



Past awards related to Nagoya University campus

- Facility Management Awards, Excellence Award 2008
- Energy-savings Excellent Cases,
Economy, Industry and Trade Minister's Award 2008
- Aichi Environmental Awards, Excellence Award 2008
- Nagoya City Eco-Office, Excellence Award 2009
- National Institute for Academic Degrees
and University Evaluation's national university evaluation
Highest rank evaluation "Excellent in achievement status of
medium-term targets"
- Environmental Report, Public Sector Award 2010
- Architectural Institute of Japan Prizes, DOCOMOMO 100 selection
(Toyota Auditorium)
- BCS Award, Chubu Architecture Award,
Aichi Machinami Architecture Award
(Noyori Materials Science Laboratory, Noyori Conference Hall)
- Nagoya Urban Landscape Award,
Aichi Machinami Architecture Award
(Integrated Building, Subway Nagoya-Daigaku Station)
- Chubu Architecture Award (Nagoya University Symposion)
- Heat Pump & Thermal Storage Technology Center
"Thermal Storage Gathering" letter of appreciation

Nagoya University Campus Master Plan 2010

Digest Edition

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Publisher :

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CMP 2010 pdf can be downloaded from the above homepage.



Introduction

A campus master plan represents the campus space planning objectives agreed by a university based on its management philosophy, providing guidelines for continuous improvement of facilities/environment and management/operation of the university.

Since their transformation into independent administrative entities, national universities have operated based on their medium-term objectives and medium-term plans, which require achievement within a relatively short period of time of six years. Meanwhile, with broad campus land areas and facilities whose development seems to take a long period of time, Nagoya University requires a longer-term plan. Its campus master plan should be capable of flexibly responding to changes in educational/research policies, social conditions, financial situations, and government policies. Under these circumstances, our Campus Master Plan 2010 shows the framework plan drawn up looking thirty years ahead, under which the medium-term action plans that should be implemented within six years are established.

Concept

Eco-campus that generates world-leading academic achievements

Campus Master Plan Charter

Aims to create a campus where creation and exchange of knowledge are encouraged, for continuous fulfillment of its responsibility as a key comprehensive university.

Basic goals

A unique and open campus

A campus that encourages creation of knowledge

A campus that encourages exchange of knowledge

Basic policies

- Integrated development through university-wide cooperation
- Flexible utilization of land and facilities
- Establishment of planning, management and evaluation systems

The Campus Master Plan 2010

The Campus Master Plan 2010 is established based on the Master Plan Charter, which is maintained universally, and will be enhanced based on past master plans and cumulative evaluations, with the aim of ensuring continuous campus development.

Plan concepts

A low-carbon, environment-friendly campus

We aim to realize a low-carbon, environment-friendly campus that can serve as a model for a sustainable society.

A campus that supports various global and local collaborations

We will establish an environment that encourages international exchange while ensuring integration of our campus with the local community and industry-academia-government collaborative projects.

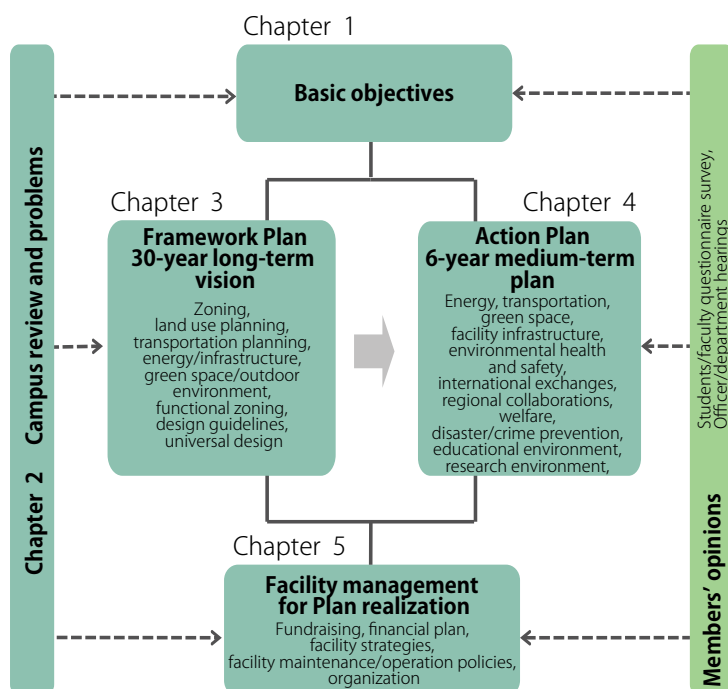
A campus that serves as the foundation for free-spirited education and research

We aim to realize a campus that provides safe and functional infrastructure to support world-leading research activities and to offer valuable experiences.

