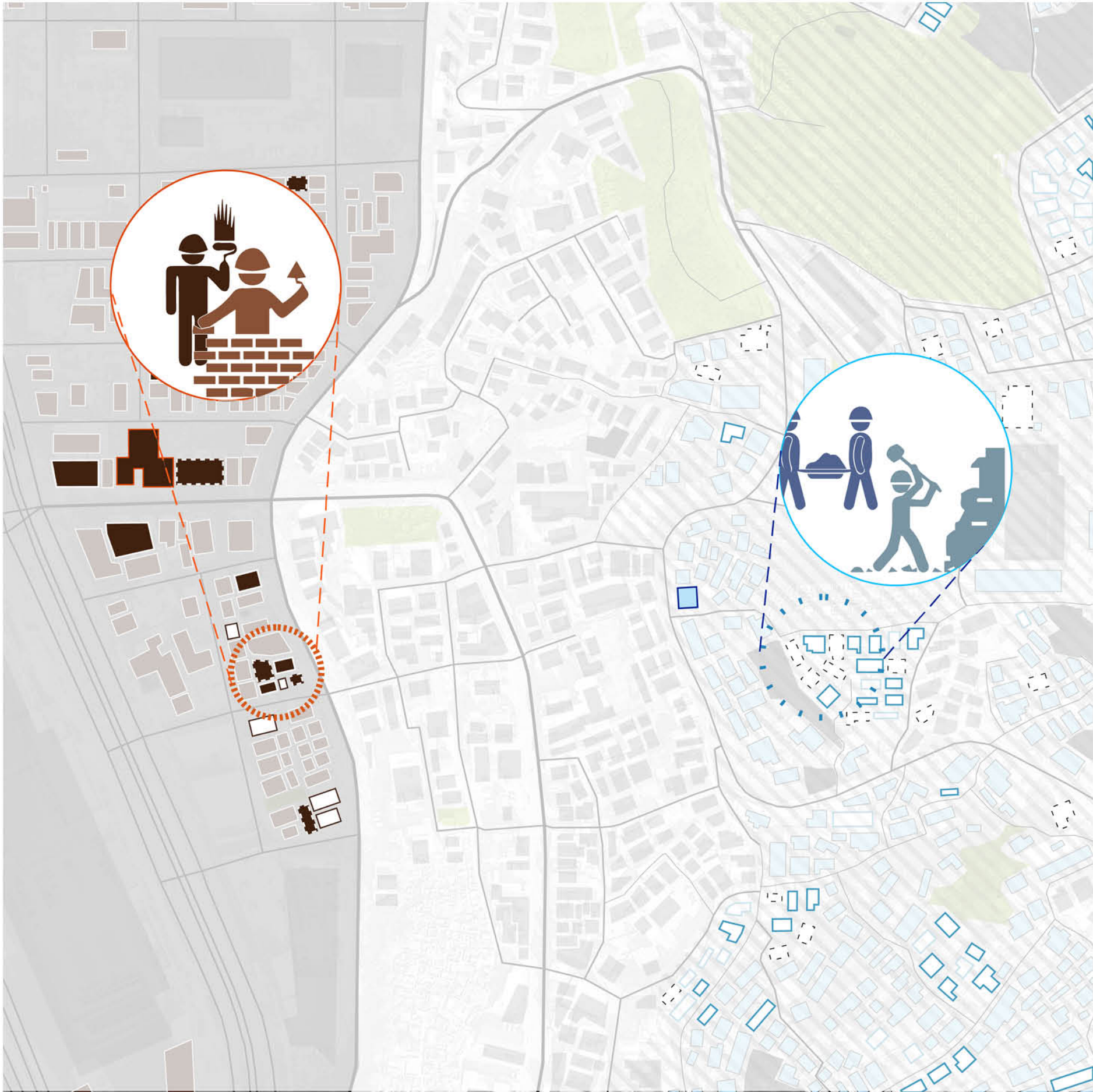
Institutions



Real Estate Market



Spatial Strategy



Community



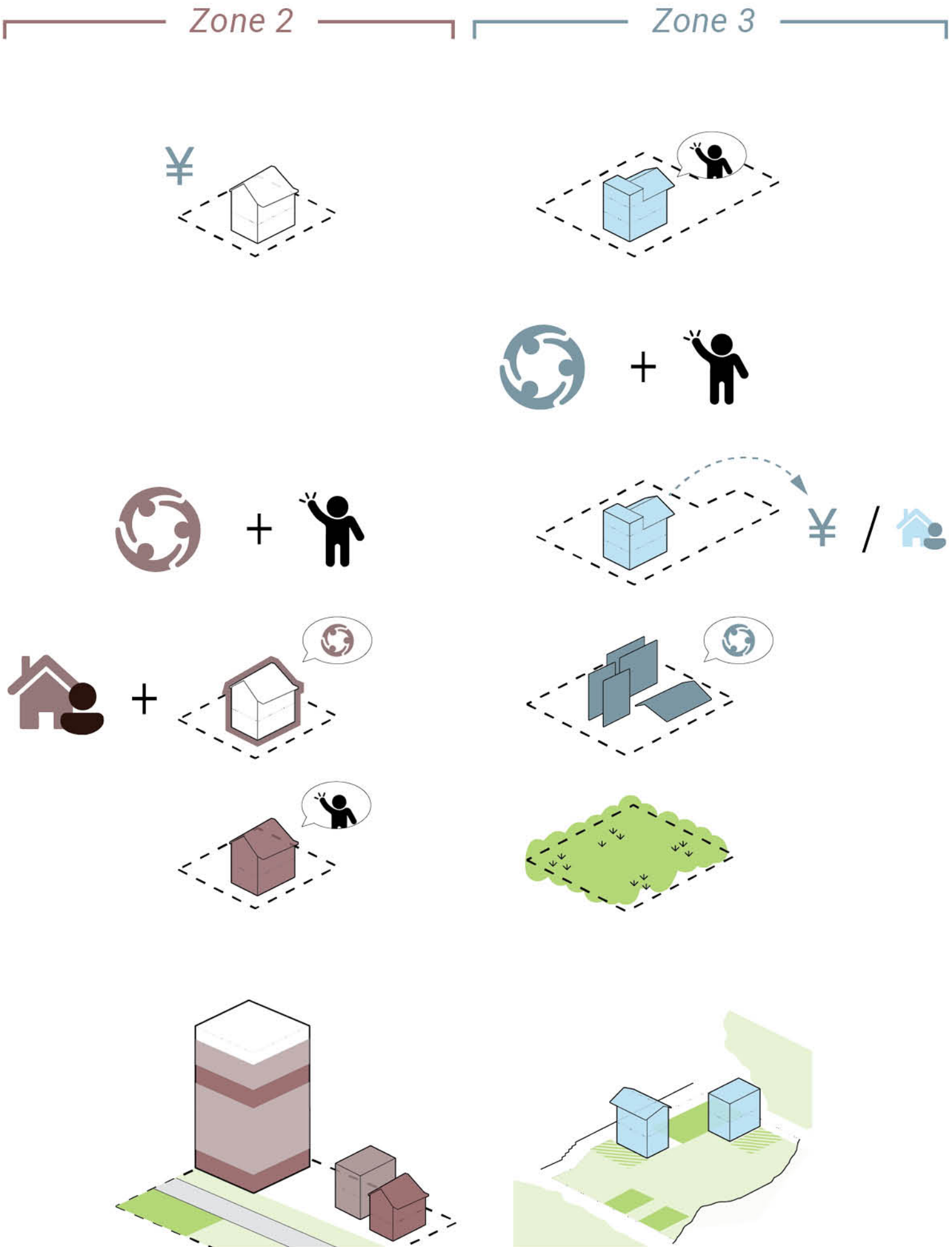
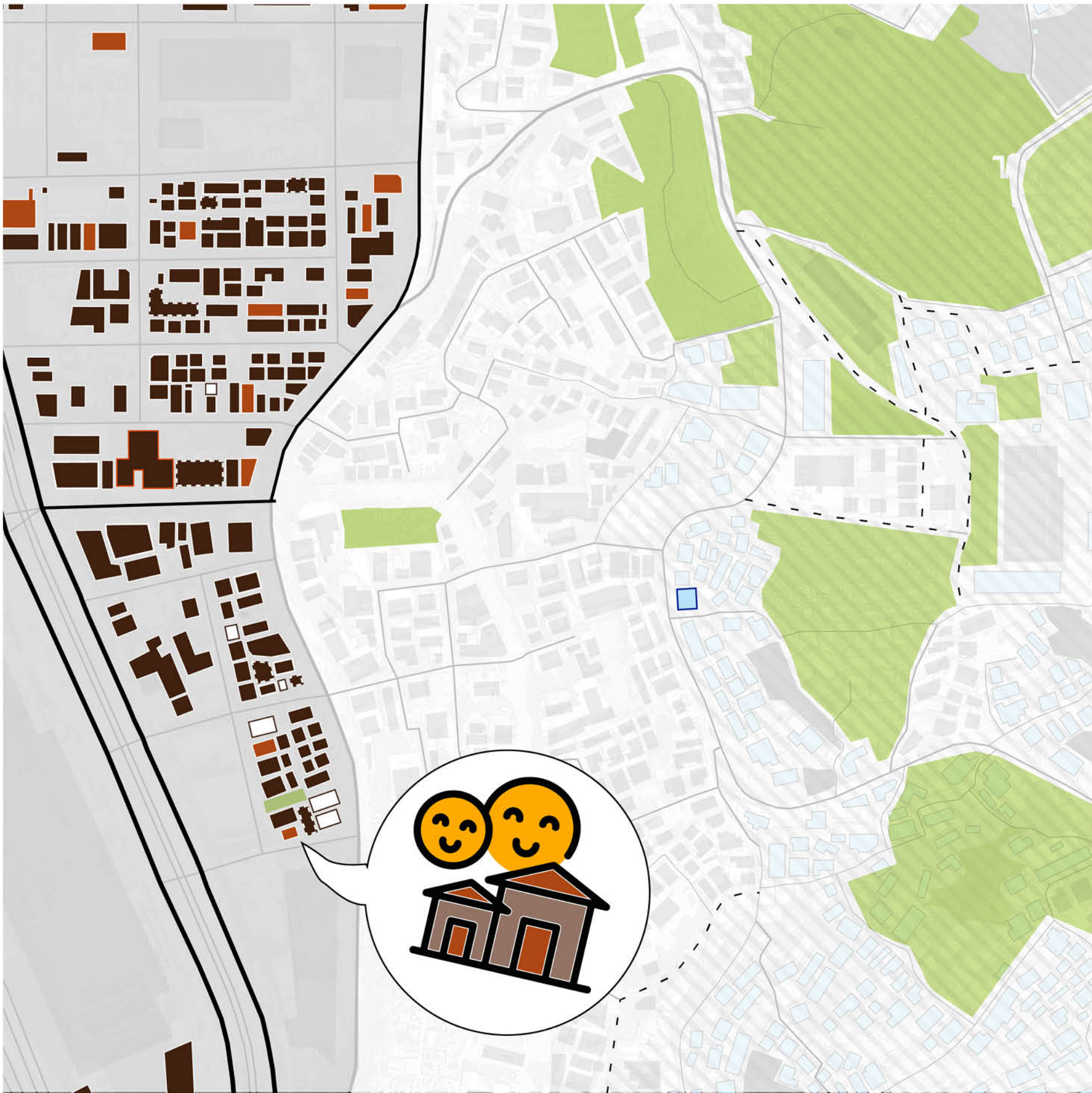
Institutions



Real Estate Market



Spatial Strategy



Community



Institutions



Real Estate Market



01	Context	
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04	Recommendations	<div>Next Steps</div> <div>Continue conversations with Nagasaki 2045 and Nagasaki Planning Department. Share with existing developers and real estate agents for resource sharing. Encourage inter-city conversations and best practices.</div> <div>Continued conversations</div> <div><i>How does this reframe the broader approach to bequest motives, besides engaging through education and imposing taxes? Is this a generational phenomena?</i></div> <div><i>How can this be adapted to growing phenomenon of shrinking cities across the world?</i></div>

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