

The Evolution of Sendai's City Planning

Development before the City Planning Law

Sendai's city planning is based upon the grid layout Date Masamune, the feudal lord, chose when he began to build Sendai Castle in 1600. The layout is based on two base lines. The Omachi line runs east-northeast from the Otemae area, located on a river terrace on the left bank of the Hirose River. The Kokubuncho-Minamimachi line runs perpendicular to the Omachi line, and the two lines intersect at the Basho no Tsuji crossroads.

Until the middle of the Meiji Era, the Kokubuncho/Omachi area around the Basho no Tsuji crossroads prospered with many well-established merchants, government offices, companies, and as a station. However, the Kokubuncho station was abandoned in 1887, when a railway began operations between Ueno, Sendai, and Shiogama. New merchants began to prosper as stores opened along the Nakakecho/Shintenmachi and Motoderakoji streets, which connected Sendai Station with the city center.

Pre-war City Planning

In 1923, the national government named Sendai as a city that would be subject to the old City Planning Law. Sendai's city planning area, 52.88km² in size, was determined in 1925. The city planning area included Sendai City as a whole, and sprawled across one city, and three towns and villages. This was the first time that Sendai's development was based upon a city plan. Areas considered for development were located within 30 to 40 minutes from downtown, basically within a 3.5km radius circle centered at the Basho no Tsuji crossroads. The limits of urban development were areas such as Dianohara and Aramaki, and future industrial areas were to be developed in the east and south. Sendai continued to develop its city plans by planning 38 city planning roads in 1927, determining urban building law-related land use zones in 1929, and designating 8 scenic zones in 1933.

Post-war City Planning

○ The Postwar Reconstruction Plan

During World War II, political and commercial centers located west of Sendai Station received heavy damage, along with surrounding residential areas. The Special City Planning Law was enacted in 1946, and became the basis for the reconstruction land readjustment area (291.1 ha), 25 city planning roads, and 13 city planning parks/greenery areas that were determined to start Sendai's postwar reconstruction.

As a result, the reconstruction project created wide roads in Sendai, such as Aoba-dori Avenue, Jozenji-dori Avenue, and Higashi-Nibancho-dori Avenue, along with improving Kotodai Park and Nishi Park. In this way, downtown Sendai became a modernized urban area while keeping the traditional aspect of a castle town. During this period, trees were planted and utility poles were removed along major roads in the city, which lead to the basic look of present-day Sendai.

○ Postwar Revisions to City Planning

Postwar changes to Japan's society and Sendai's growth made it necessary to revise land usage in the city. The Building Standard Law was introduced in 1950, which made it necessary to specify fire protection zones in 1953 (quasi-fire protection zones were specified in 1948 to comply with Ministry of Construction regulations). The city revised its land use zones in 1955, after examining its urban area distribution plan and land use plan.

71 city planning roads, which total 193,177m, were proposed in a 1954 revision plan. This plan proposed a road network that combined grid and spoke road layouts (which are considered to be ideal road network forms) with ring roads.

Old City Planning Road Network (planned in 1927)

