

Road Administration in Okinawa

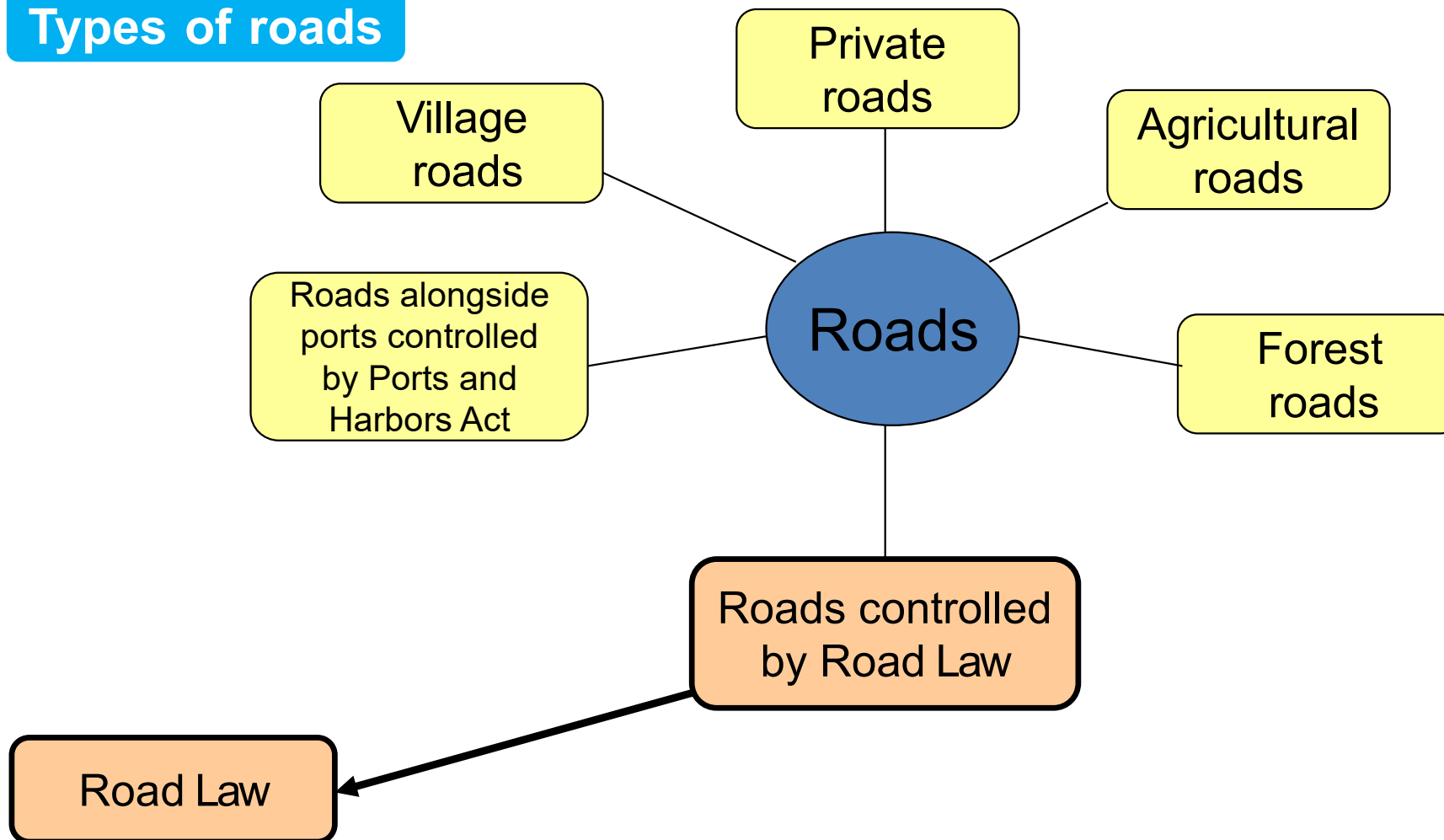
October 30, 2025

Road Administration Division

- 1. Okinawa's Roads**
- 2. Road Management System**
- 3. Maintaining Roads**
- 4. Various Road-related Projects**
- 5. Road Management (E.g. Authorization)**

1. Okinawa's Roads ①

Types of roads



- Clause 2 Roads used for general traffic
- Clause 3 Highways, general roads, prefectural roads, municipal roads

1. Okinawa's Roads ②

Road length

○Roads in Okinawa Prefecture

(As of April 1, 2024)

Type	Number of routes	Actual length (km)	Manager
Highway	1	57.3	Minister of land, infrastructure and transportation
General roads (designated zone)	6 (2)	332.2	
General roads (non-designated zone)	6 (2)	174.0	Prefectural governor
Major rural roads	25	413.7	
General prefectural roads	118	673.7	
Municipal roads	16,840	6,599.3	Mayor

