

KITAKYUSHU, FUTURECITY

FORMING PARTNERSHIPS TO REALIZE FUTURECITIES



5th International Forum on the “FutureCity” Initiative
October 27, 2015
Kenji Kitahashi, Mayor, City of Kitakyushu

Outline of City of Kitakyushu

— Geographical Advantages, Nature's Blessings —



CITY OF KITAKYUSHU

Established by the equal-basis merger of five cities in 1963

(Japan's 6th ordinance-designated city)

- Area: 491.95 km²
- Population: 959,224
- Households: 430,034
- Population aging rate: **28.2%**
(highest of ordinance-designated cities)
(As of June 1, 2015)

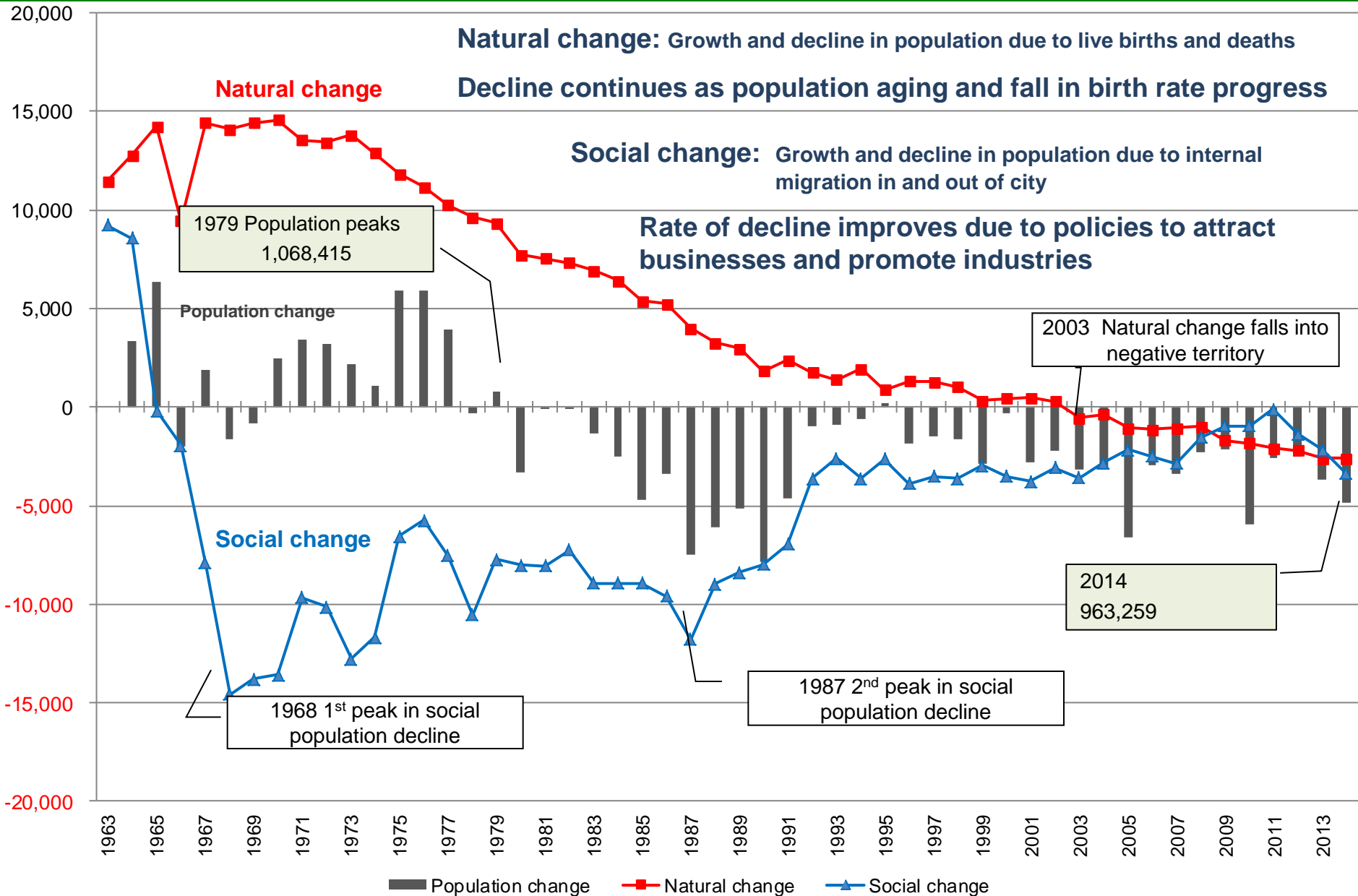


- Located at the northernmost tip of Kyushu, the western island of the Japanese archipelago ⇒ Gateway to Asia
- A manufacturing town, boasting high concentrations of industry and technological advantages ⇒ steel, metals, environment, robotics, automobile-related industries, etc.
- Blessed with an abundance of natural beauty ⇒ 210 km of coastline, about 40% of city's area is forested



