



Tokyo's traffic challenges

Information for

[Developing a Regional Road Map to Support Regional Cooperation for the Wider Deployment of Sustainable Smart Transport Systems](#)



December 1, 2021

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President, ITS Japan



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1.ITS Japan's 4th mid-term plan

- History and transition of ITS (Value of movement and Carbon neutrality)**
- An improvement in transportation flow (an effective use of vehicles)**

2. Tokyo's challenges

3.People's behavior is changing

Key perspective to solving traffic jams in the future

4.Points to consider for ITS road map creation



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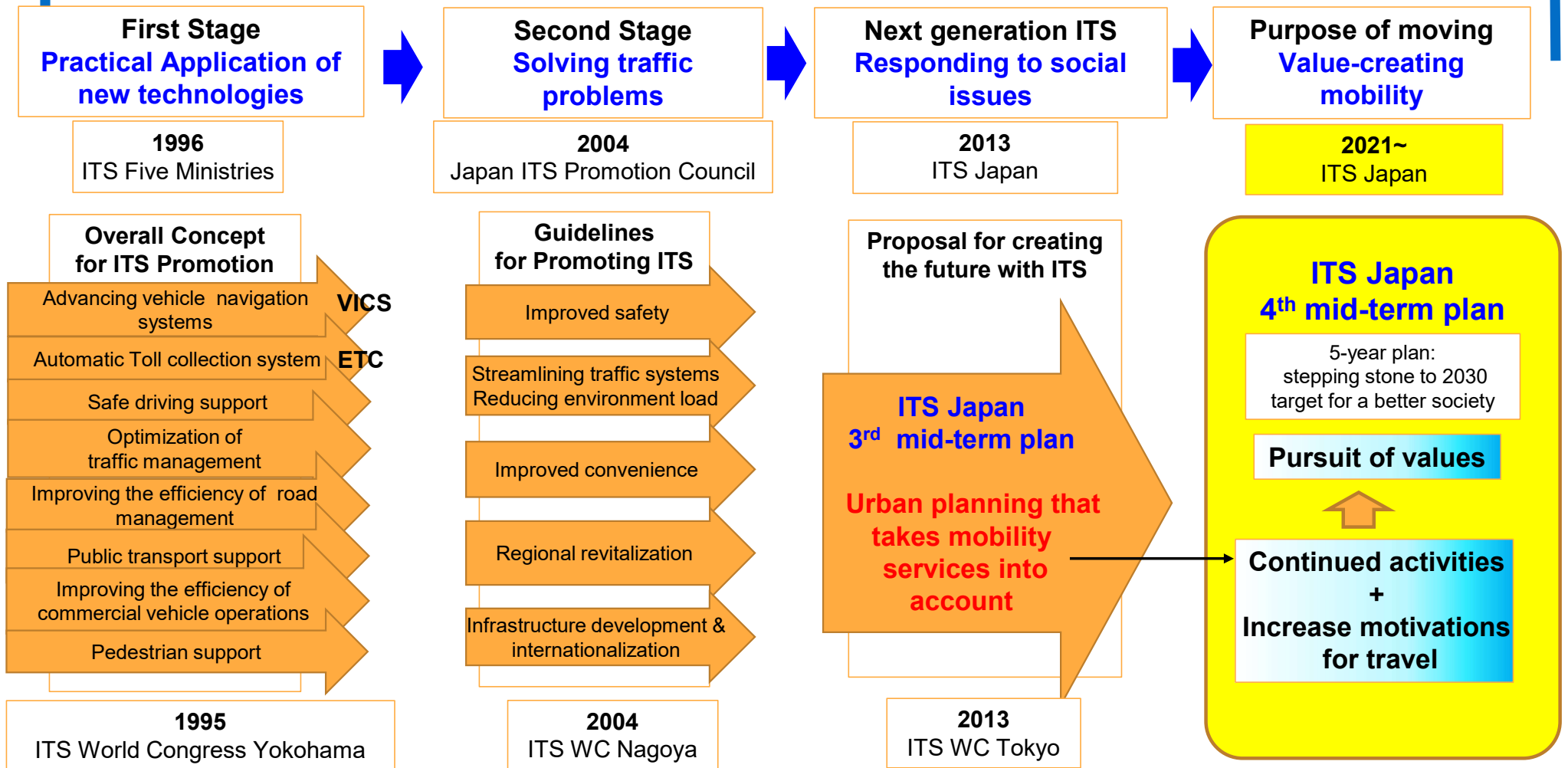
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<ITS Japan's 4th mid-term plan>



