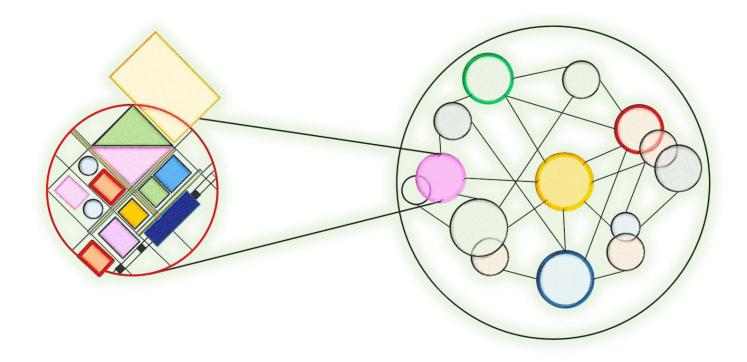
Introduction to development for innovation in Japan

March 29th, 2024

The Center for Real Estate Innovation, the University of Tokyo Project Researcher Yosuke NAGASE

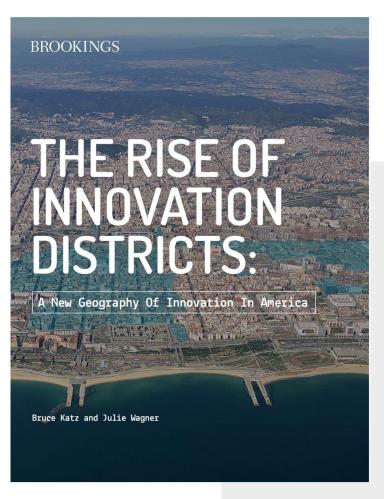


Research on Development for innovation

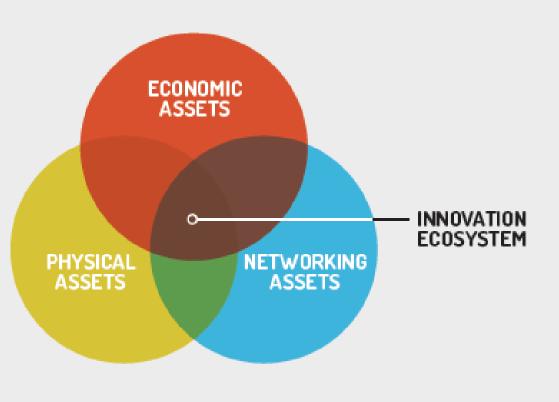


Turning real estate into a "Platform" for human capital investment

Started from



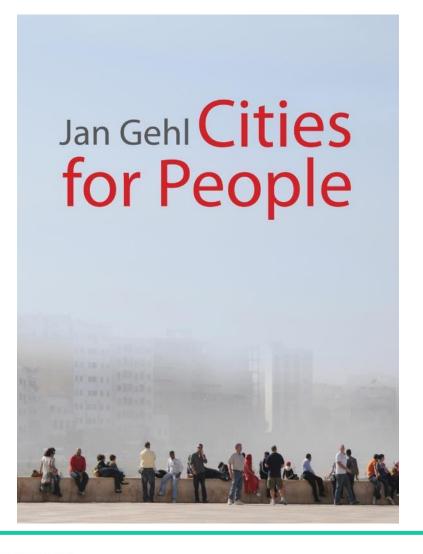
All innovation districts contain economic, physical, and networking assets.