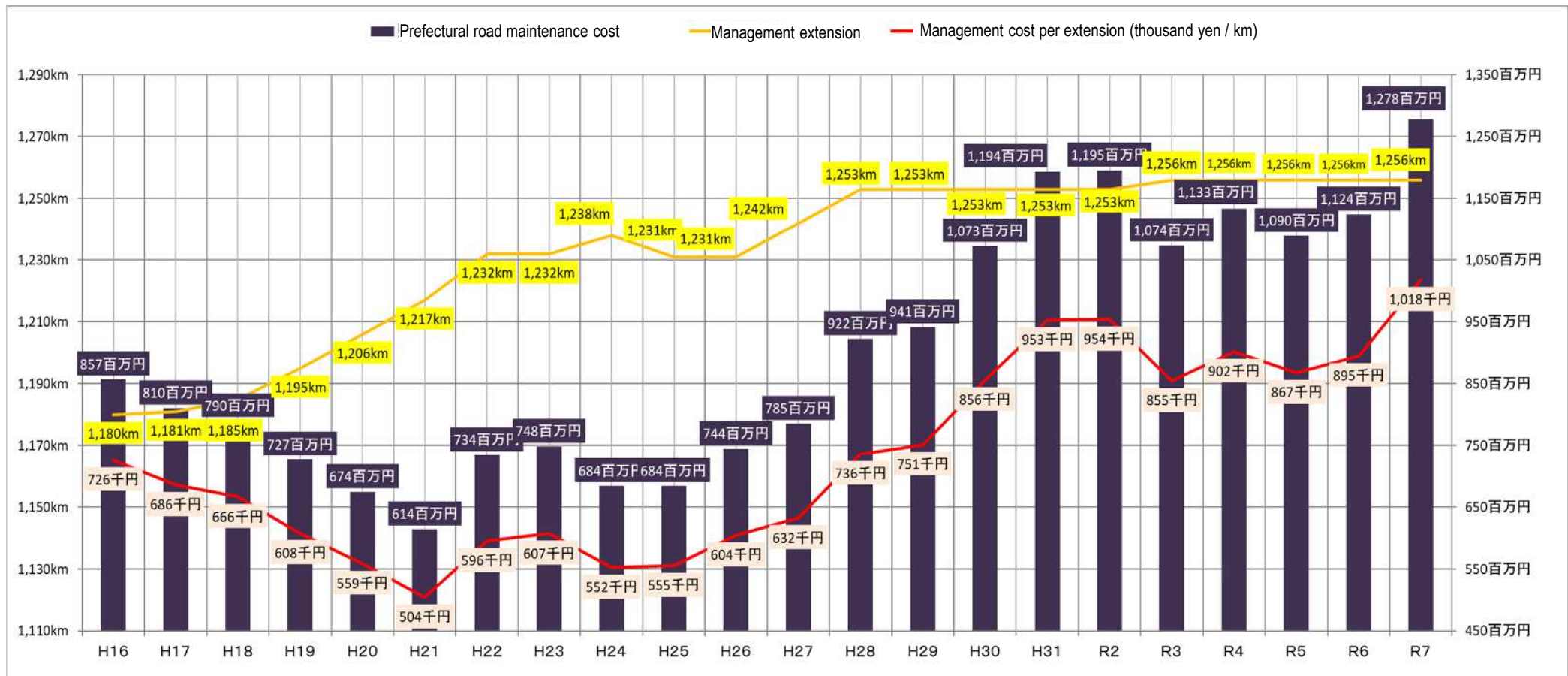
Notes: Roads are specified by the Road Act

Figures in parentheses are overlapped in designated and non-designated zones.