History and transition of ITS



Overviews of ITS Japan's 4th mid-term plan

Target: social and value changes

Individual

Diverse, growing society where individuals can play active roles freely

Social Ties

Society where a variety of ties yield new values

Sustainability

Sustainable society where every citizen lives safe and comfortable

Before Travel

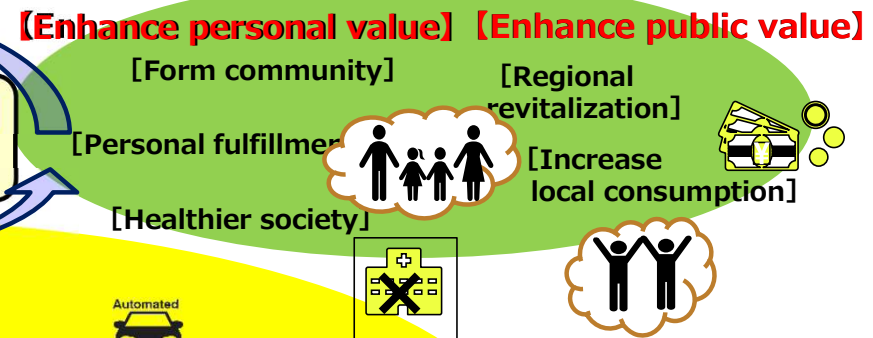
[Induce value-linked travel]



[Mobility Value chain]

1. Increase of travel motivation

After Travel



During Travel

2. Improvement of transport systems

B Mitigation of environmental loads



A Safe, secure, comfortable movement



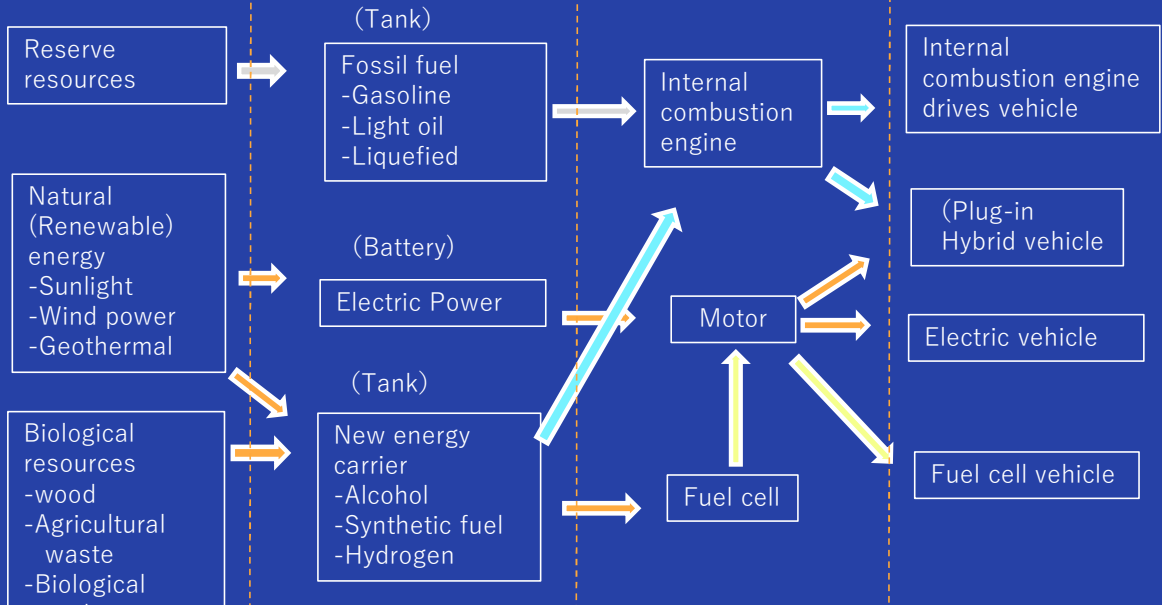
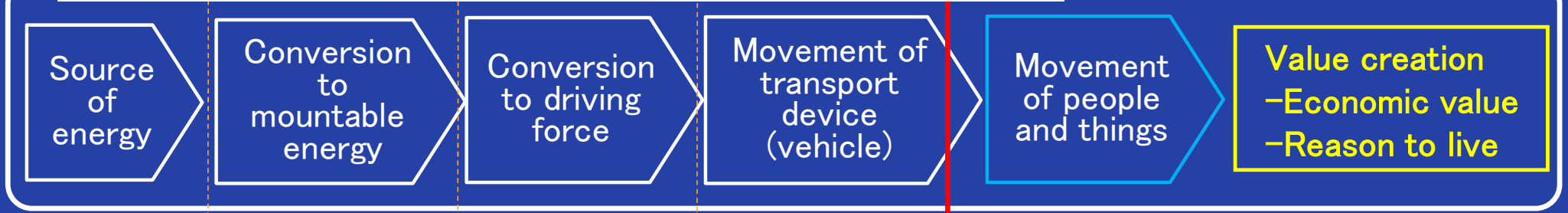
C Natural disaster resilience