Facility management that supports continuous campus development and contributes to better university operation

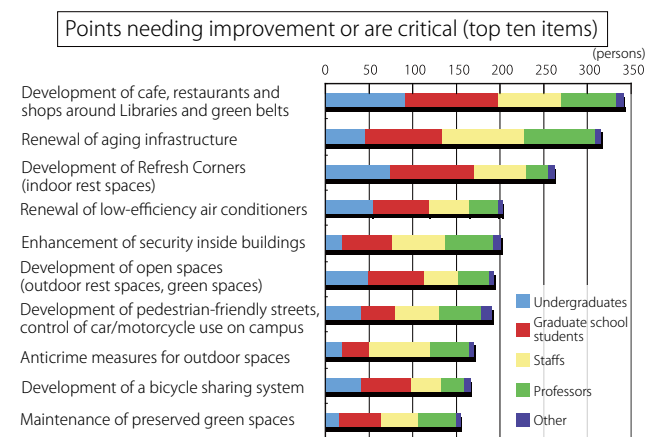
We will establish a promotion system to implement the master plan and realize facility management linked to financial management.

Structure of Campus Master Plan 2010



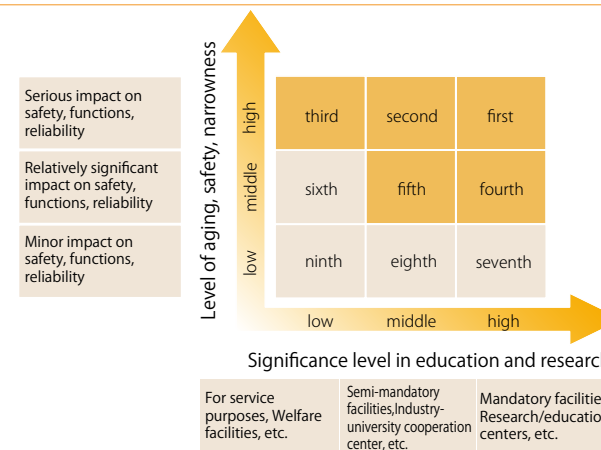
Making the Plan effective

In drawing up of the Plan, we invited opinions from various members. A system is being adopted in which opinions provided in questionnaire surveys as well as from various department and board members.

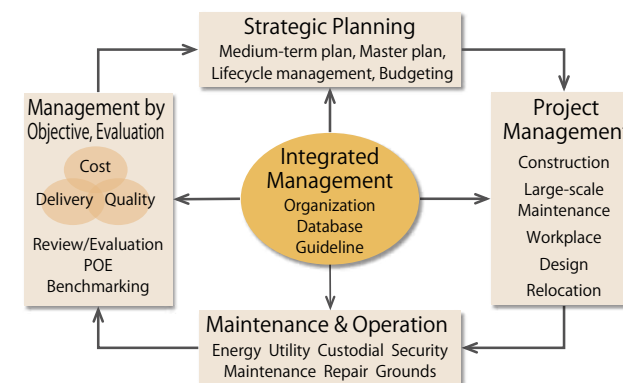
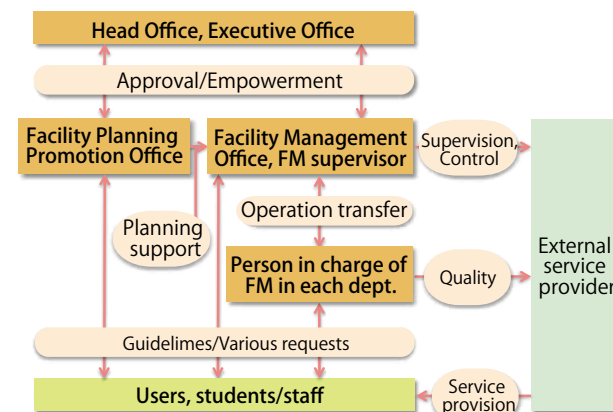


To realize the plans proposed in the Campus Master Plan, it is necessary to secure resources to finance the plans and to have a strategic facility management method. Facility management will be implemented based on the concept of the PDCA cycle, which aims for continuous improvement by setting management targets for quality, delivery and cost, taking actions to achieve the targets and conducting evaluations.

Example of priority determination based on facility portfolio



Facility management promotion organization model



Strategic facility management policy

Planned preservation based on lifecycle management (LCM)

To ensure stable maintenance of a favorable environment over a long period of time, "planned preservation" activities will be carried out based on strategic management policies.

System development for procurement of funds for facility maintenance and management

- 1) Secure financial resources for renovation of key facilities under the medium-term and long-term preservation plans.
- 2) Secure financial resources that will enable promotion of recycling-based energy savings.
- 3) Consider a medium-term and long-term renovation cost reserve system appropriate for each use area.