The Importance of Proximity

Hints on thinking about human sensation and behavior, and

distance are from



Building a new regional revitalization model

Emergence of Innovation

- Collaboration with research Institutes and universities
- Startup supports
- Funds such as VC/CVC





Pandolf et. al(2011)

Development for building coziness and openness

[Devices of "Place" and "Space"]

- Walkable City Inside
- Café, Restaurant, Bar
- Mix land use of Office and House



From PPS website



Fusion of digital and real



Development of the "Innovation District" model in Europe, the U.S., and other countries



Development of the "Innovation District" model in Japan

A cozy town attracts diverse talents including innovators and promotes interaction

Innovators empowered by "the Power of Place"

Leads to "the Power of Place" further increased by innovators



Japan's Case1: Nagaoka City Innovation Districts





Agreement on research collaboration and cooperation between Nagaoka City, the Cabinet Office and the Center for Real Estate Innovation March 30th, 2022



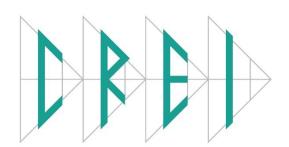
Research and study of measures for revitalization of the central city area and local development in Nagaoka City, and collaboration with academic and research institutions in the city

etc.



Advice and lateral development from a nationwide perspective

etc.



Data analysis, collaboration with overseas, advice to real estate operators

etc.

Miraie Nagaoka (July the 22nd, 2023) and New NaDeC (Nagaoka Delta Cone) Base



Retrieved from Miraie Nagaoka HP https://miraie-nagaoka.jp/





Goson Bunko (Library): the 3rd Floor and the part of the 5th Floor



Café: the 3rd Floor



NaDeC Base: the 5th Floor



Collaboration with an international research institute The Global Institution on Innovation Districts (GIID)





Nagaoka City Innovation District was registered to the Global Network for the first from Japan

April 25th, 2023, with Nagaoka City, CREI participated in the Global Network organized by GIID. To improve research, CREI interacts with cities around the world that are planning to create an innovation district and obtains insights and disseminates information with GIID.

Information Transmission with Research Results

Lecture by Prof. Yanagawa, CREI President

May 17th, 2023

Prof. Yanagawa presented research results titled "Real Estate Potential to Economic Revitalization and Innovation," incorporating the results of previous innovation city planning research.

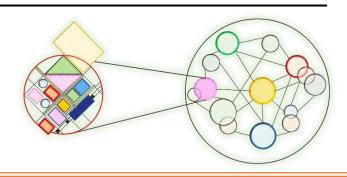




Establishment of a special research website

Based on certain research results and participation in the Global Network, we have established a page to disseminate information to people in Japan and overseas who are interested in the global expansion of innovation city planning.

Research on Development for innovation



Turning real estate into a "Platform" for human capital investment

[Research Philosophy]

To understand and investigate the power of "place" in innovation emergence by systematizing it quantitatively and qualitatively through data observation and analysis, while deciphering the "context" of region, area and real estate facilities, and the "people equation".

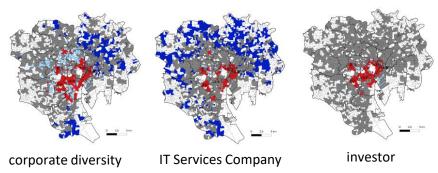
[Research Ambition]

The research findings will provide the insights necessary to enhance innovation generation functions according to the context of the region. By enhancing the innovation generation functions of area and real estate facilities, we will ultimately increase the potential growth rate and total factor productivity, thereby contributing to Japan's economic growth.



Researches/Analyses on Development for Innovation in CREI

Semi-Macro Analysis: Analysis of Start-up Locations by Area Scale

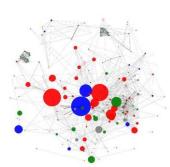


By the city/area scale, CREI conducted analyses of

- Agglomeration of startups and other factors, and
- Location transitions such as entry, closure, move-in, move-out, IPO, M&A, etc.

These analyses examine and analyze the surrounding environment that nurtures startups and the transition of locations at each stage of growth, etc.

Micro Analysis: Analysis of Diversity and Interaction in Incubation Facilities



- Students
- Scholars/Univ. Officers
- Civil Servants
- Company Employees
- Self-employed/Freelance
- Others

Based on the hypothesis that face-to-face interactions between diverse people in facilities intended for innovation/incubation may be the key to creating and promoting innovation, we measured the status of characteristic interactions and quantitatively and qualitatively analyzed whether they lead to innovation.