ライドシェア

A bird's eye view of the ITS carbon neutral process

Conversion process from energy resources to value creation



Vehicle OEMs and other industries

**Minimum energy
Maximum value of movement**

1. Optimal and comfortable combination of various means of transportation (The very essence of MaaS)
2. Smooth traffic flow integrated with development of urban transportation functions

ITS Japan's 4th mid-term plan



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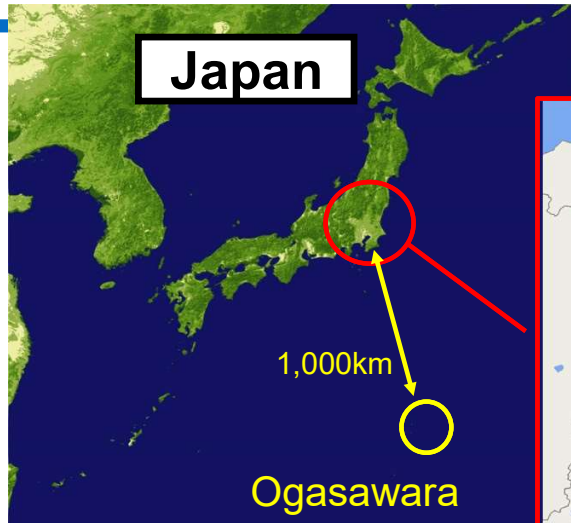
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<Mega City in Japan>



Tokyo



Kanto Area



Tokyo Prefecture

**City of Tokyo
(23 Special Wards)**

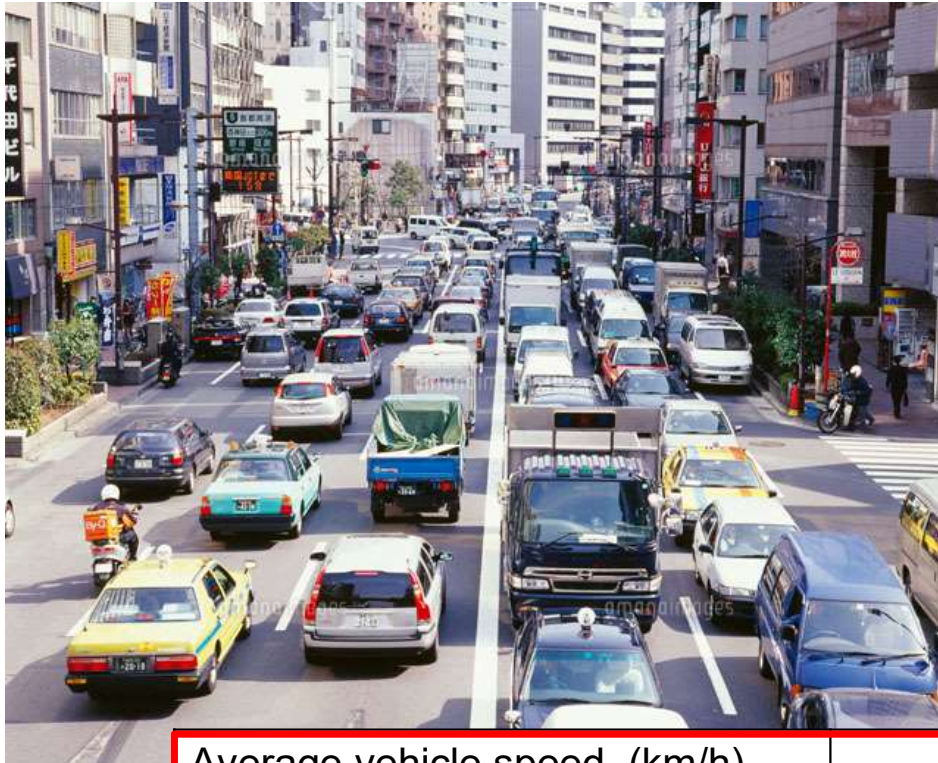
	Tokyo Prefecture	City of Tokyo	Outside of 23 special wards	Ratio
a. Population (M people)	1.4	9.7	4.3	2.26
b. Area (km ²)	2,194	627	1,567	0.4
a/b Density (1Kpeople/km ²)	6,401	15,484	2,762	5.61