1. Okinawa's Roads ③

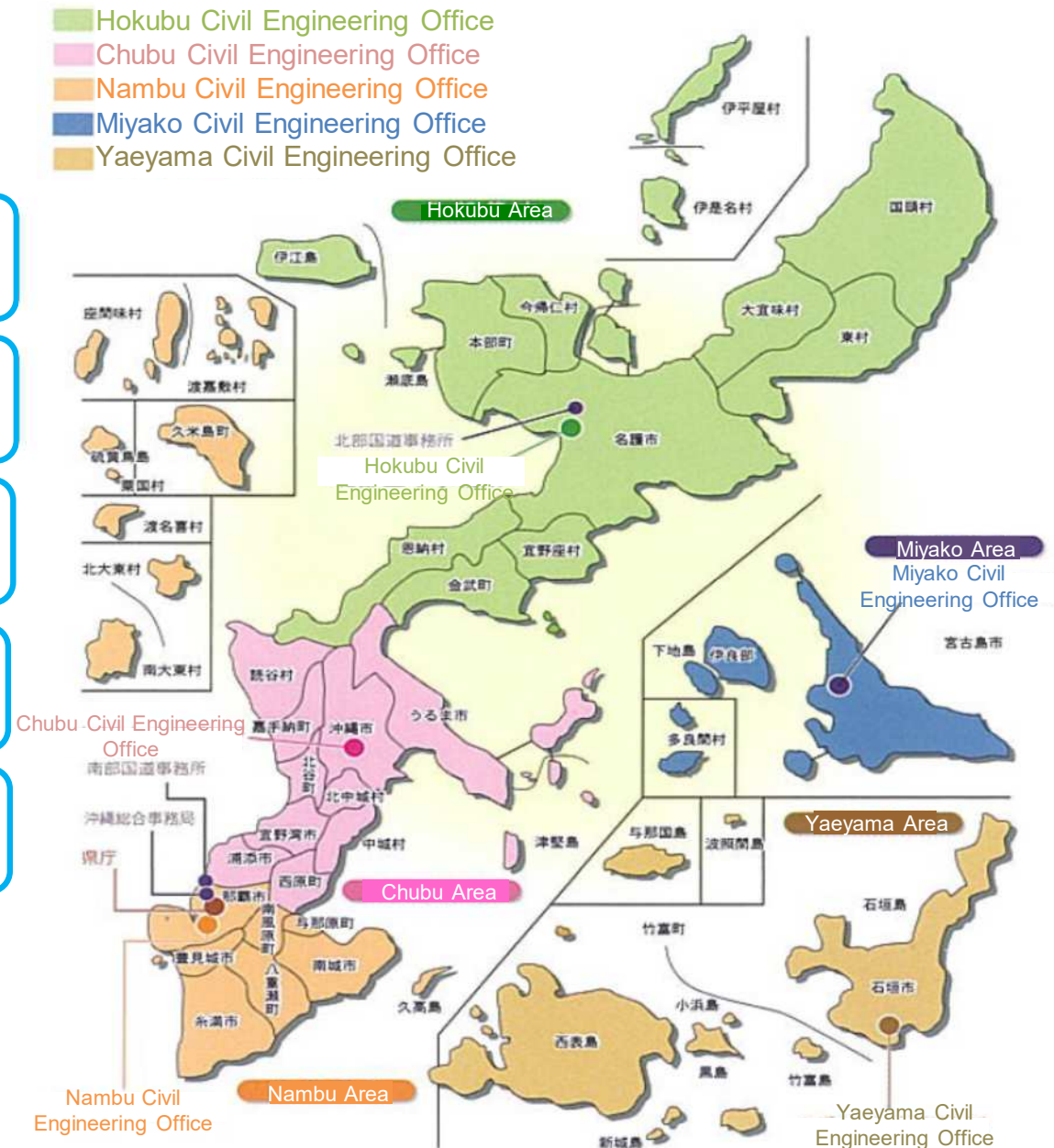
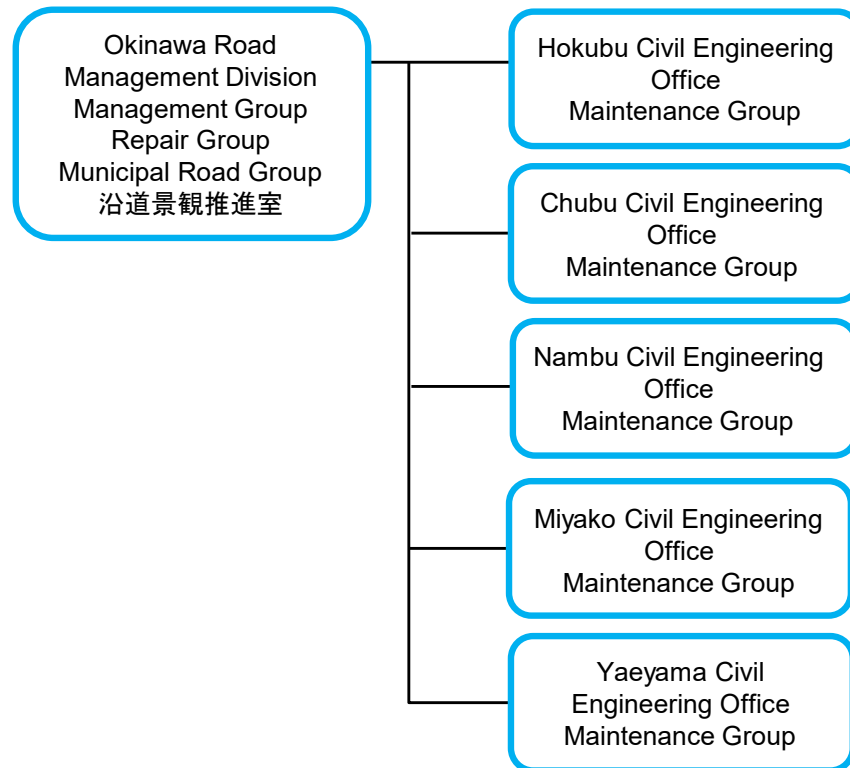
Environment of road maintenance work

- Weeds grow rapidly in Okinawa Prefecture due to its subtropical climate, and the rapid development of motorization has resulted in increased traffic and larger vehicles, which have caused significant damage to road surfaces. In addition, the rapid development of motorization has increased the volume of traffic and the size of vehicles, resulting in significant damage to road surfaces.
- In recent years, there has been an increase in damage from flooding of roads due to localized heavy rainfall and reduced infiltration of rainwater as a result of urbanization.
- Although road maintenance budgets have increased in recent years, it is still not enough to carry out appropriate maintenance and management, and creativity is required.



2. Road Management System

Organizational chart and jurisdiction



3. Maintaining Roads ①

Mission of road administrators

- Road Act Article 42 stipulates that “road administrators shall maintain and repair roads to keep them in good condition at all times, thereby ensuring smooth traffic flow for the general public.” Accordingly, road administrators are responsible for properly maintaining roads at all times.
- Maintenance and management are required to meet diverse needs such as securing more comfortable traffic space, creating favorable landscapes, preserving historical streetscapes, promoting tourism, restoring local culture, and revitalizing the community.