Enhancement of accounting system and database for FM

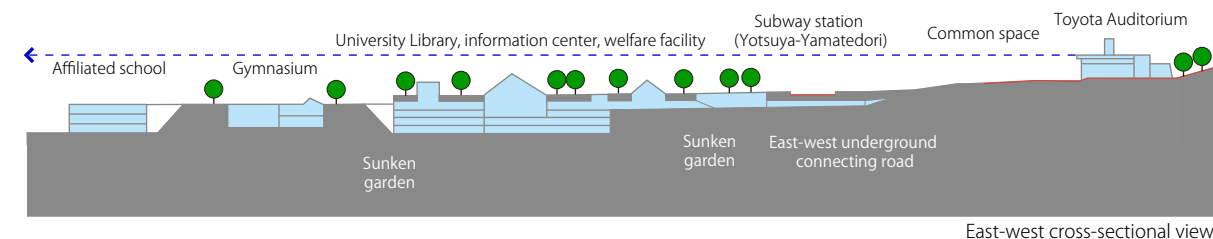
- 1) Introduce a management accounting system linked to the financial accounting system.
- 2) Establish a database where various facility data are linked to financial information.
- 3) Develop a LCM support system containing energy management information, etc.
- 4) Enhance space management utilizing database.

Effective use of facility review/evaluation and benchmarking

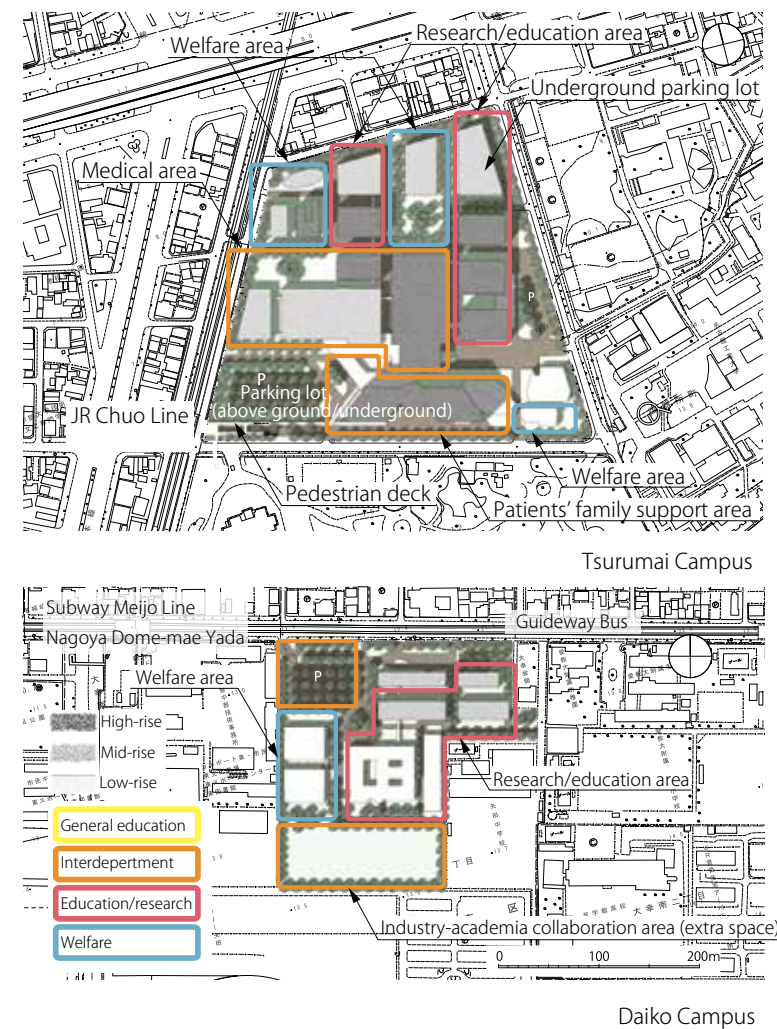
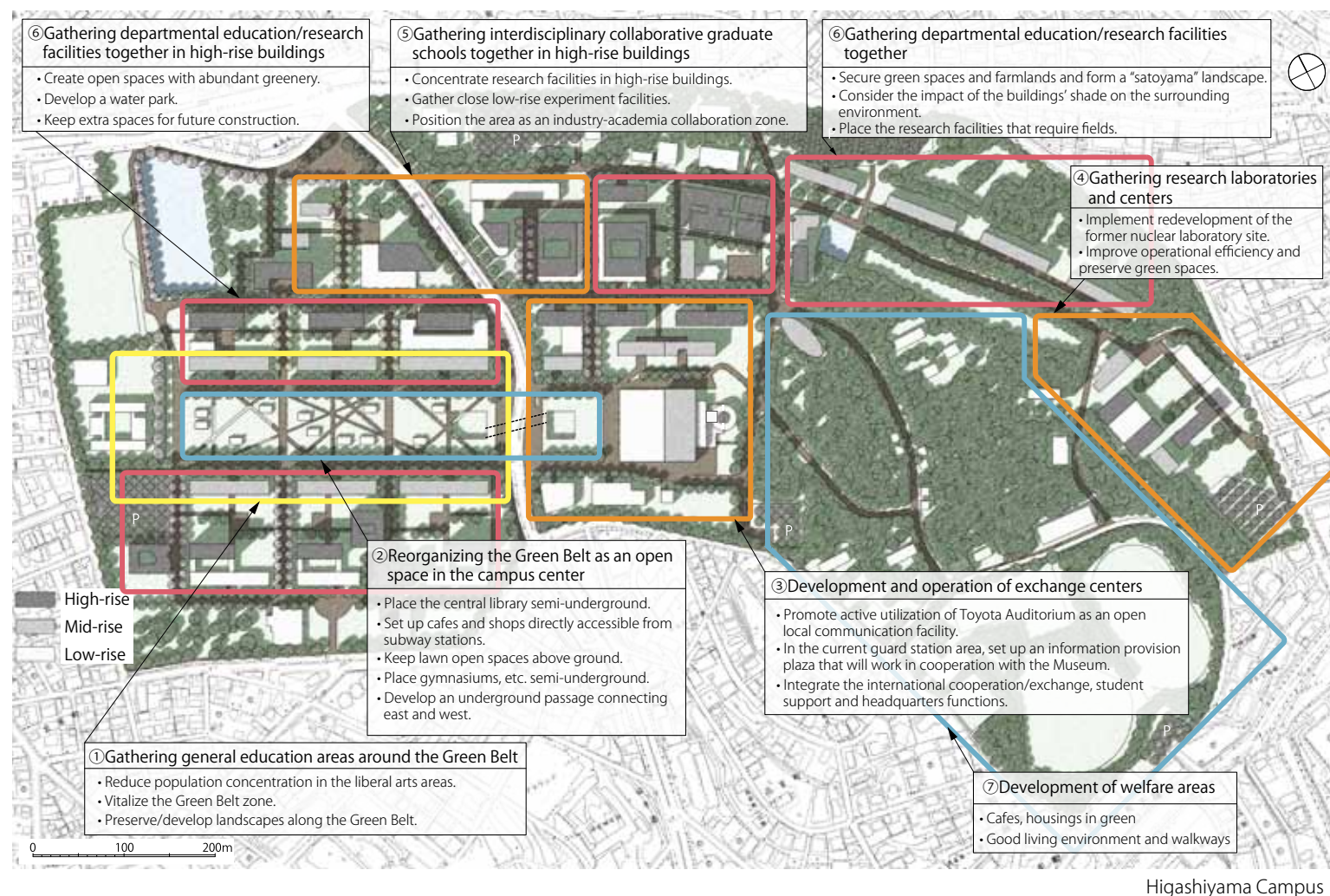
- 1) Set and verify facility performance evaluation indexes.
- 2) Strengthen review/evaluation systems employing building inspection checks and satisfaction surveys.
- 3) Conduct inter-university benchmarking to evaluate facility quality.