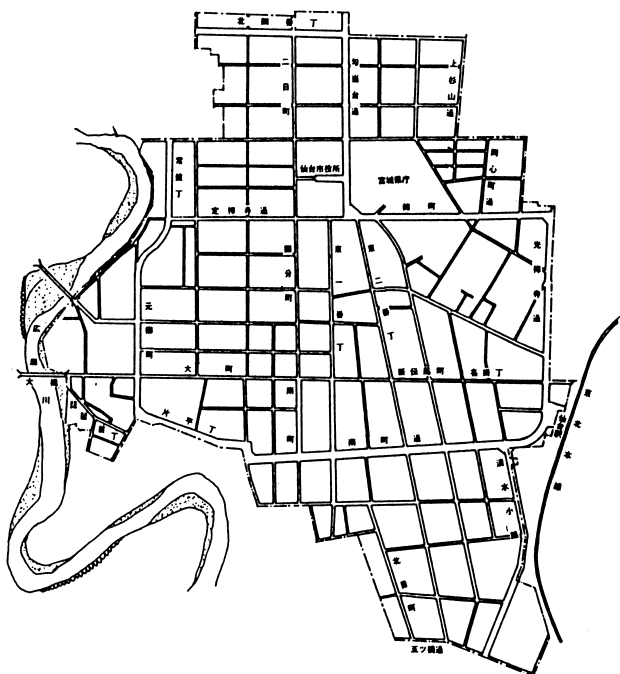


Map of Sendai Castle Town in 1668

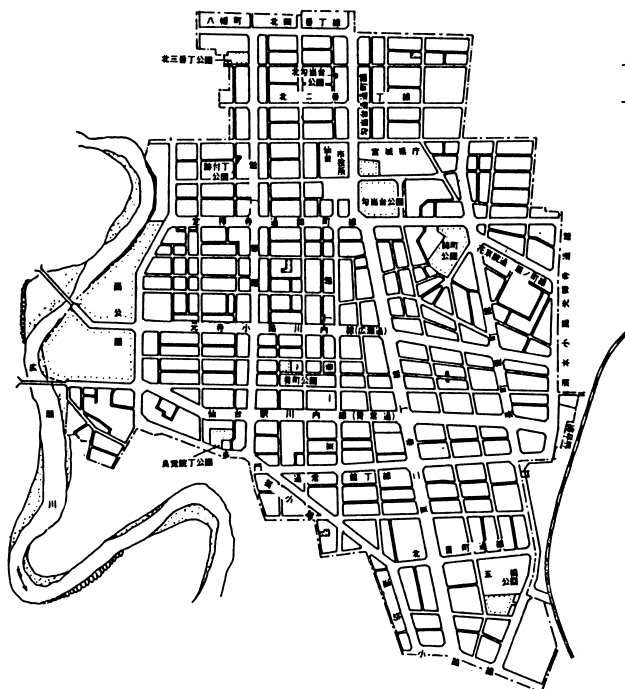


■ Sendai City Planning Reconstruction Land Readjustment Project

Before Land Readjustment



After Land Readjustment



City Planning during the Economic Boom

In the late 1950s, industrial development became the single most important issue in Sendai's city planning. In 1964, 16 local governments located in the Sendai port area were designated as a new industrial city. Construction of the new Sendai port and improvements to eastern industrial areas progressed at a rapid pace. Such developments lead to various urban problems, such as the concentration of people in Sendai, urban sprawl, traffic congestion, and a deteriorating natural environment. A comprehensive city plan, which included surrounding local governments, became necessary to deal with these issues. As a result, the city planning area was revised in 1966, to include the entirety of Sendai City and part of Izumi Town, Miyagi Town, and Akiu Village – a total of 432.95 km². Land use zones were revised and vacant zones were determined at the same time. Fire protection zones and quasi-fire protection zones were also revised in 1967.

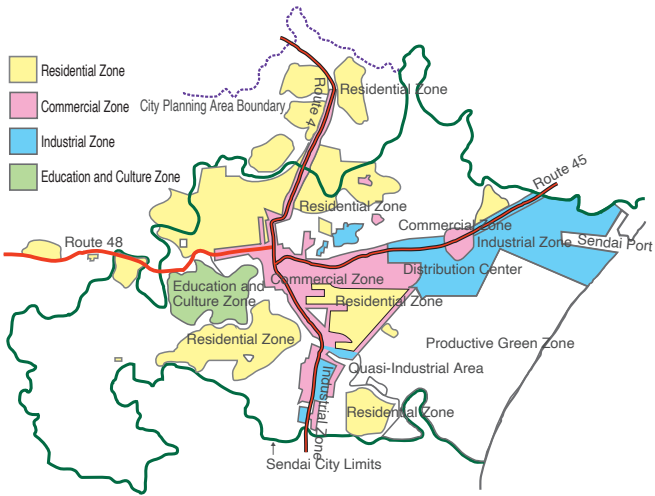
In 1962, future traffic estimates were obtained from origin-destination research. The estimates were used to debate the construction of new roads and widening the roads. As a result, Sendai's road plans were revised in 1966, and 76 roads, which totaled 284km, were included in the new plans.

City Planning after the Introduction of the New City Planning Law

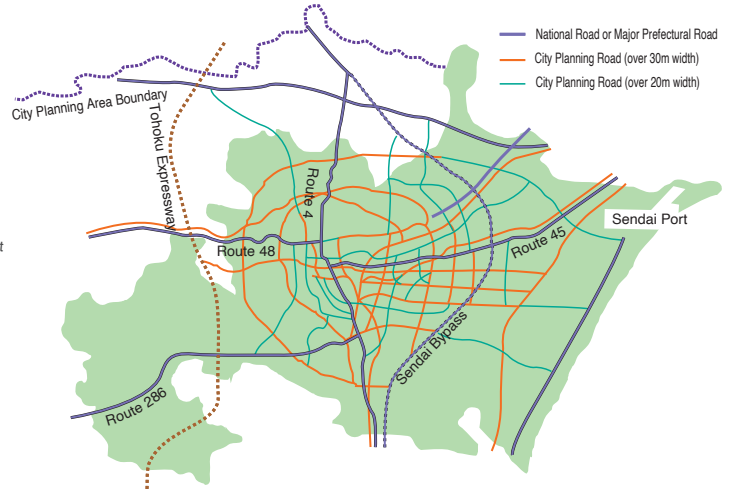
Urban problems became prevalent throughout Japan after the mid-1960s. The new City Planning Law was introduced in 1969 to solve these issues. In 1970, the Sendai-Shiogama regional city planning area (804.86 km²) was determined, in order to implement one city plan for the 13 local governments in the Sendai-Shiogama area and carry out region-wide city planning. Urbanization promotion areas and urbanization control areas were introduced and designated at the same time. The Building Standard Law was revised in the same year and became the basis for the eight land use zones, corresponding lot coverage and floor area ratios, special use districts, height control districts, fire protection zones and quasi-fire protection zones that were determined in 1973. Zoning, urbanization promotion areas, and urbanization control areas were subsequently revised in 1977, 1984, 1991, 1997, 2004, 2010, and 2018.