*Based on the agreement on research collaboration and cooperation between Nagaoka City, the Cabinet Office Nagaoka City, CREI, Interaction measurements were conducted with the cooperation of Nagaoka City facilities and users.

Comparative Study: Initiatives for Development for Innovation in Japan and Abroad

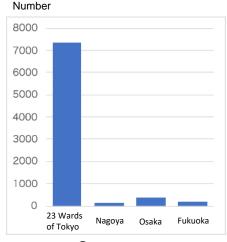




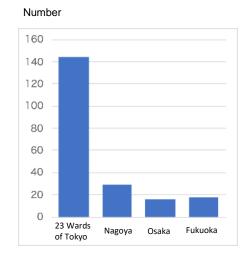
Expanding our research field from Tokyo and Nagaoka, we are investigating domestic and international case studies in order to examine and verify feature values that have a significant impact on the improvement of innovation generation function. Participated in The Global Network operated by The Global Institute on Innovation Districts (GIID), an international research institute specializing in innovation district research.



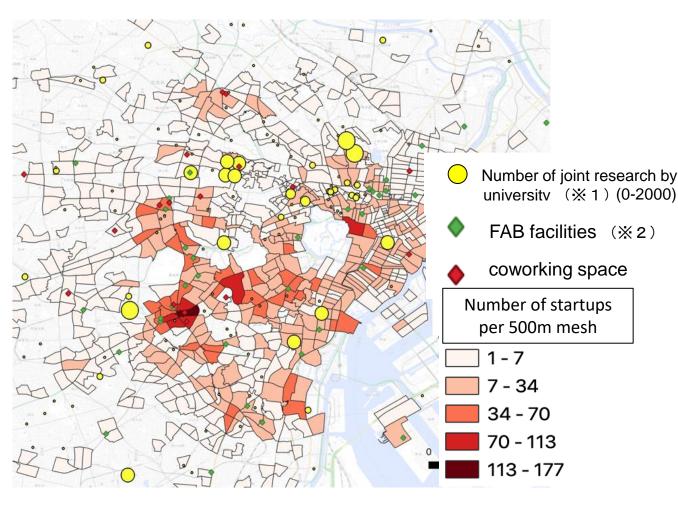
Locations of Startups and Universities in 23 Wards of Tokyo



Startups



Universities



- (※1) Number of joint research by university: The size of the circle indicates the number of joint research.
 - ※ 2) FAB facilities: Facilities with 3D printers, etc.

Initiatives for Development for Innovation in Japan



Why we are conducting this research

Purpose: Extraction of feature values important to enhancement of the innovation function in a city

- In the research conducted in 2021 and 2022, CREI have conducted analyses of (1) the concentration of various facilities, companies, and human resources and start-up locations (semi-macro analysis) mainly in Tokyo, and (2) the diversity and interaction of open innovation facilities in a regional city (Nagaoka) based on previous research and case studies on innovation districts in recent years.
- On the other hand, it is difficult to extract features that contribute to the improvement of the innovation function or determine the innovation function (index) only by observing a single city (e.g., Tokyo, Nagaoka City).
- CREI will also examine the characteristics and features of major cities and regional cities both at home and abroad, as well as the differences between them, to consider the characteristics that are important for a higher level of innovation function. Then, CREI will compile insights that can be used to improve the international competitiveness and innovation function of Tokyo and, ultimately, of Japan as a whole and abroad.