Green Belt redevelopment plan

The Green Belt that runs from Toyota Auditorium will be redeveloped as the "exchange center" of Higashiyama Campus. No permanent facilities that would spoil the scenery will be built. Common-use facilities will be placed mostly underground so as to keep its open space characteristics, taking advantage of connection with subway stations.



Campus Framework Plan – 30-year long-term vision



Basic policies for utilizing Higashiyama Campus

① Concentration and rearrangement of facilities

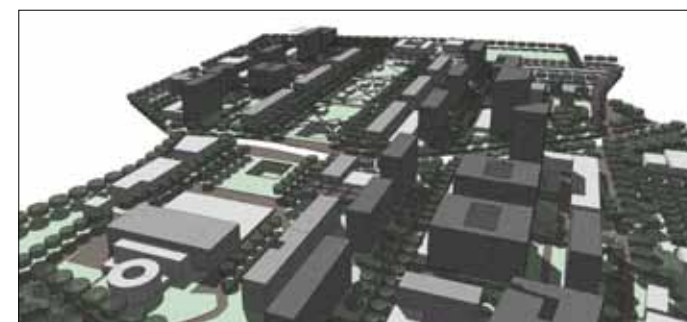
The blocks on the western and northeastern sides will be used as education and research zones, where high-rise buildings are densely located. The eastern green block will be maintained as a low-density preservation zone.

② Facility layout prioritizing accessibility

Facilities of a highly public nature such as halls and lecture rooms, main office building, and welfare facilities will be laid out in a manner prioritizing accessibility.

③ Planning with emphasis on flexibility

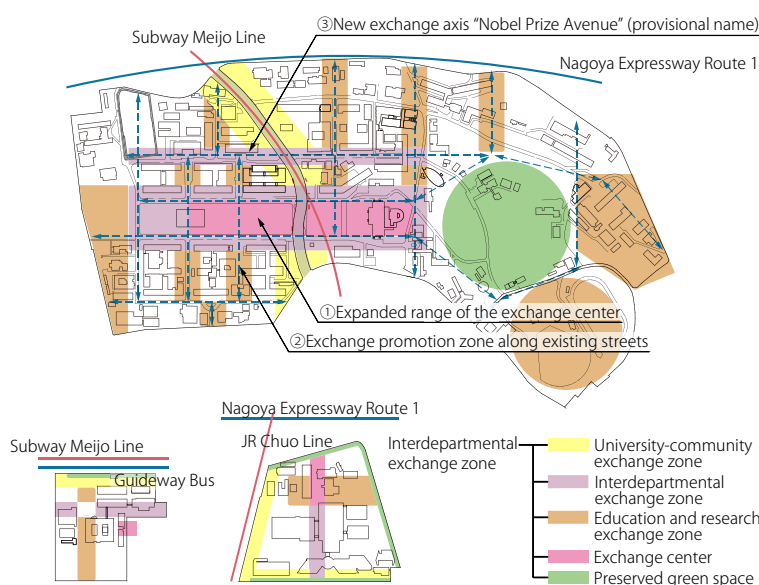
To secure extensibility for the future, open spaces will be systematically maintained. Efficient use of interdepartmental common spaces and reallocation of areas will be promoted.



