

Transportation during Wartime (1938–1945)

Policy

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Transportation Policy under Wartime Control

The start of Japan's war in China necessarily represented a departure in national policy, or strategic concepts based on that policy, devised by government and armed forces leaders. The "criteria of national policy" adopted in June 1936 directed Japanese incursion in Asia not only at north-eastern China (Manchuria) but at South-East Asia, too. The leadership assumed that the Soviet Union and the United States would declare war over Japan's domination of north-eastern China. But the bringing of South-East Asia into the strategy made it even more likely that not only would the Soviet Union and the United States come into the war, but that two other adversaries, Great Britain and the Netherlands, would also enter. Consequently, a five-year plan beginning in 1937 strongly appealed for a strengthening of army and navy power, the establishment of a domestic economic system that would support total mobilization, and a strongly controlled economy.

Japan's national policy and strategic framework failed, however, to accurately foresee the realities of the conflict. The government and armed forces underestimated China's power, particularly its war capability and the people's will to fight, and launched a war that they told themselves was winnable in several months. China's defences were much stronger than had been thought, and the government and military failed to conclude the war according to the estimated time schedule.

To prosecute the war, it was decided that the mobilization for total war previously prepared must immediately be put into force. On 1 April 1938, the government overrode all parliamentary and public opposition and enacted a national mobilization law to provide legal justification for com-

plete wartime control. The law stated that the policies and measures the government considered necessary to prosecute the war would not have to receive approval of the Diet but could be implemented as government orders. In other words, the law granted full powers to the cabinet and almost totally abrogated the powers of the Diet.

The mobilization law formed the basis of Japan's wartime controls until defeat in 1945. The law created a framework for basic wartime economic control and allowed the rapid implementation of a series of measures necessary for prosecuting the war.

Armaments production is an obvious aspect of wartime, but under total mobilization, food and many other items are also considered essential to the war effort. Another important part of a wartime economy is distribution, the power to transport goods necessary to wage war. Military transport is of course crucial, but so too is the complete passenger and freight transportation system that brings workers to and from factory and office and transports raw materials and manufactures.

These were the perspectives on which authorities based their move for a sharp change in transportation policy. Previous control policies, particularly those taken from 1930 on to counter the depression, were partial measures for allaying the crisis in capitalistic economy. But transportation policy after the outbreak of war in China, and especially after the enactment of the national mobilization law, was directed at providing transportation to prosecute the war and any other large-scale wars that might occur in the future.

Effecting total control over transportation required the building of a totally integrated transport system like nothing that had ever existed before. It had to cover all land and water transport sectors, i.e., all trunk, local, and interurban areas of railroad and motor vehicle transportation and all coastal and ocean shipping routes in water-borne transport. This problem of controlling transport during total war was one that every nation confronted as it implemented the lessons the Western powers had learned from the First World War. Japan's Railway Ministry oversaw all land transport and had been working with the War and Navy ministries since the latter part of the 1920s on studies of how to implement overall control of both rail and motor-vehicle transport.

They started by studying the plans of traffic systems in Europe and North America. Based on those studies, different transportation control programmes were tested to determine their suitability to Japanese conditions. But the tests proved inadequate in the actual implementation of the wartime system. Maritime transport had not been fully developed, and the authorities had to move as quickly as possible to formulate an overall traffic system that would include water transport. The problems existed in the systems of domestic transport and of transport in the regions surrounding Japan.

Railroads had been the central sector in the domestic transport system since the latter half of the Meiji period and were considered central to the wartime transport system, too. The inherited traffic system, with railroads

as arteries and motor-vehicle routes as capillaries, was reconfirmed as the basic pattern of domestic transport.

The most important strategic consideration in the traffic pattern with Japan and its peripheries was the acquisition of transport routes connecting Japan, Korea, and north-east China. Such a transport system was required by Japan's policies of control over these areas after the Russo-Japanese War. On top of this system, after the outbreak of the war with China, was required one encompassing "Nichi-Man-Shi," an expression used at the time to refer to Japan, Manchuria, and China, and that included the territory Japan occupied in China. The region was conceived of as a self-sufficient economic sphere – an autarky – necessary to support the prosecution of total war. The other fascist states, Germany and Italy, also based their policies on theories of autarky, national self-sufficiency, and non-reliance on imports or economic aid, and Japanese policy makers applied those theories to the Nichi-Man-Shi region. In addition to strengthening the Nichi-Man-Shi economic system, the policy called for the acquisition of South-East Asia, an area of more abundant raw materials, by freeing the European and US colonies under the slogan of Asian liberation and then forming the entire region into an autarky with Japan at the centre. But that goal would have to wait for the Pacific War stage, because the priority transportation task during the period of war with China was to establish a transport network in the Nichi-Man-Shi region.