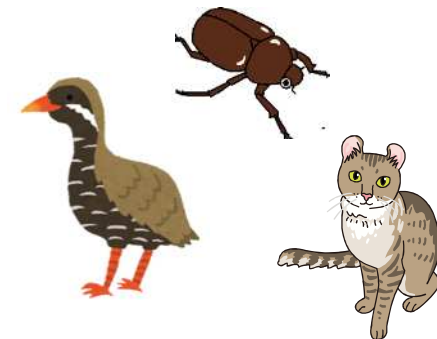
Aging population and
fewer children



Advancing
globalization



Environmental
conservation



3. Maintaining Roads ②

Road patrols

- Regular patrols (once every two days)
Check road surfaces and vegetation,
taking steps as needed
- Night patrols (at least once a month)
Check road lighting equipment
- Emergency patrols
After typhoons, heavy rains, or other
natural disasters, taking steps as needed
- Urgent measures
Emergency protection and enforcing traffic
controls



Road patrol



Removing downed trees

3. Maintaining Roads ③

Maintenance tasks

○ Cleaning roads

We keep road surfaces clean with regularly cleaning.



Cleaning road surfaces

○ Weeding and trimming roadside trees (2~ 3 times a year)

We remove weeds and trim trees to maintain an attractive landscape and ensure that the vehicles, pedestrians, traffic signs, and signals are not difficult to be seen by the overgrowth.

We have also established a subsidy program for joint activities with local volunteers that ensure a better road environment.



Weeding and trimming roadside trees

○ Repairing pavement

We cover holes and localized damage to road surfaces or replace pavement as needed in order to maintain a certain level of functionality.