Japan's Cases

Kyoto City, Kyoto Prefecture



Fukuoka City, Fukuoka Prefecture



Nagaoka City, Niigta Prefecture





Japan's Case 2: Sendai City, Miyagi Prefecture

Formation of "SENDAI STARTUP CAMPUS" through industry-academia-government collaboration

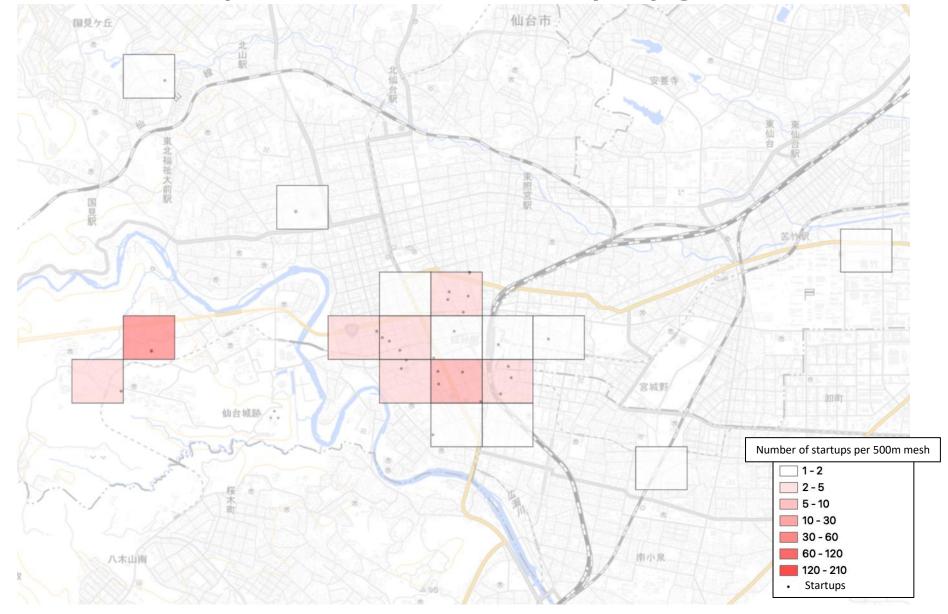






The entire city of Sendai will be transformed into an international start-up campus, with Tohoku University, one of Japan's leading research universities, at the center of the plan to create start-up hubs with a different flavor. In particular, this March, the "Sendai Startup Studio" opened in the NTT Urbannet Sendai Chuo Building, which is about an 8-minute walk from Sendai Station. "Creative One Block" by Takuto Motomura (Granma Inc.) concept being used as a base, NTT and the Sendai City built the Studio, which is near the Shinkansen station to serve as a node for major companies (e.g. NTT), Tohoku University satellite campus, local start-ups, and visitors to the city. The Studio will foster the exchange of a diverse range of human resources, including VCs and accelerators, which has not existed in Sendai until now.

Reference: Startup Location around Sendai City, Miyagi Prefecture





Japan's Case 3: Nagoya City, Aichi Prefecture

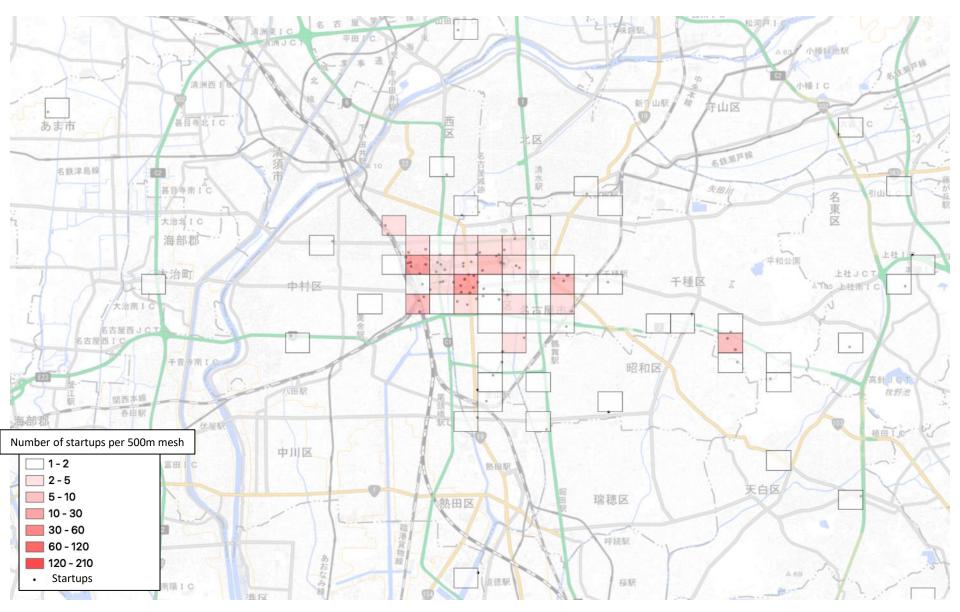
Incubation facility "STATION Ai" is under construction in the southern part of Tsurumai Park near Tsurumai Station, 7 minutes by JR from Nagoya Station (scheduled to open in October 2024). The facility will be a "one-roof, all-in-one" facility based on the "Aichi-Startup Strategy" (2018, revised 2023), which was formulated by the Aichi-Startup Promotion Network Conference, a voluntary organization led by Aichi Prefecture. The concept intends that cafés/restaurants, meeting facilities that can be used by the general public, and big data analysis functions are integrated into a single facility. Emphasis is placed on face-to-face relationships and communication within the facility.