Source: Tokyo Metropolitan website



<Mega City in Japan: Tokyo>

Traffic congestion in Tokyo



Average vehicle speed (km/h) on national roads	2008	2011	2015
City of Tokyo(23 special wards)	19.3	19.8	19.9
Japan overall average	-	41.3	40.1

Source: Website Ministry of land, infrastructure, land ,and tourism



<Mega City in Japan: Tokyo>

Source: Tokyo Metropolitan website



Tokyo's initiatives to eliminate traffic congestion

<Hyper Smooth Tokyo Project>

Various initiatives are being pursued around Tokyo



Hyper Smooth Tokyo's "Hyper Susumu" mascot character

- Implementation of demand forecasting signal
- Traffic information sharing with drivers

ITS Japan will also focus on these in its 4th mid-term plan

- Improvement of intersections
- Countermeasures against the lack of parking space for business vehicles (logistics, taxis ,etc.)

Hyper Smooth Tokyo is a project, started in 2016, that aims to alleviate traffic congestion by utilizing existing roads and implementing intensive measures in major traffic congestion areas in Tokyo.

It is people's behavior that causes traffic congestion, and it is people's behavior that can solve it. Knowing why traffic jams occur, as well as individuals taking action, will lead to the creation of a safer and more secure city in the future without traffic jams.



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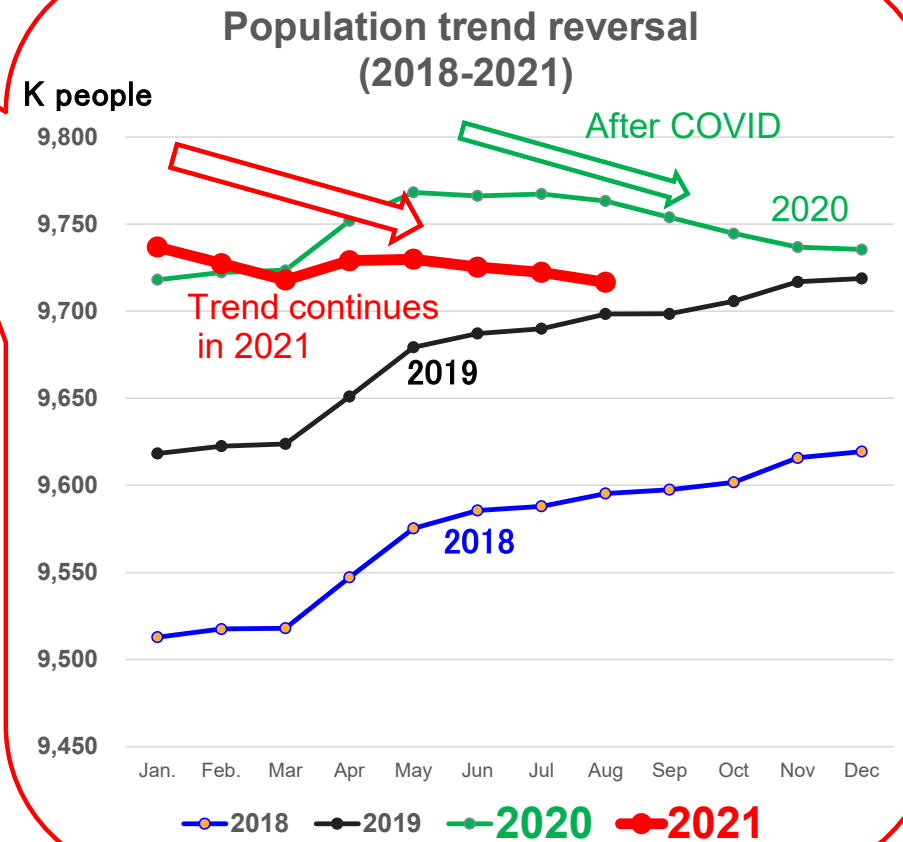
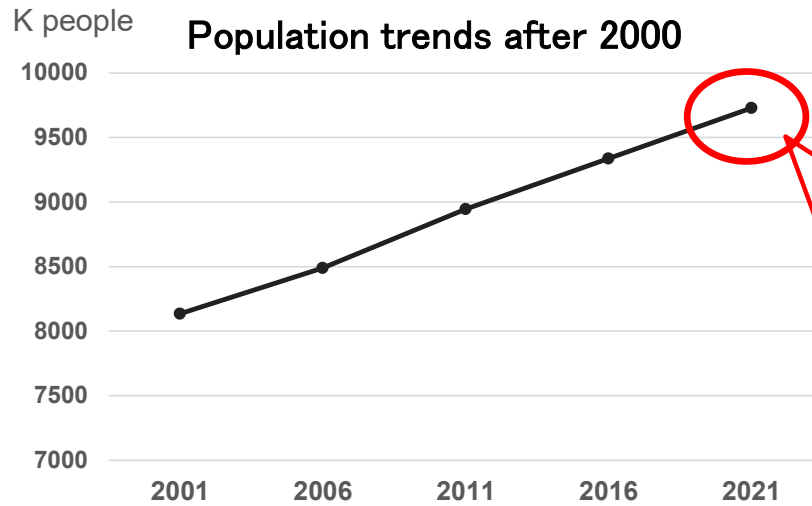
Key perspective to solving traffic jams in the future