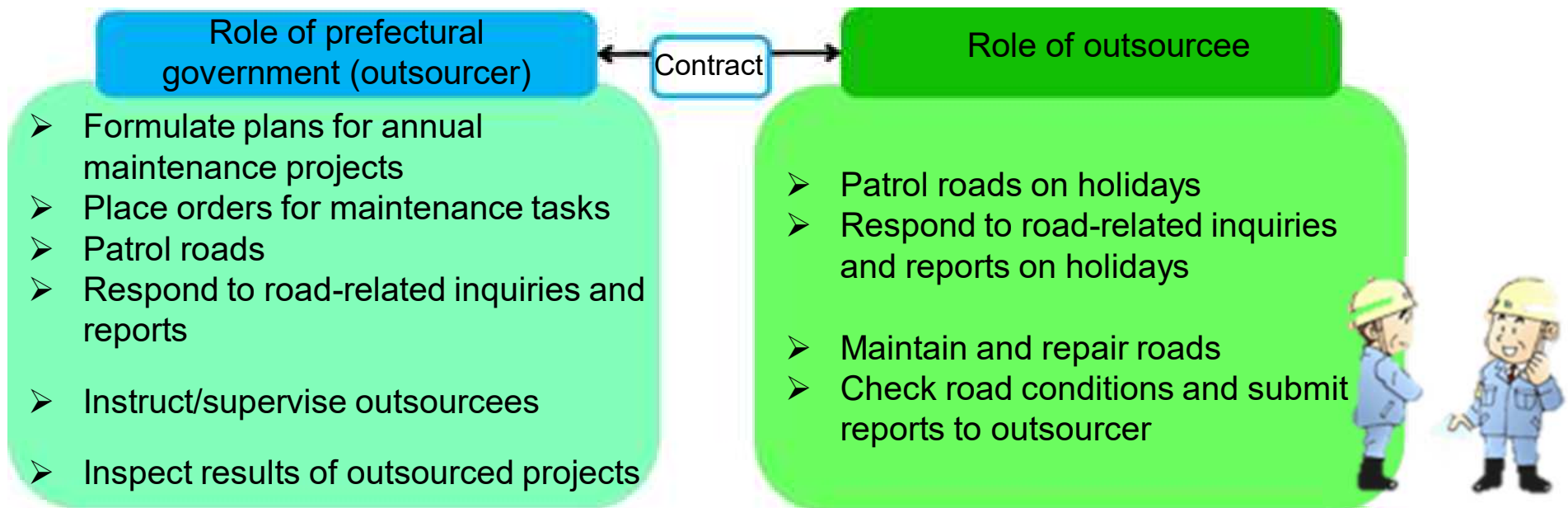


Repairing pavement

3. Maintaining Roads ④

Outsourcing

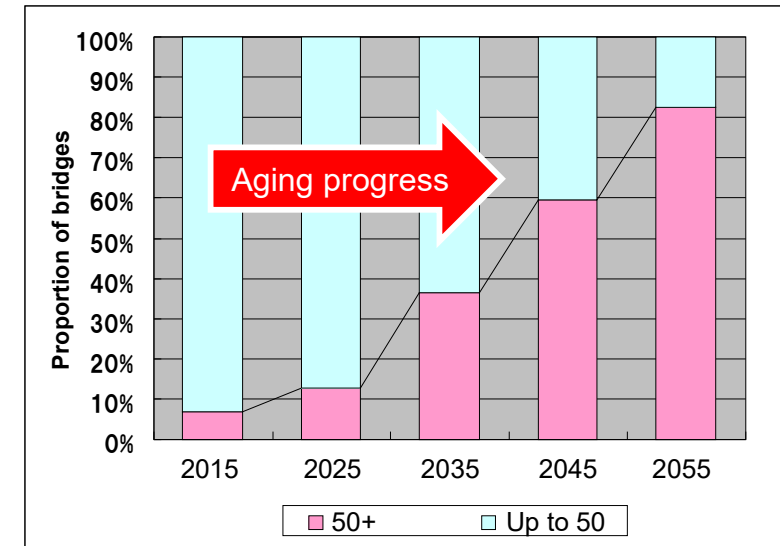
- We outsource tasks to private contractors (annually or biannually) when those tasks do not require safety decision to be made.
- We also outsource responses to road user reports received after hours (those not requiring decision-making) and holiday road patrols.
- Road administrators come up with plans, make planning decisions, take measures, make judgment calls, coordinate with related parties, report test results, and so on.



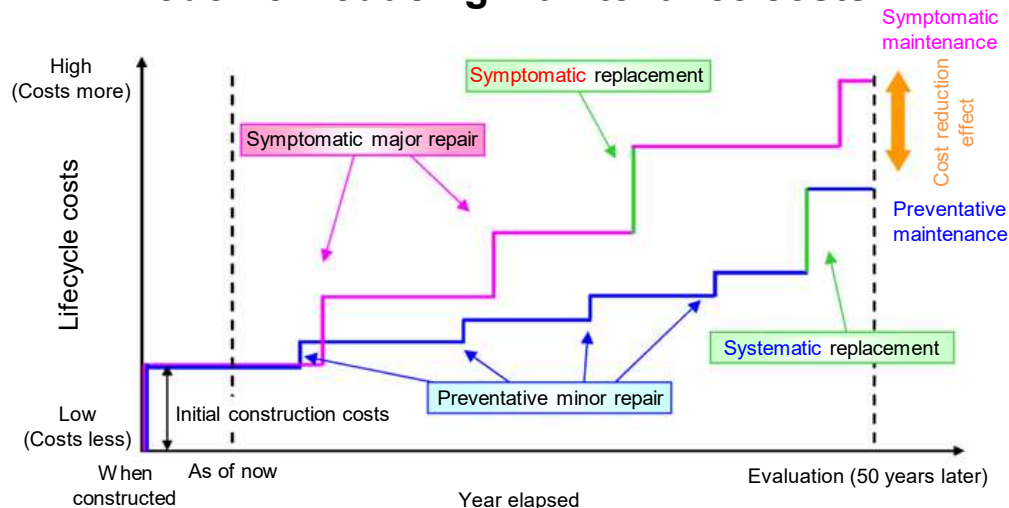
4. Various Road-related Projects ①

Extending bridge life

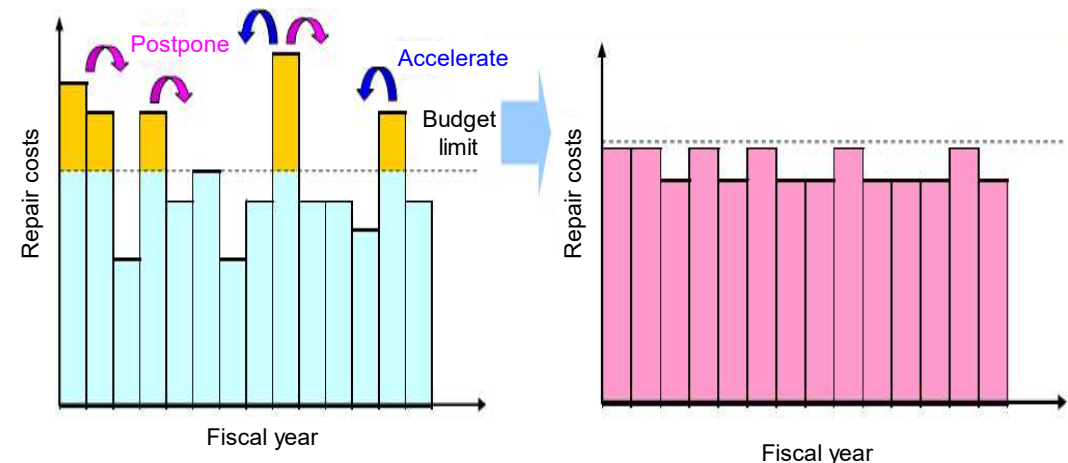
- The Okinawa prefectural government oversees 698 bridges 2 meters or longer, and about 10% of them are now at least 50 years old. Thirty years from now, about 60% of these bridges will be half-century old or more, meaning that many of them will require substantial repairs or even total replacement.
- We are in progress of shifting our maintenance strategy from symptomatic to preventative management to prolong the life of our bridges as well as reduce and level out maintenance costs.