Higashiyama Campus CG

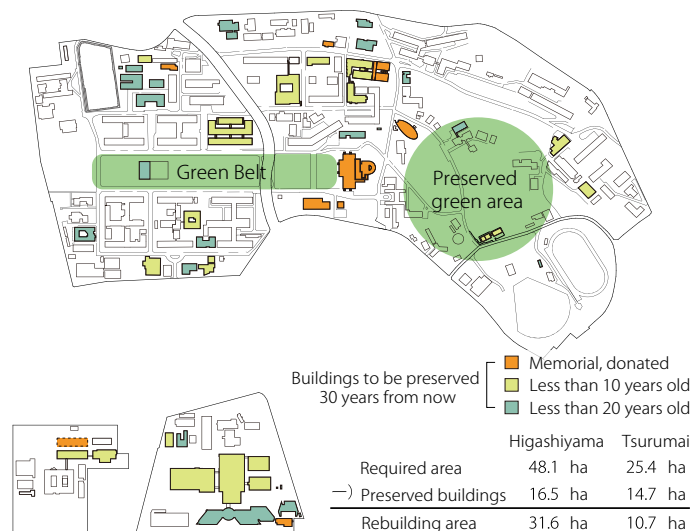
Zoning

For Higashiyama Campus, the highest development priority will be placed on the Green Belt where the University-Community Exchange Zone and Interdepartmental Exchange Zone overlap as an exchange center. The road that runs from Noyori Conference Hall to the south of Kagamigaike will be named "Nobel Prize Avenue" (provisional name) and positioned as a new axis for exchanges besides the Green Belt.



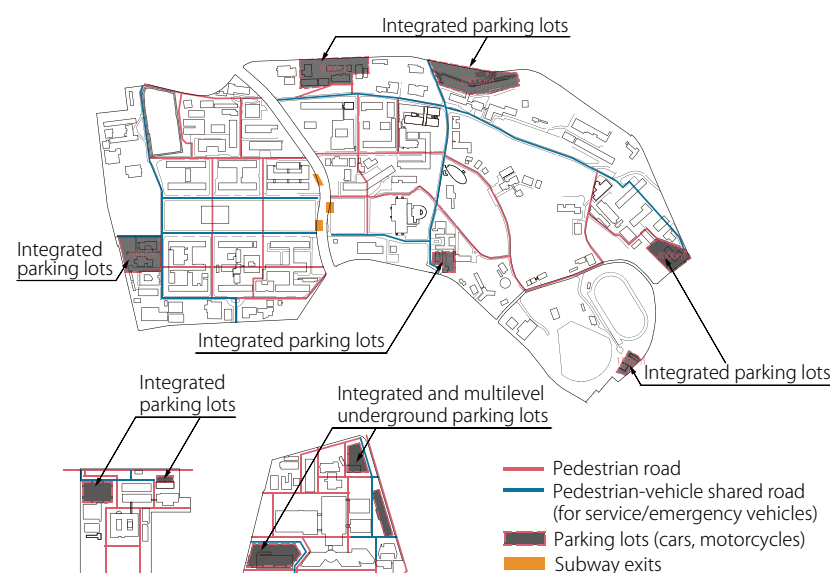
Determination of their future scale

Recognizing the history of how the present green areas and environment have been formed as a modern urban heritage, we will preserve and pass down there framework. Our campus design will be based on excellent modern historic architecture and environment including Toyota Auditorium. Under this Campus Master Plan, the proper future scale of resources will be determined to avoid increases in facility operation/management costs.