Outline of City of Kitakyushu

— Population change (natural and social) —



Regional revitalization efforts

Town, People & Work Revitalization Strategy in City of Kitakyushu



Basic Policy

Achieve positive social dynamics by encouraging women and young people to establish themselves in the city and by other means, with the aim of becoming a model of success in regional revitalization

Basic Targets

1) Work: Creation of Jobs

- Number of city's university graduates finding employment locally
1.5x (10 percentage-point increase in local new graduate employment rate)
e.g. Close gap (350 graduates) between percentage of new graduates wanting to find employment locally (32%) and percentage actually doing so (22%)
- Number of new jobs in city
20,000
- Increase in airport users
1.26 million ⇒ 2 million
Airfreight volumes
Double (15,000 t ⇒ 30,000 t)
- Economic ripple effect of manufacturing and environment/energy
Approx. ¥950 billion

2) People: Create new flows of people

- Transfer of company head office functions from Tokyo metropolitan area
30 companies
- Number of passengers passing through Kokura Station Shinkansen Exit
3 million or more (annual)
- Foreign tourists
Double (130,000 ⇒ 260,000)

3) People: Fulfil the wishes of the young generation for marriage, birth and child rearing

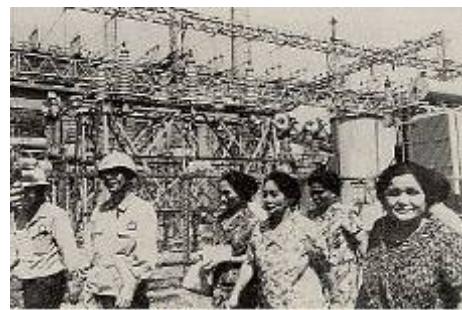
- Women in the workforce
Increase percentage of women aged 25–44 years in the workforce **from 65.9% to 70%**.
- Companies registering/notifying Diversity Action Declarations
Total 800
- Maintain **top-class** total fertility rate among ordinance-designated cities

4) Town: Create an attractive city suited to the times

- Percentage of residents who respond that they "have pride and confidence in their city"
From 57% (FY2013) ⇒ 80% or more
- Improve sense of public safety: percentage of residents who believe the city is safe
From 76% (FY2014) ⇒ 90% or more
- Number of known criminal offences (per 1000 population)
12th ⇒ Best Three among ordinance-designated cities
- **Reduce by 20%** the number of publicly owned facilities over at least the next forty years

EXPERIENCE IN OVERCOMING POLLUTION

— Joint efforts by public and private sectors to solve urban problems



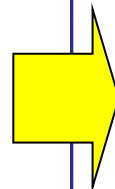
Residents inspecting companies

RESIDENTS

PARTNERSHIP

GOVERNMENT

COMPANIES



City of Kitakyushu succeeds in environmental rehabilitation 1960s



Today



Stricter regulation and monitoring



Signing of Pollution Prevention Agreement

From a polluted city to a green FutureCity
Building civic pride among residents

City of Kitakyushu's FutureCity Efforts

- Creating value through synergy of environment, society and economy -

ECO-MODEL CITY

Kitakyushu Green Frontier Plan
(Establishment of FY2013 Next Action Plan)

ENVIRONMENTAL VALUE



Fureai Flower and Vegetable Gardens



Hiagari Sewage Sludge Fuelization Plant
(completed Oct 2015)



Creating a city of safety and peace of mind

SOCIAL VALUE



Deploying urban infrastructure overseas

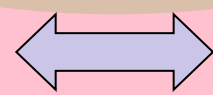
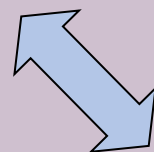
ECONOMIC VALUE

HEALTH MODEL CITY
Kitakyushu Health Promotion Plan
(Established Mar 2013)