WeWork (Sasashima Live Global Gate) has been operating PRE-STATION Ai, its predecessor, since 2020.1, and the incubation program is already underway. (A large community with as many as 230 startups registered)





Reference: Startup Location around Nagoya City, Aichi Prefecture





Japan's Case 4: Kyoto City, Kyoto Prefecture



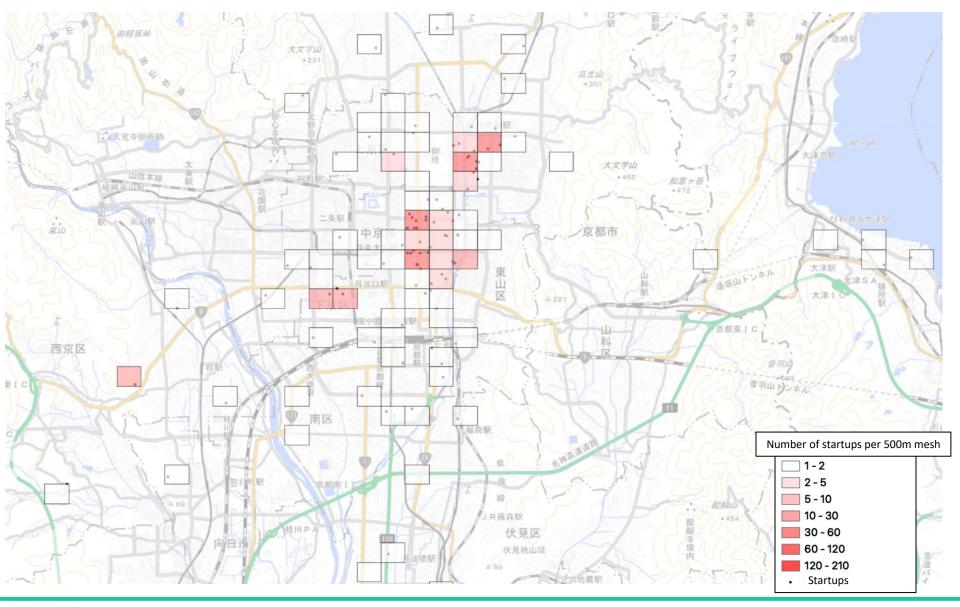
From Kyoto City. (2022). Kyo-Working Book



Kyoto City University of Arts was relocated (in October 2023) just to the east of Kyoto Station, the gateway to Kyoto, as its symbol that the city aims to create a creative town based on culture and art in the entire area.

A specific use inducement district (the floor-area ratio is relaxed to 1,000% under certain conditions) is established, and an industrial concentration area is planned for large companies and semiconductor/elefactories in the medical/biotechnology, ctronics, environment-related fields, as well as manufacturing and deep-tech ventures and startups in the entire area.