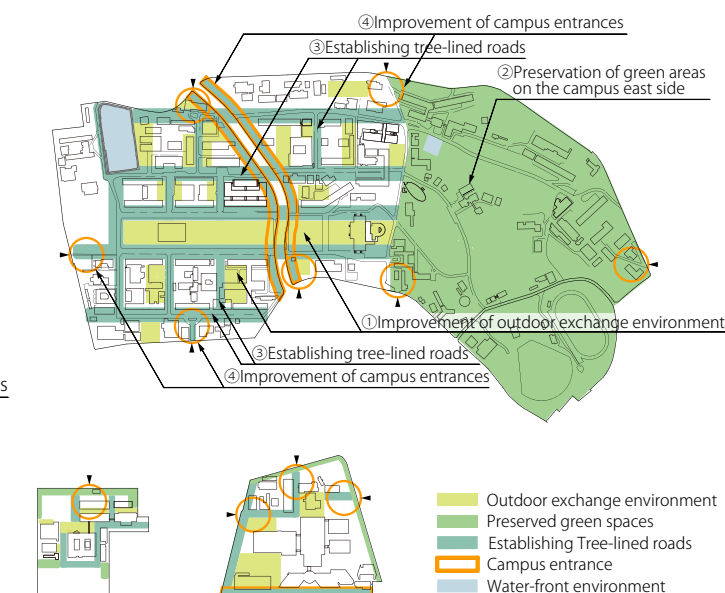
Traffic, parking space planning

Parking lots will be placed in positions accessible from the campus periphery, and the use of cars and motorcycles will be basically prohibited, so as to realize a pedestrian-friendly transportation environment. The east and west areas of Higashiyama Campus will be connected with a pedestrian deck or other means, with the aim of eliminating the problem of separation between east and west.



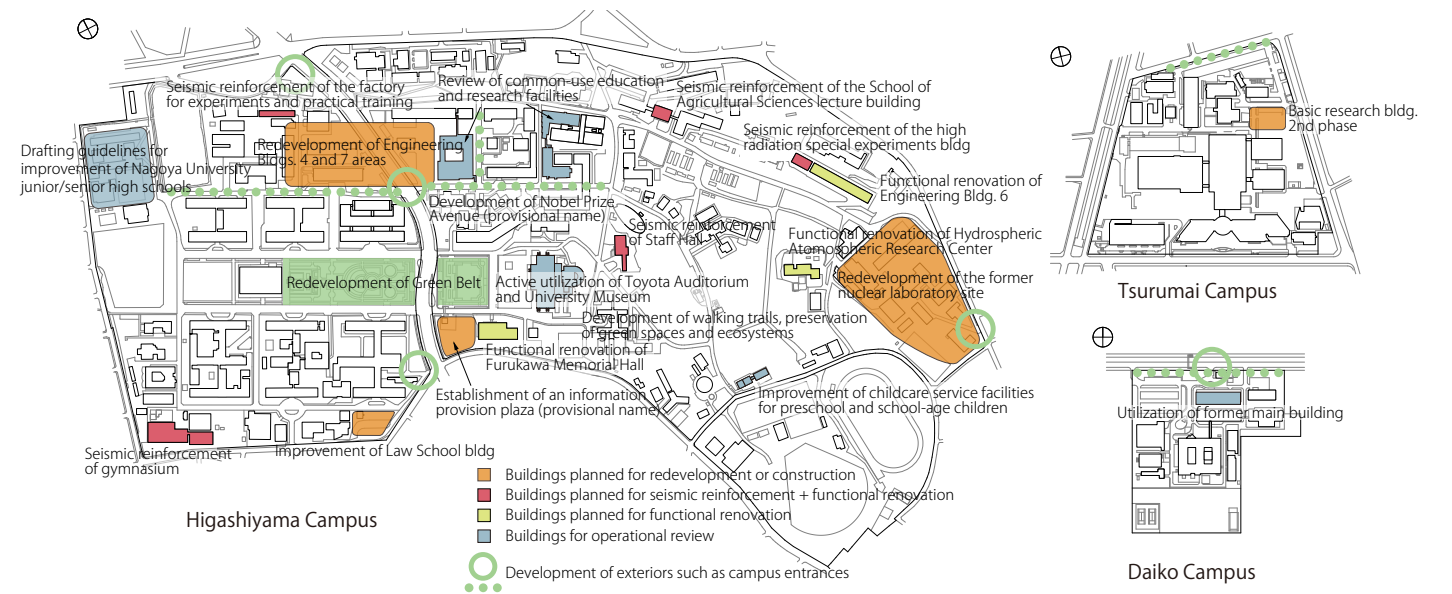
Green spaces, outdoor environment

Taking into account the local conditions of each campus, we aim to realize a safe and comfortable outdoor environment well-harmonized with buildings, that supports free and lively activities of campus members and visitors, and emphasizes each campus' characteristics and features. Both zone open for local residents and zone requiring rigid security control will be designated, so that the entire campus will be open and safe.



Our Campus Action Plan is designed to support the facility/environmental aspects of the “Hamaguchi Plan,” consisting of action plans that are linked to the university medium-term objectives/medium-term plans requiring implementation in six years and the facility management plans to promote efficient campus operation. In each implementation plan, projects for development or operation are classified into 1) development that will require investments through budget requests or external funds, 2) development that will be financed within the university budget, and 3) projects that can be implemented without any budget allocation.