Promoting introduction of nursing robots

KITAKYUSHU NEW GROWTH STRATEGY
(Established Mar 2013)



Showcase of Diverse Energy Supplies (Hibikinada District)

1) Primary energy stockpiling bases

- Petroleum stockpiling base
- Coal import base
- LNG import base



3) Renewable and new energies

- Wind power generation, including offshore
- Large-scale solar power generation
- Hydrogen (SHS: Smart Hydrogen Stations)



2) Thermal power generation

- Highly efficient use of coal in power generation (EAGLE: Energy Application for Gas, Liquid and Electricity)
- Biomass-coal co-firing power generation
- High-efficiency LNG thermal power generation



4) Energy linked to industry

- CDQ facilities
- Thermal power resources and energy flexibility



Aim to establish hubs for low-carbon, stable, and low-cost energies

● Effective utilization of unused city-owned land and sections of parkland

City-owned land lent out to community associations, etc. at no charge

Used to plant flowers
and vegetables

Make town
greener

Keep senior
citizens healthy

Give senior
citizens purpose
and motivation

Inter-generational
interaction makes
community stronger



Experience in overcoming pollution



Leading-edge environmental technologies
Urban environmental infrastructure technologies



Friendly relations with other countries cultivated through many years of international contributions

Overseas deployment of “Green Cities” where environment and economy are in balance

Haiphong (Vietnam)

Support for establishment of Green Growth Promotion Plan
Received order for U-BCF installation project (International Water Business)

9 major cities in Cambodia

Deployment of International Water Business



U-BCF plant in operation in Haiphong, Vietnam



Intermediate waste separation facility (Surabaya)

Surabaya (Indonesia)

Export of comprehensive Green City initiatives, including waste management, energy, wastewater treatment, etc.

India, China, Myanmar, etc.

Promotion of Eco-city model, recycling of electrical and electronic waste products, etc.

Social × Economy

Promoting Introduction of Nursing Robots

(Proposal for National Strategic Special Zone)



Industry

Presence of world-famous robotics companies

▶ Yaskawa Electric Corporation



Transfer assist device



REWALK

(walk assist device for patients with spinal cord injuries)

▶ TOTO Ltd.



Bedside flush toilet

▶ FUJISOFT INC.



PALRO

(communication robot)

▶ REIF Co., Ltd



Tree

(walking rehabilitation assistance tool)



Academia

Excellent development regimes, abundant human resources

(Prospective graduates of science and engineering universities, graduate schools, and technical colleges: approx. 4,500/year)

- ▶ **University of Occupational and Environmental Health Japan**
The only medical school in Japan to research the development of industrial medicine and occupational health and safety.
- ▶ **The Center for Socio-Robotic Synthesis, Kyushu Institute of Technology**
Promoting the return of research outcomes to society and the development of next-generation robots, with a focus on extreme environments, medicine-industry collaboration, mechatronics, and robotics education.



Govt

Assistance schemes for demonstration and implementation

- ▶ **Kitakyushu Nursing Robot Promotion Council**
- ▶ **Kitakyushu Technical Aid Plaza**
(Kitakyushu Municipal Welfare Agency)
- ▶ **FAIS** (Kitakyushu Foundation for the Advancement of Industry Science and Technology)
Robotics Technology Center

Create a hub for research and development, demonstration and assessment through collaboration between industry, academia and government

Solutions to Social Problems

Public-Private Cooperation for Advanced Assistance for the Elderly



City of Kitakyushu Initiative

Comprehensive promotion of dementia support and prevention of need for nursing care

Operation of Dementia Support and Nursing Care Prevention Center (tentative title)

* From April 2016

- Support and network-building for senior citizens and their families
- Training and support for dementia supporters and other human resources
- Development of prevention programs backed by scientific evidence
- Assistance in promotion of new industries related to health, medicine and nursing care

Creating an environment where active seniors can engage with society

Establishment of hub for demonstration of CCRC

- Demonstration of Kitakyushu CCRC Model (staying healthy, life-long education, social contribution activities, cooperation with local community, etc.)
- Establishment of Active Senior Hello Work (job-placement service) (Proposal for National Strategic Special Zone)



City of Kitakyushu Initiative



City of Kitakyushu Initiative

Life Linking Network Program

- To prevent residents from becoming socially isolated, the whole community will watch over them and link them to necessary services, etc.