4. Points to consider for ITS road map creation



<People's behavior change>

Tokyo 23 districts' population trends



<Question>

After COVID, would you live in a city or a rural area?

<Result>

City

Rural

46%

54%

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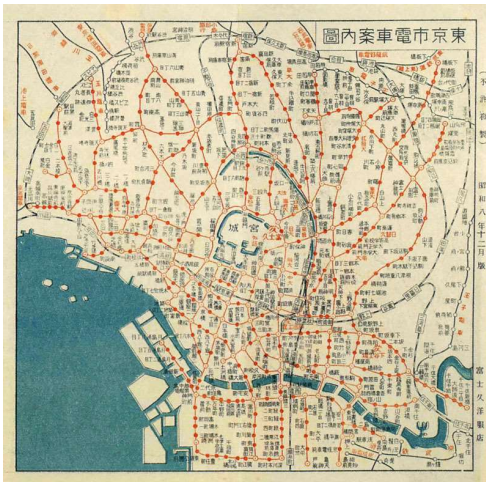


<Key perspective to solving traffic jams in the future>

Public Transportation and Transition in Tokyo

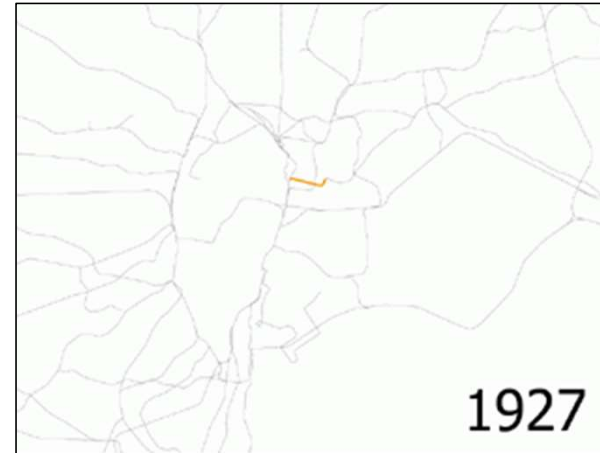
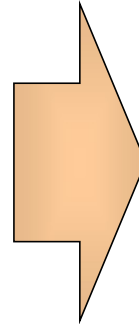