Model for reducing maintenance costs



Maintenance budget leveling model



Collapse of Benoki bridge (July 15, 2009)



4. Various Road-related Projects ①

- Systematic repairs are ongoing by conducting regular inspections (once every 5 years) to detect damaged or deteriorated parts and prioritize repair work according to traffic volume and availability of detours.
- In addition to repairs, we are promoting seismic reinforcement. Learning from the lessons from the Hyogo Prefecture Southern Earthquake (1995), which damaged many bridges and hindered rescue and restoration efforts, we prepared for large-scale earthquakes, and ensured safety against bridge collapse, and promptly restored bridges after an earthquake. We are making arrangements to restore functionality.



Before



After

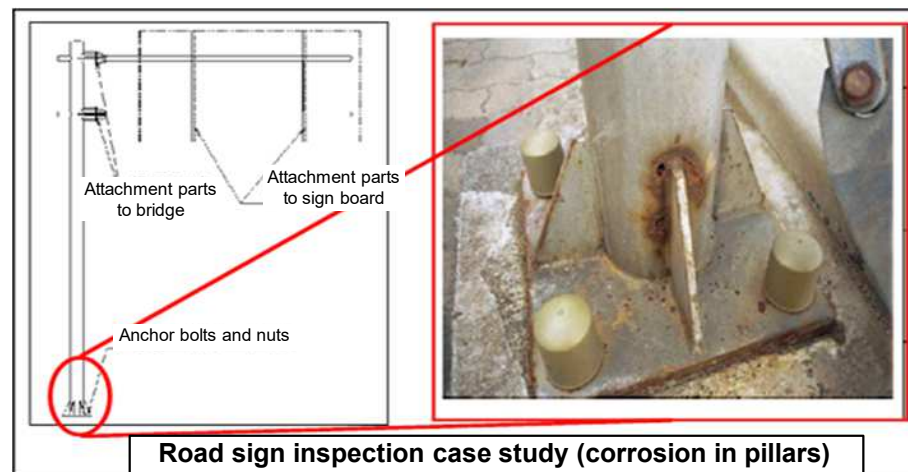
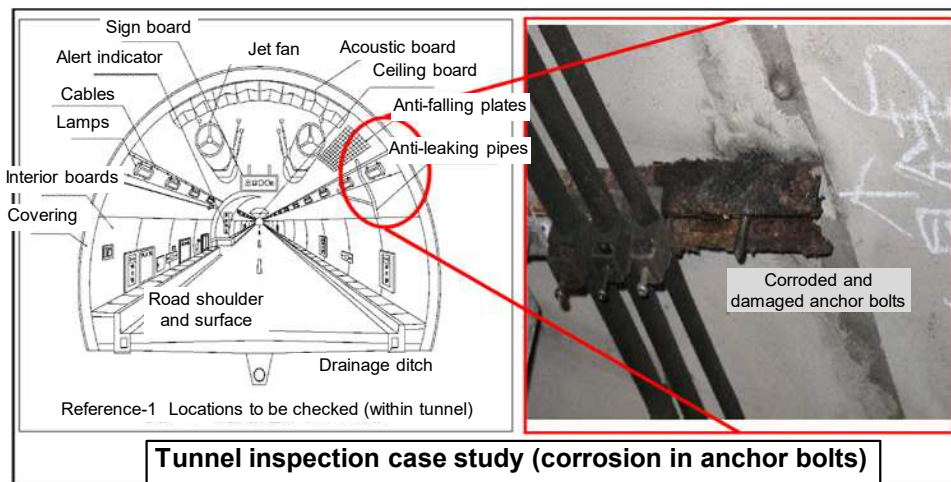


- Wound bridge footing
- Inserted shock absorbers

4. Various Road-related Projects ①

Extending life of other facilities

- In response to the Sasago tunnel collapse in 2012, the Ministry of Land, infrastructure, Transport and Tourism defined the year 2013 as the first year of its intensive maintenance campaign. In 2014, inspection criteria was made into law through an amendment to the Road Act.
- Prefectural governments throughout Japan established Road Maintenance Conferences to optimize their maintenance cycles (inspect → diagnose → remedy → record). In this way, road administrators are making ongoing, collaborative efforts to cope with issues related to Japan's aging infrastructure.
- In Okinawa Prefecture, inspections of road facilities such as tunnels, pedestrian bridges, pavements, and road signs were carried out by FY2018, and a repair plan to extend the life of large structures such as tunnels was formulated in FY2019.



Sasago tunnel ceiling board fall accident (Yamanashi Prefecture)



Source: documents created by Survey and Study Committee for investigating the tunnel underwent ceiling boards collapsed

4. Various Road-related Projects ②

Disaster prevention

- We take steps to prevent disasters in locations where damage could hinder smooth traffic flow, such as on slopes and retaining walls.
- We identify the locations that need to be improved through regular inspections and disaster prevention diagnostic tools.