Reference: Startup Location around Kyoto City, Kyoto Prefecture





Japan's Case 5: Osaka City, Osaka Prefecture

Morinomiya Campus, Osaka Metropolitan University



Morinomiya Campus (Main Campus of) Retrieved frm Osaka Metropolitan University「森之宮キャンパス概要(1期: 2025年開設予定)」 https://www.upc-osaka.ac.jp/information/morinomiya/about_morinomiya/

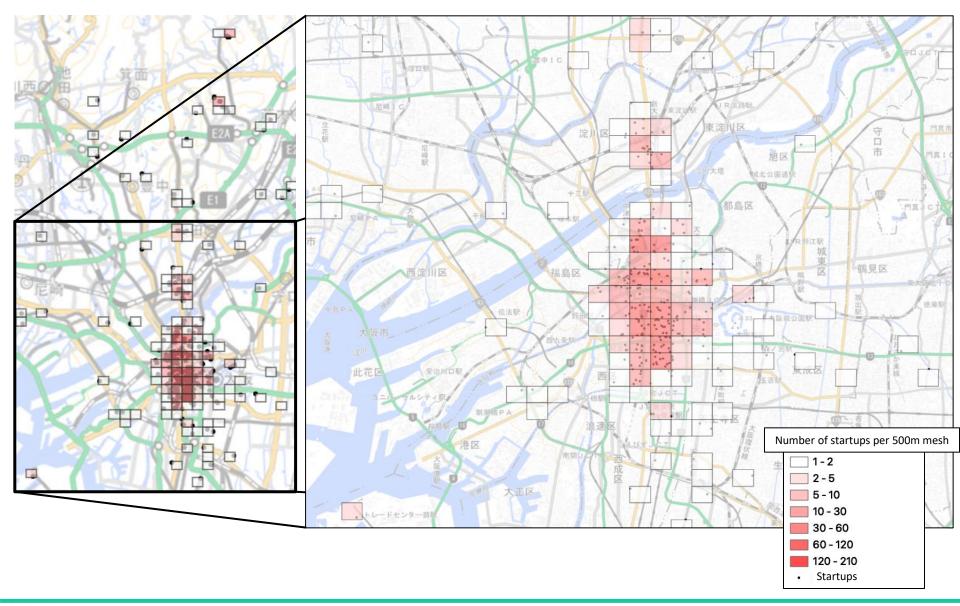
Osaka Public University, which merged with Osaka Prefecture University and Osaka City University in April 2022, plans to open the Morinomiya Campus as its main campus in 2025. It is expected to become an academic research institution that could serve as an anchor, something that has not been the case in central Osaka until now.



Retrieved from Osaka City「大阪城東部地区のまちづくりの方向性」(Sep. 2020) https://www.pref.osaka.lg.jp/attach/28267/00000000/houkousei honpen.pdf



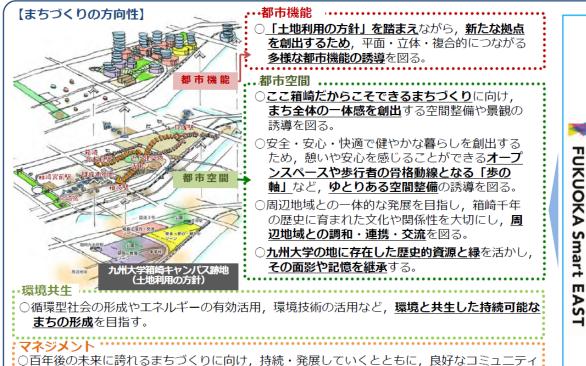
Reference: Startup Location around Osaka City, Osaka Prefecture





Japan's Case 6: Fukuoka City, Fukuoka Prefecture

Former site of Kyushu University Hakozaki Campus, Higashi-ku, Fukuoka City, Fukuoka







From the FUKUOKA Smart EAST Pamphlet https://d1el3c74ar2wow.cloudfront.net/clients/smart-east/pdf/Fukuoka-Smart-East-Pamphlet-JP.pdf