Ginza, Tokyo in 1911 and today



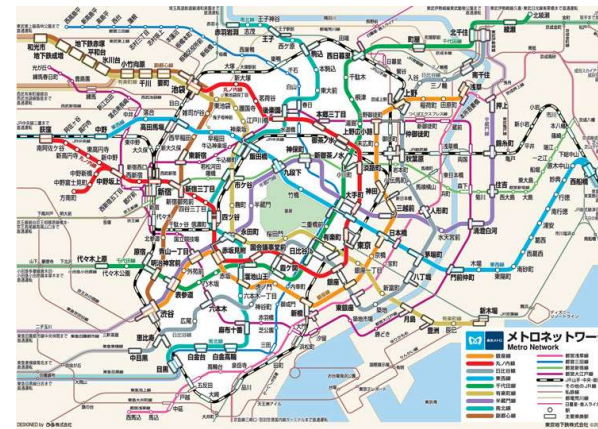
LRT network in 1933

Source : Tokyo Metropolitan Government



1927

Source : Wikipedia



Subway Network in Tokyo

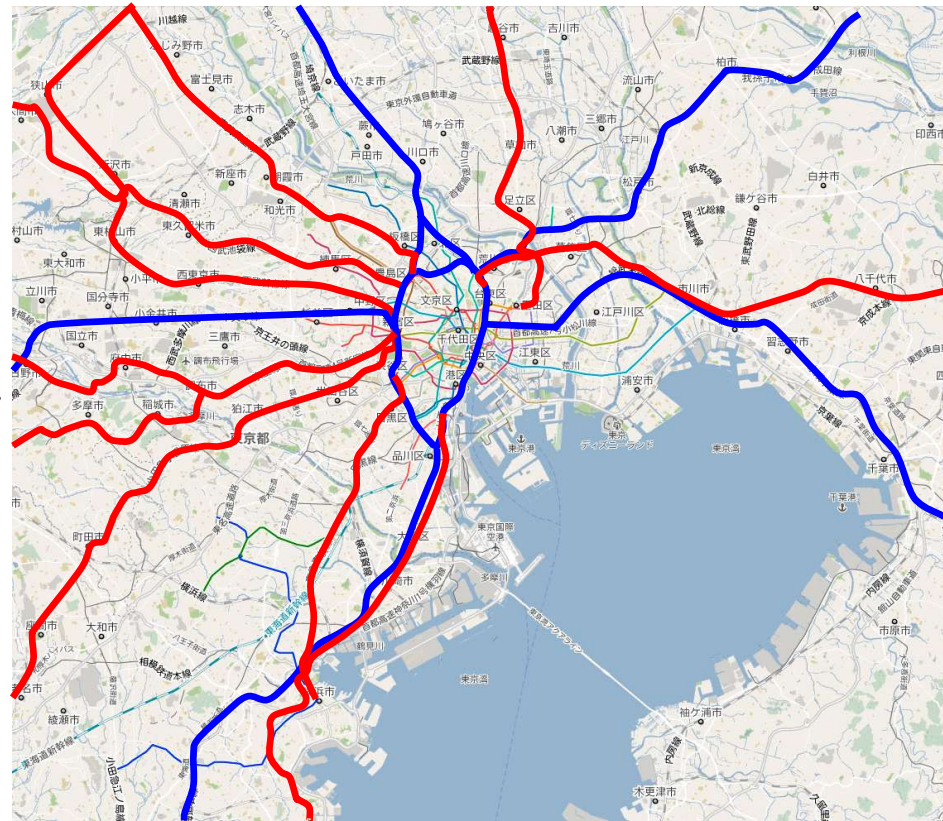
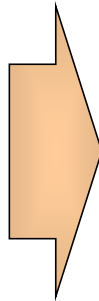
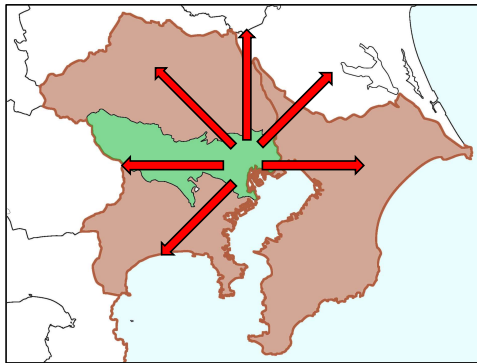