Unification of Transportation during Wartime and the Conflicts in that Unification

Let's consider the problem of how transportation policy proceeded by looking at events from the end of the 1930s to 1945. The transportation system was able to deliver large volumes of men and *matériel* to the Asian continent after the outbreak of the war in China in July 1937. But once it became evident that Japan would not soon gain the upper hand, it was realized that basic adjustments would have to be made in how transportation power would be used to sustain the war effort. The first problem that arose was fuel. Because of Japan's lack of a good supply of raw materials, it was unable to stockpile enough fuel oil and gasoline to operate ships, aeroplanes, tanks, and other motor vehicles for long periods. Even if the country were able to import enough fuel to meet its war needs, it would have to adopt stiff controls to regulate fuel use by the general population. A severe shortage in shipping space was also created because the armed forces had taken over many ships for military transport. Because railroads ran on coal, which was more widely available domestically, as much of the transportation of goods as possible had to be shifted over from motor vehicles and ships to the railroads.

Both passenger and freight volume rapidly increased after the war started, but the lack of materials and labour caused a decline rather than an increase in transportation power.

Table 1. Passengers transported by rail

Fiscal year	National Railways	Private railroads
1872	495,078	—
1882	6,003,802	0
1892	12,873,547	15,590,168
1902	31,897,045	78,121,456
1907	102,426,263	39,890,322
1912	162,793,852	539,546,895
1922	516,315,575	1,703,634,556
1932	780,240,132	1,894,342,429
1942	2,321,899,076	5,039,335,514
1947	3,363,404,370	5,253,543,598
1952	3,541,528,986	5,307,667,109
1962	5,899,177,897	8,028,731,000
1972	6,723,786,385	10,061,241,000
1982	6,742,418,000	11,526,680,000
1983	6,696,759,000	11,741,000,000

Source: Harada Katsumasa, *Tetsudō no kataru Nihon no kindai* (The railroads and Japanese modernization), expanded and rev. ed., p. 54, table 1 (more recent data have been added).

Note: Figures for private railroads from 1912 on include those for trams.

The first thing that began to happen was a breakdown in the balance between demand and supply in transportation. To prevent the situation from getting worse and to restore the balance, the authorities conceived a policy to strengthen control of transport, which they made manifest in the Land Transport Control Order and the Shipping Control Order, issued on 1 February 1940. These orders derived their authority from the provisions of the mobilization law mentioned previously and allowed the state to ensure the transport of materials for war use by directly controlling the way land transport was used, bringing under its umbrella of direct control not just the National Railways but all private railroads and tramways, and motor vehicles and railway feeder services.

Just a few weeks before the start of the Pacific War, on 15 November 1941, the Land Transport Control Order was totally revised. The revision provided a legal basis for utilizing the Land Transport Control Order to control every aspect of transportation, state or private; to strengthen control over transport; supervise, use, or expropriate transport facilities; control transport materials, equipment, and transport projects. In addition to this imperial edict, the Law for Coordinating Land Transport Operations, enacted on 1 April 1938, at the same time as the mobilization law, started to exert control on transport operations in urban and suburban regions. In the case of Tokyo, to handle the increasing transport demand from commuter traffic, and at the same time to lengthen the underground lines for protection from bombs, the Teito Rapid Transit Authority was established,

Table 2. Freight transported by rail (in tons)

Fiscal year	National Railways	Private railroads
1872	0	—
1882	Not known	0
1892	982,404	1,719,316
1902	3,183,720	12,938,951
1907	18,693,127	7,219,514
1912	33,578,190	5,295,985
1922	67,138,393	17,386,342
1932	69,692,447	23,569,435
1942	163,635,177	50,727,541
1947	112,864,673	23,381,757
1952	159,908,003	32,414,140
1962	210,478,412	45,789,081
1972	177,477,542	56,918,736
1982	97,765,000	38,472,000
1983	86,091,000	35,440,000

Source: Harada Katsumasa, *Tetsudō no kataru Nihon no kindai* (The railroads and Japanese modernization), expanded and rev. ed., p. 54, table 2 (more recent data have been added).

Note: Figures for private railroads from 1912 on include those for trams.

unifying under a single controlling body the entire transport network (including high-speed electric train, underground, tramway, and bus) of inner and outer loop lines centring on the National Railways' Yamanote Line. However, not all of the owners of these transport modes – the private companies, Tokyo City Electric Bureau, the National Railways – went along with this plan of setting up a public corporation, one similar to the London Passenger Transport Board. This lack of support resulted in the enactment, on 7 March 1941, of the Teito Rapid Transit Authority Law, which, while it unified all underground corporations under public ownership, failed to bring the National Railways' electric trains and the city-operated electric trams and buses under its umbrella.

However, a policy to consolidate most of the electric railway companies in the Tokyo suburbs was carried out, bringing together Tobu Railway in the north-east, Keisei Electric Railway in the east, Seibu Railway in the north-west, and Tokyo Express Electric Railway in the south and south-west. Moreover, the city of Tokyo absorbed almost all the trams. In areas other than Tokyo, the situation was the same: transportation companies that were operating systems that centred on a city, whether it was Osaka, Fukuoka, Takamatsu, Toyama, or any other, were consolidated, their lines absorbed, and transportation efficiency improved.