Road anti-disaster diagnosis (end of 2022)

	Number of locations	Inspection frequency
Locations under continued investigation	266	Once in five years
Location needs remedies	120	Once a year
Location completed remedies	262	-

Before



After

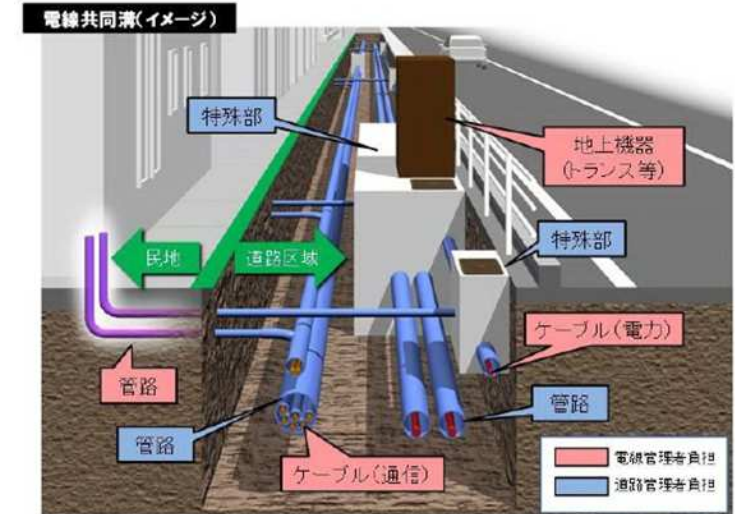


- Revetment
- Vertical drainage
- Rock fall prevention net
- Surface protection

4. Various Road-related Projects ③

Burying transmission wires

- Burying wires crisscrossing above ground improves the urban landscape.
- Towns without utility poles also offer wheelchair users safer and more convenient widened sidewalk, making this a barrier-free initiative as well.



Before



- Burying transmission wires
- Removing utility poles

After



Photo: Prefectural Route 16 (Uruma City)

4. Various Road-related Projects ③

- Okinawa is in a typhoon corridor and suffers major damage from these storms every year. Burying transmission wires can prevent traffic paralysis due to collapsed utility poles and sagging wires while reducing the risk of electric shock.
- From the perspective of disaster prevention, we must promote pole-free towns as a way to also avoid the risks of downed communication networks and power outages.



Damage from Typhoon No. 14 in 2003 (Miyakojima City)



Damage from Typhoon No. 13 in 2006 (Ishigaki City)

4. Various Road-related Projects ③

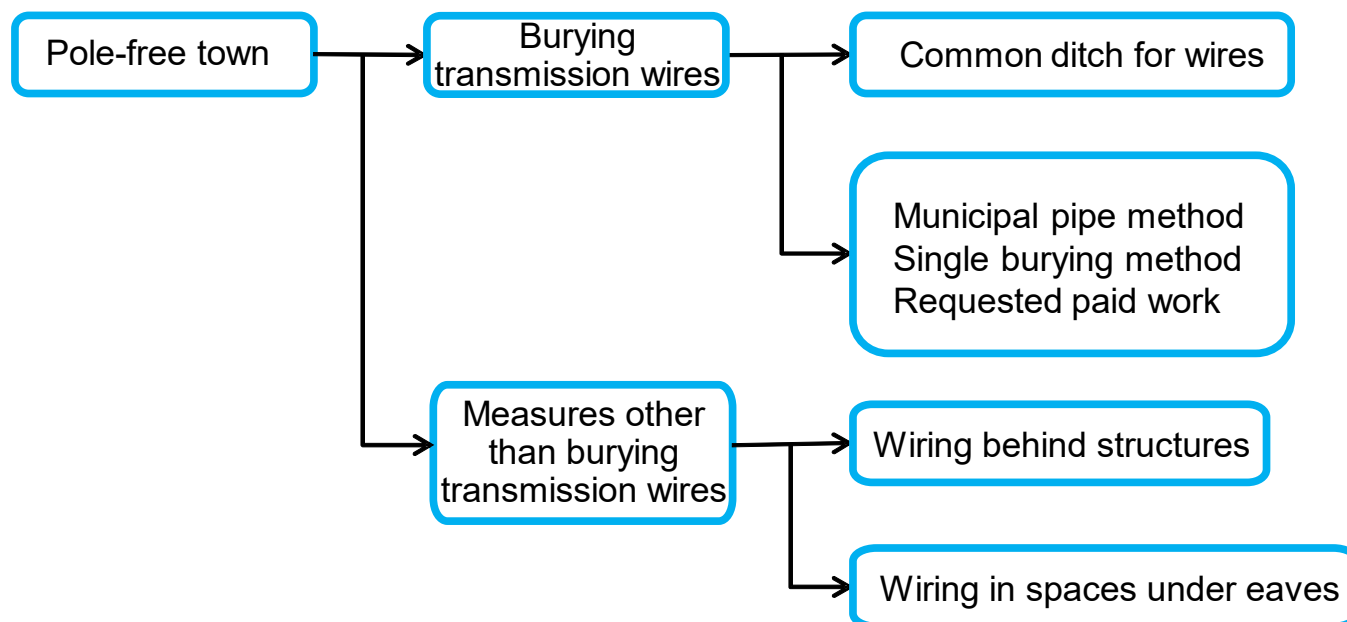
○ Improvement progress

So far, we have upgraded about 5 km a year between 1991 and 2025, and have 184 km of roadway already completed. In the future, the prefecture plans to focus on improving emergency transportation roads and main roads in urban areas.