<Key perspective to solving traffic jams in the future>

Expansion Along the Railway



Transit Oriented Development



<Key perspective to solving traffic jams in the future>





<Key perspective to solving traffic jams in the future>

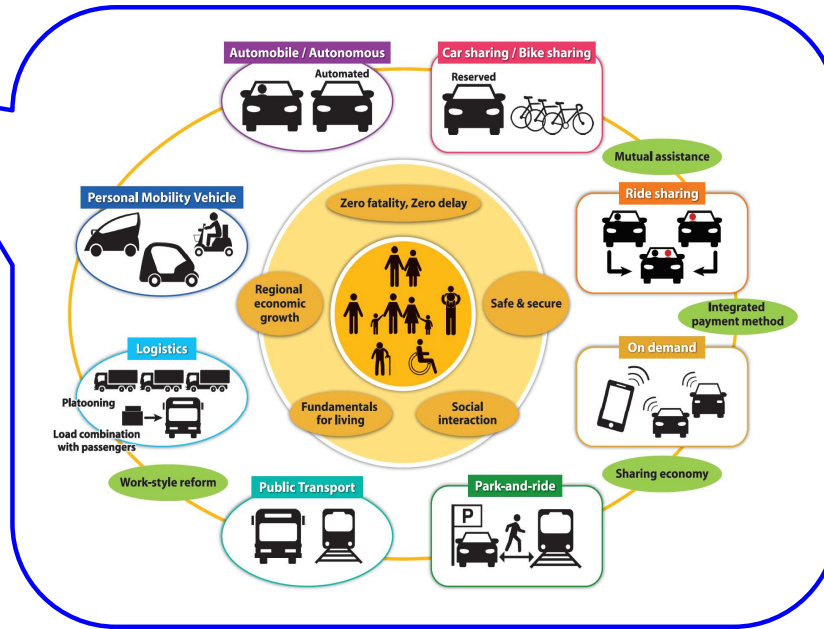
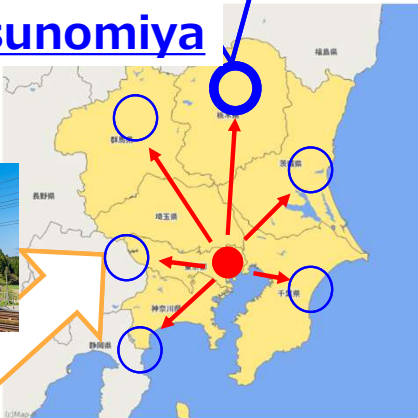
Integrated Mobility Services (One theme within ITS Japan's mid-term plan)



Integrated Mobility Services: To ensure a vigorous, inclusive, safe and secure society
-Satisfy drivers' mobility needs compatible with public interests, deploy innovative technologies, modal mix and enhanced infrastructure, and collaborate across industries, academic disciplines and jurisdictions



Utsunomiya



- Connections between trains from Tokyo and local transportation systems
- Connections between Local transportation and last mile



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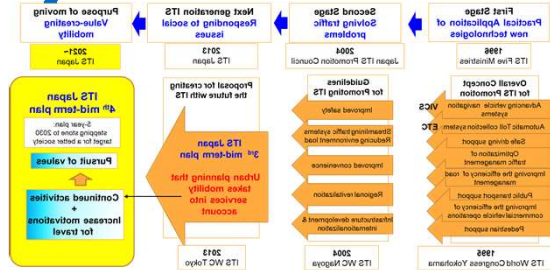
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In order to make the ITS Road Map valuable the following points should be considered.



-Role of ITS

e.g. Safety, Contribution to environment, Accessibility

-Scope

e.g. Services (Maas, MoD, Logistics, etc.), Area

-Hierarchy/Class

e.g. Technology, Platforms/Information, Services, Value

-Features in different cities (countries) including historical and geographical background

-Alignment with local policies

e.g. with Urban planning, with Carbon neutrality, etc.

Hierarchical Structure

Field of deployment



Values to be created



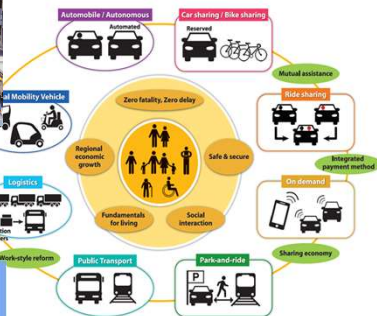
Services to materialize the value



Platforms services are build on



Technologies to realize the services



Sinza, Tokyo in 1911



LRT network in 1933



What is Purpose of the ITS Road Map?

Thank you very much for your attention.

Overviews of ITS Japan's 4th mid-term plan