From The Report Material in the Welfare and Urban Development Committee of September Assembly (2022) https://www.city.fukuoka.lg.jp/data/open/cnt/3/92469/1/220927-keizai-houkoku-sanko.pdf?20221006100258

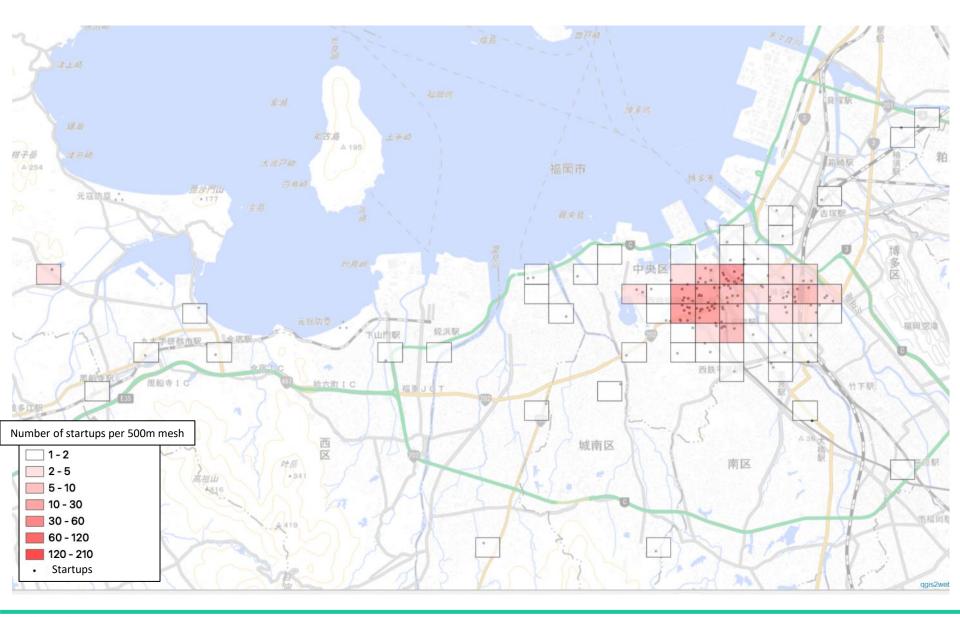
The Hakozaki campus site, which is approximately 50 hectares in size (equivalent to the area between Hakata Station and Tenjin area), will be developed to create a favorable urban area and introduce new urban functions (business and research functions that generate innovation (a town where people can take on challenges), and a bustling exchange area).

The public call for proposals for the area management project will be held from the end of fiscal year R4 to the spring of R6.



を形成する**マネジメントの仕組みづくり**を目指す。

Reference: Startup Location around Fukuoka City, Fukuoka Prefecture





Overview of Initiatives (from the spatial perspective)

Sendai



With the idea of Creative One Block, a major startup center near the Shinkansen station (immediately next to it is a Yokocho (pub street)). Expect synergies among the four characteristic districts.

Osaka



The campus of the merged public university will be located in the center of the city where almost no research university has existed before. It will be interesting to see how the relatively easy access from Umeda will bring about changes.

Nagoya



Local governments and companies formed a voluntary organization to promote startups and discuss and compile strategies for a new startup center. Formation of "a one-roof, all-in-one", highdensity place.

Fukuoka



Smart EAST

project for new town development is scheduled to FUKUOKA start on the vast former site of Kyushu University. The matter what kind of urban development will be carried out on this vast site.

Kyoto



The city is executing redevelopment near the bullet train station and bold changes to traditional height and floor area ratio regulations. Attracting business through history, and academia (human art resources) with international name recognition and a number of students.

> **Conducting Depth** Interview Research

Nagaoka



innovation district was established in the central city area in front of the Shinkansen station, which is also the center of gravity for four universities and one technical college. The aim is to create a variety of interactions in a compact city center centered on Miraie Nagaoka, which was constructed for the purpose of innovation.

Big thank you for your attentive listening!