The outbreak of the Pacific War made urgent the task of creating basic guidelines for a transportation policy that would encompass all regions of Asia, with Japan at the hub. The transportation policy outline that the

cabinet laid down on 14 February 1941 called for setting up an integrated transportation system in east Asia centring on Nichi-Man-Shi. There was no mention in it of making South-East Asia part of the transport network; once the Pacific War had begun, though, the government and armed forces leaders realized they would have to bring South-East Asia into their Nichi-Man-Shi net.

In the guidelines for administering the occupied southern territories that the government and military leaders adopted just before implementing the Pacific phase of the war, a policy was laid down for prosecuting war in which the Empire would obtain as much in raw materials as possible from the occupied regions of South-East Asia. Of absolute necessity to the war effort was the securing of routes for bringing the raw materials to Japan. On 21 August 1942, the Council on the Construction of Greater East Asia, an advisory body to the government, submitted a report entitled "Basic Policy for Transportation in Greater East Asia." This policy sought to establish an integrated transport system that included east and South-East Asia in its scope in order to perfect Japan's system of mobilization for total war and to establish the Greater East Asia Coprosperity Sphere with Japan at its centre.

The policy instituted planning guidelines for the maintenance and control of transportation operation facilities that would strengthen every area of transport: land, sea, air, communications, and meteorology; it also contained guidelines for transport control that called for a re-examination of the unified operation and fare system on transport routes connecting Nichi-Man-Shi; a rationalization of marine and land transport; a switch in transportation of goods from sea to land; a thorough plan for laying out sea routes; and an integration of the ship-operating system.

The guidelines contained regulations for unifying the transport facilities in the Japanese home islands and the continent and promoted a new trunk line, or Shinkansen, which the Railway Ministry had already started and which would run on international standard gauge between Tokyo and Shimonoseki. The history of the Shinkansen, built during the postwar period, can be traced back to these recommendations. Investigations were also begun on the possibilities of building a Kampo (Shimonoseki-Pusan) undersea tunnel that would connect the Japanese home islands with Korea and be an adjunct to the Kammon Tunnel being dug at the time.

In maritime transport, supervision and control of ships and shipbuilding projects had been under way since 1937, and in 1940, regulations were laid down for the control of port and harbour operations. On 19 August 1941 the government implemented the General Plan for State Supervision of Sea Transport, placing all sea transport under government control. State control was strengthened further during the Pacific War through the creation of the Sempaku Un'ei Kai (Merchant Marine Commission), the joint government-private organization that set up the system for planning shipbuilding and shipping operations.

At first Japan assumed the initiative in the Pacific War, with events mov-

ing favourably; but in the months from June to October 1942, the situation shifted rapidly with the Allies turning the tide of war against Japan. The logical inconstancies between transportation policy and the actual transportation situation quickly grew ever more apparent. On 6 October 1942 the cabinet adopted the **Matters Relating to Establishing a Wartime Emergency Land Transport System**, a land-transport policy based on the previously mentioned **Basic Policy for Transportation in Greater East Asia**. By means of this new policy, the government strengthened the planned transport system for railroads, motor vehicles, and all domestic transport modes, and at the same time it effected a shift from sea to land for freight transport.

However, none of these policies was realized as planned, and the cabinet, in March 1944, adopted the **General Plan for Emergency Measures in Decisive Battle** and, based on that, decided on 16 August 1944 to implement a **General Plan for Emergency Transport Measures**. Following these measures, passenger transport was severely restricted, allowing its use only for evacuation out of the cities, although shortages in both labour and materials had placed planned transport itself into a state of ruin. All active construction plans, such as those for the Shinkansen and the Kampo undersea tunnel, were cancelled. In the early months of 1945, the continuing bombardment and damage to Japan created a situation in which the only planned transport was that of men and materials for the defence of the main Japanese islands.

War damage in shipping and air transport far exceeded the initial estimates. An enormous amount of ship tonnage had been destroyed, the number of registered ships dropping from 6,380,000 tons in 1941 to 1,560,000 tons in August 1945. This low figure alone was enough to make planned transport impossible.

In the days leading up to Japan's defeat in the war, transportation control was impossible to effect. The responsible agency was changed to the Ministry of Transport and Communications in 1943, and then, in 1945, to the Ministry of Transport. These ministries built a system unifying land and sea transport, but in the bankrupt state prevailing at the time, there was no way that such a system could be operated as intended.

Railroads

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Strengthening the Wartime Transportation System

The National Railways revised its timetables on 1 July 1937 immediately before the start of the war with China. This timetable revision provided five round-trip limited express trains (including one unscheduled train) per day on the Tokaido Main Line and brought express and local train service to their prewar peak levels. Economic recovery from the depression of the