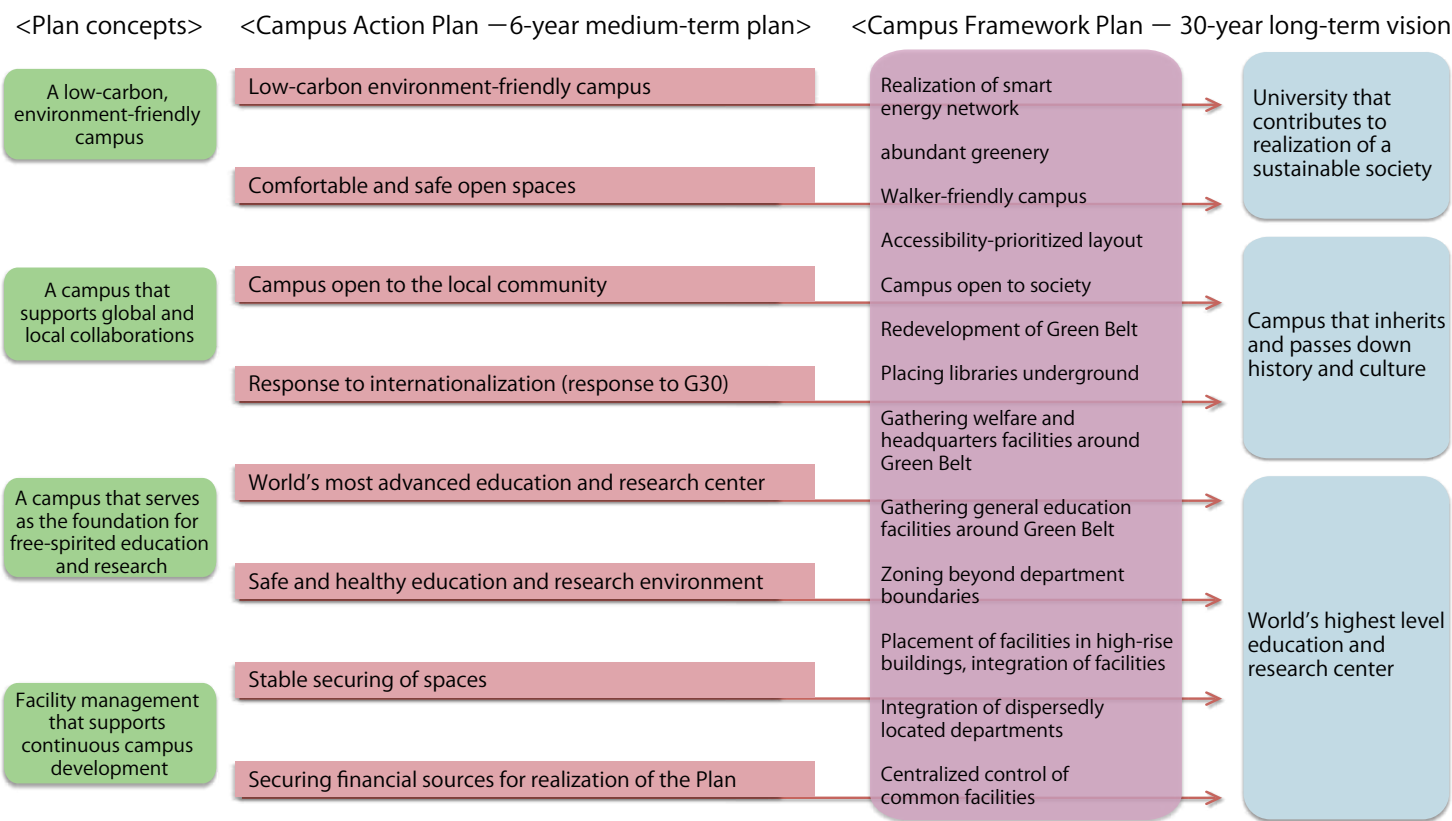
Action Plan – 6-year implementation projects



Action plan for energy savings/environmental burden reduction

We aim to reduce carbon dioxide emissions by 20% from the fiscal 2005 level by fiscal 2014. To achieve this target, we will develop systems that promote energy savings and secure funds, make investments in renovations for improved energy efficiency and cost reduction, and provide education and establish methods of raising university members’ environmental awareness.

Roadmap for realizing Campus Master Plan 2010

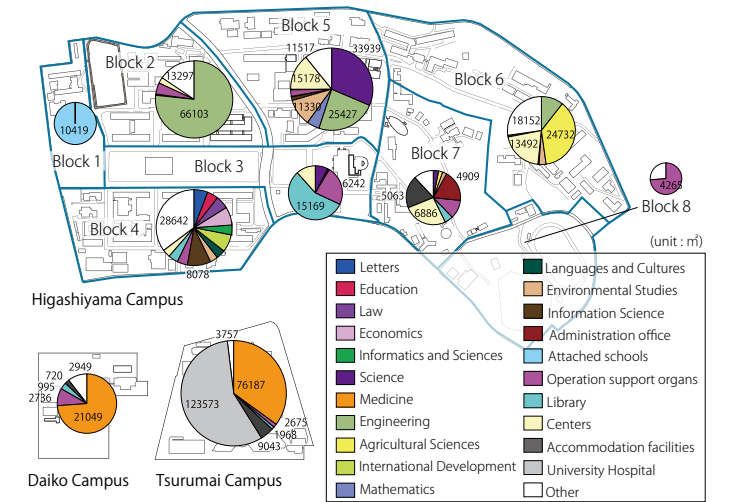


The Nagoya University Campus Master Plan is positioned as a flexible plan that grows/develops through repeated reviews and evaluations, so it is capable of adapting to future environmental changes. Therefore, when revising the Plan, it is important to review and evaluate the contents and implementation status of the current master plan.