The national government continued to revise and improve the City Planning Law and Building Standard Law. In 1980, the district planning system was introduced in order to create communities while carefully considering local characteristics. Sendai's first district plan was determined in 1985 and there are now 117 unique districts in the city. In 1992, land use zones were subdivided into 12 types and local governments established basic policies towards city planning. These land use zones were further revised in March, 1996.

■ Land Use Plan (1966)



■ Structure of the Road Network (1966)



■ Changes to the City Planning Area and Land Use Zones (km²)

Name of City Planning Area	Sendai City Planning Area							Sen-En (Sendai-Shiogama) Extensive City Planning Area														
	March 1925	April 1928	July 1929	September 1941	March 1955	March 1966	August 1970	December 1973	July 1977	January 1984	November 1987	March 1988	March 1991	March 1996	May 1997	May 2004	May 2010	September 2012	October 2013	May 2018		
Total Planning Area	52.88	52.88	52.88	188.21	188.21	432.95	804.86	804.86	801.07	836.81	836.81	836.81	836.81	892.31	836.71	838.19	892.31	892.31	892.31	889.34		
Planning Area in Sendai	17.62	50.64	50.64	185.03	185.03	236.85	236.88	236.88	237.05	237.05	347.21	440.84	440.84	442.93	440.84	442.84	442.93	442.93	442.93	442.96		
Urbanization Promotion Area							116.78	116.78	118.37	118.44	131.86	169.13	171.04	179.61	175.03	180.01	178.92	179.61	180.35	180.06		
Urbanization Control Area							120.10	120.10	118.68	118.61	215.35	271.71	269.80	263.32	265.81	262.83	264.01	263.32	262.58	262.90		
Land Use Zone	Residential Zone			9.11	—	25.88	28.14	29.83	25.88	25.85	24.71	30.79	50.21	51.33	51.48	53.54	56.72	54.33	55.05	55.79	54.63	
	Residential Zone			—	—	—	—	—	—	—	—	—	—	—	0.05	0.05	0.05	0.05	0.05	0.06	0.59	
	Residential Zone			—	—	—	—	—	11.55	13.31	14.17	16.61	20.21	20.31	6.91	7.05	7.40	7.45	7.33	7.33	7.33	
	Residential Zone			—	—	—	—	—	—	—	—	—	—	—	14.32	15.05	15.40	15.33	15.33	15.37	15.69	
	Residential Zone			—	—	—	60.35	48.85	36.08	39.10	40.17	44.82	55.23	55.20	27.94	27.11	27.70	28.09	28.47	28.94	29.52	
	Residential Zone			—	—	—	—	—	—	—	—	—	—	—	26.55	25.77	26.13	25.62	25.62	25.62	25.09	
	Residential Zone			—	—	—	—	—	—	—	—	—	—	—	0.63	0.61	0.63	0.64	0.64	0.64	0.64	
	Commercial Zone			5.02	—	5.50	14.08	14.08	7.80	7.91	5.03	8.23	9.31	9.38	10.60	9.12	9.36	9.50	9.58	9.73	9.73	
	Commercial Zone			—	—	—	—	—	8.20	8.16	8.17	8.18	8.92	8.92	8.96	8.82	8.82	9.37	9.37	9.37	9.37	
	Quasi-Industrial Zone			—	—	2.51	0.70	0.70	5.50	6.51	6.52	6.52	7.48	7.73	8.63	8.77	10.58	11.34	11.47	11.34	10.98	
Industrial Zone			1.43	—	7.24	10.13	6.33	4.90	4.16	3.40	3.40	3.40	3.40	5.45	5.06	4.96	4.18	4.18	4.17	4.59		
Industrial Zone			—	—	—	15.72	15.72	15.59	13.37	13.27	13.27	14.38	14.79	13.39	14.07	12.25	13.02	12.52	12.50	12.43		
Non-Specified Area			0.78				1.28	1.28														
Summary	Determined City Planning Area	Determined City Planning Projects					Introduction of the Zoning Re-evaluation System August 31, 1970		1st Re-evaluation	2nd Re-evaluation			3rd Re-evaluation		4th Re-evaluation	5th Re-evaluation	6th Re-evaluation			7th Re-evaluation		
			Specified City Planning Land Use Zones	Changed Land Use for Postwar Reconstruction	Determined Vacant Areas	Increased Types of Land Use Zones from 4 to 8 December 15, 1973 *2	Merged with Miyagi Town	Merged with Irumi City and Akiu Town	Increased Types of Land Use Zones from 8 to 12 March 29, 1996	Examined Total Area	Altered Revising the City Planning Road Network	Altered Revising the City Planning Road Network									*1	

*1. A Rural Residential Zone was newly established as a Land Use Zone on April 1, 2018. However, no areas in the city are designated as Rural Residential Zones at the present time.
 *2. At the same time, the Building Standards Act was amended and the building coverage ratio and floor-area ratio were determined.