Dementia Programs, etc.

*Top class among ordinance-designated cities for numbers trained

- Training of dementia supporters
- Dementia Policy Promotion Council (Orange Council) – members from community groups, private citizens, government
- SOS network systems for cooperation by residents, private sector and government in assisting wandering elderly, etc.

Entire community banding together to watch over and support the elderly



Full Range of Assistance for the Elderly

* Only ordinance-designated city to operate directly

Regional Comprehensive Support Center

- Center operated directly by city with cooperation of related organizations

In-home Medical and Nursing Care Support Center

- Establish hub for coordination of medical and nursing care within Medical Association

Full range of high-quality medical resources

Quality ensured through cooperation with residents and relevant organizations

Solutions to Social Problems

City building that gives a real sense of safety and peace of mind



Raising residents' awareness and promoting action regarding safety and peace of mind

- Measures to prevent crimes against children, women and senior citizens
- Hold Safety and Peace of Mind Student Volunteer Summit (tentative title)
- Promote voluntary crime prevention activities by businesses

Promotion of community activities for safety and peace of mind

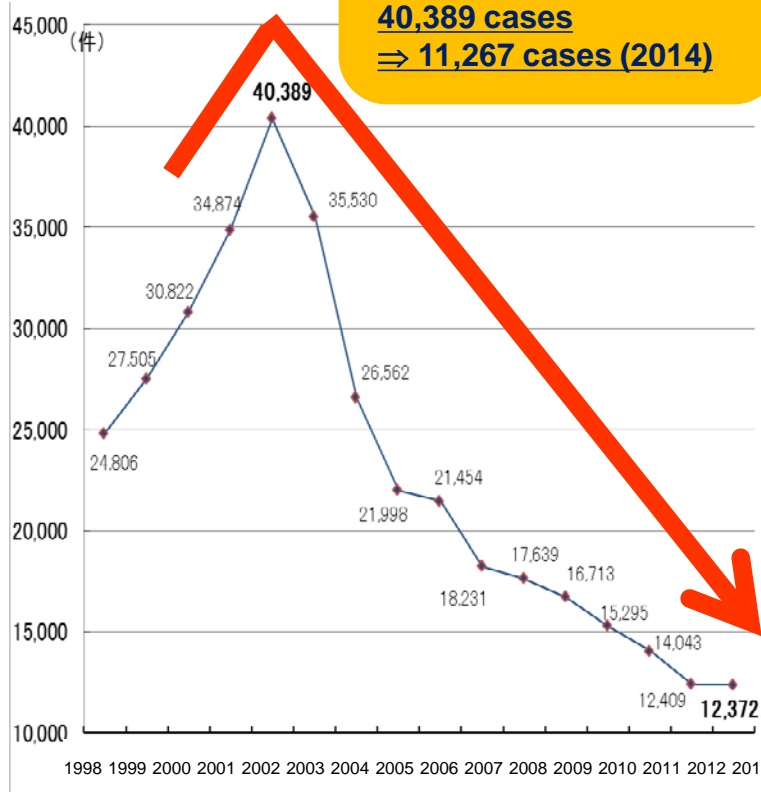
- 10,000-Strong Security Patrol Campaign
- Promotion of activities to watch over children

Development of environment that considers safety and peace of mind

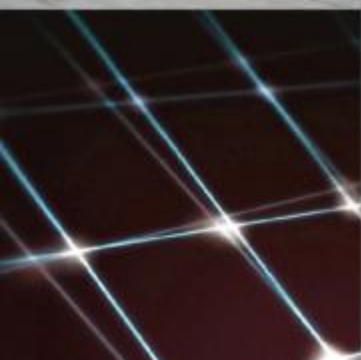
- Model program for roads, parks, etc. with an added crime prevention perspective
- Reinforcement of night-time safety measures along school commuting routes
- Promotion of efforts to install more security cameras



After peaking in 2002
Reduced by approx. 70%
40,389 cases
⇒ 11,267 cases (2014)



Number of known criminal offences



Employing its greatest asset, the power of its people, the City of Kitakyushu will take advantage of its experience in overcoming pollution and its strengths as a city standing at the forefront against the challenges of a super-aging population, to contribute to the resolution of global problems.

Through the formation of public-private partnerships, Kitakyushu will strive to become a FutureCity that places its people at its center, and to be a city where everyone wants to live and where everyone can lead vibrant lives.