Since establishment of the Campus Master Plan 2005, various actions have been taken to improve the campus facilities, including renovation of Toyota Auditorium, seismic reinforcement of existing facilities, rebuilding of the university hospital and improvement of welfare facilities. Meanwhile, several problems on campus still remain.

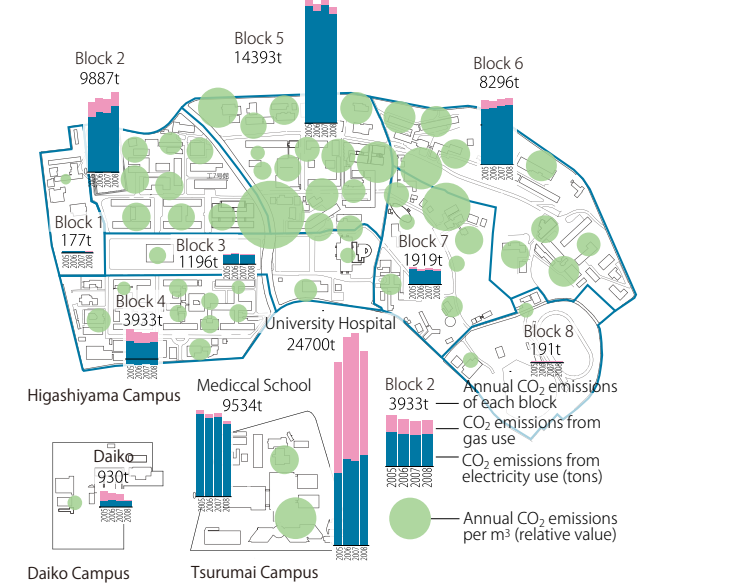
Dispersed location of departments

Faculty members of some departments such as interdisciplinary collaborative graduate schools are dispersedly located throughout campus, which causes inconvenience in education and research activities including students’ moves and classroom arrangement. Early integration of facilities is therefore necessary.



Energy consumption (CO₂ emissions)

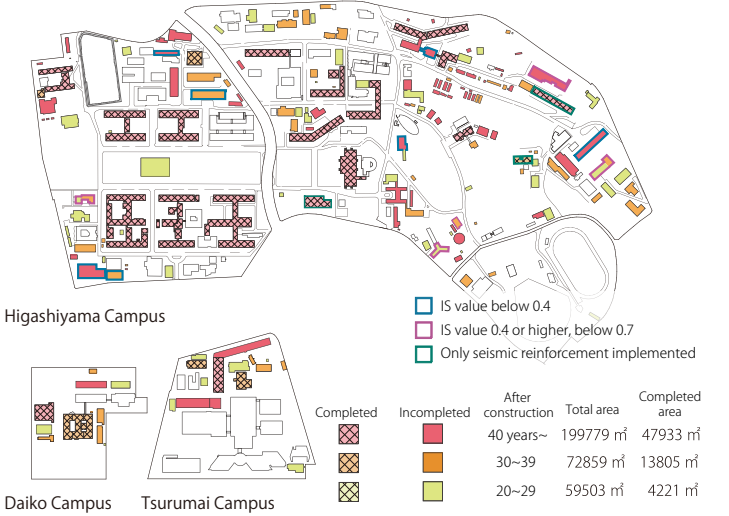
Nagoya University emits approx. 80,000 t of CO₂ annually, of which Higashiyama Campus and Tsurumai Campus account for approx. 52% and 44%, respectively. The amount of emissions per unit area varies largely among departments and buildings.



Higashiyama Campus	Compliance with 31 m building height limit, 45% green area rate regulations, Redevelopment of the aged and inefficient former Nuclear Fusion Laboratory site, Reform is needed of internal facility functions/equipment for which only seismic reinforcement has been implemented, Shortage of project spaces and increase of prefab buildings
Tsurumai Campus	Negotiations for relaxation of the floor space ratio limit Lack of green areas and open spaces that a university should have
Daiko Campus	Utilization of the former School of Health Sciences main building (former Mitsubishi Heavy Industries building) as a memorial building
Other complexes	Development of housing for foreign students, using new scheme Effective use of facilities and property of the Toyokawa Complex
Facility management	Securing various financial resources for development and maintenance Integrating facility management and operation

Renovation and seismic reinforcement of aging buildings

About 48% of the total building area at Nagoya University is over 25 years old, of which around 44% of buildings have not been reinforced yet. Also, 23% of buildings designated as requiring seismic reinforcement have an IS value below 0.7.



Interdepartment facilities for common use

Interdepartment educational/research facilities for common use are established mainly for promotion of leading-edge research activities, occupying approximately. 52,000 m². These facilities are mostly used as temporary occupancy sites and solutions to space shortages, and thus operation of these facilities needs to be reviewed.