Length to be improved by administrators
(end of 2024)

Administrator	Length to be improved
Central government	Approx. 58 km
Prefectural government	Approx. 83 km
Municipal government	Approx. 43 km
Total	Approx. 184 km

○ Pole-free method



4. Various Road-related Projects ④

Public transportation safety

- This project aims to prevent traffic accidents and achieve smooth traffic flow by improving conditions on roads with frequent traffic accidents and/or areas requiring extra safety.
- We have been upgrading intersections, pedestrian bridges, road signs, and guard fences for zones with particularly high accident risk based on annual traffic accident surveys and feedback from local communities.

Before



After



- Non-slip pavement
- Addition of guard fences

4. Various Road-related Projects ④

- In response to the multiple fatal accidents in 2012 involving children commuting to school, an urgent investigation was conducted in collaboration with schools, police, and road administrators. We are now taking enhanced traffic safety measures on school-commute routes based on the results.
- Municipal governments formulate programs to ensure safe school-commute routes while conducting ongoing surveys and taking action where needed.

Before



After



- Larger, improved sidewalks

4. Various Road-related Projects ④

Upgraded school commute routes (example)

Members to review measures:

- BOAs, schools, PTAs
- Road administrators
- Police
- Resident groups

(2) Dangerous because
of interfering bicycles
and children
Measures:
Indicated bicycle-only
path (completed in 2013)



(1) Pedestrians are forced to
enter the roadway to avoid
poles

Before



Solution:
Bury poles

(3) Dangerous rail crossing
congested with children and
vehicles

Before



After



Solution
Expand railway crossing
(completed in 2013)

(4) Bypass for congested
national roads is dangerous
with narrow sidewalk

Before



Solution:
Placing objects for
narrowing roads

(5) Dangerously
narrow with steps that
may cause falls

Before



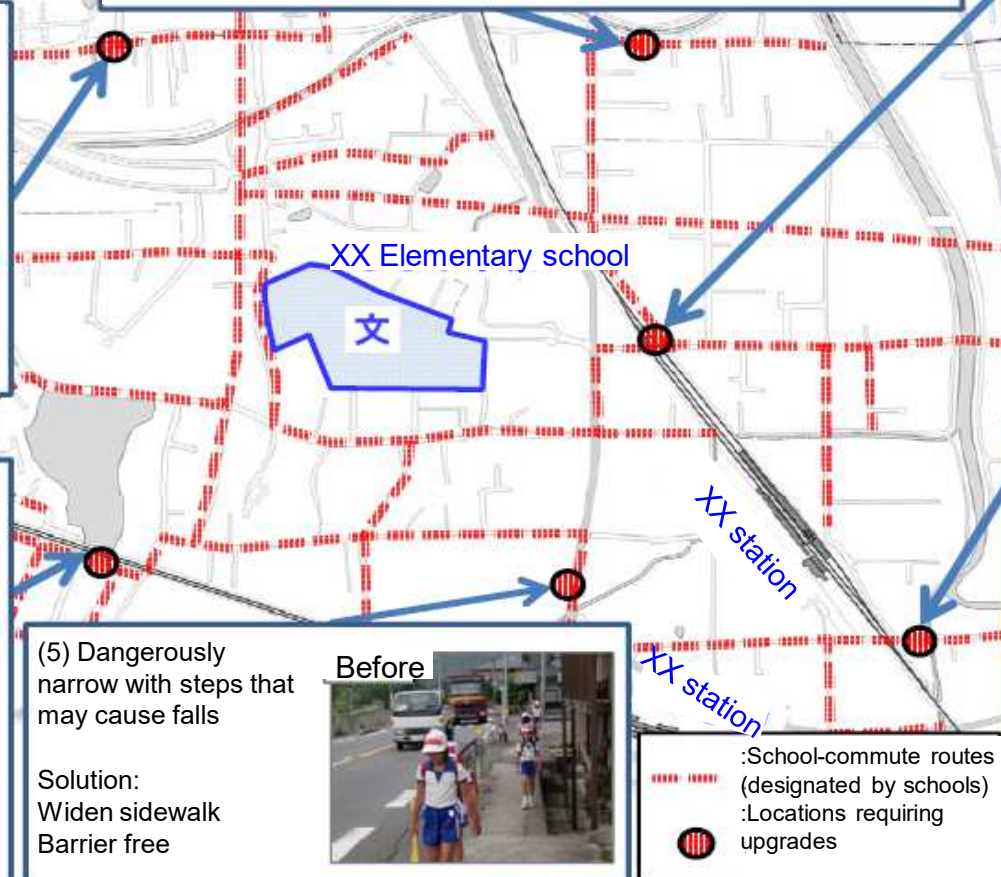
Solution:
Widen sidewalk
Barrier free

(6) Dangerous bus stop
located on a narrow
sidewalk

Before



Solution:
Upgrade sidewalk around
the bus stop



Source: Ministry of Land, Infrastructure, Transport and Tourism

5. Road management ①

Road occupancy system

- The use of roads by people and automobiles for traffic is called "general use of roads" because it is in accordance with the original purpose of roads.
- On the other hand, when a living area is formed with the road as its foundation, facilities are established above or below ground on the road for public utilities such as electricity, gas, water, and sewerage, and these facilities are used continuously beyond their original purposes. This type of use is called "special use of roads" as opposed to general use.
- Special use of roads is secondary to the original purpose of the road, which is to serve general traffic, and is allowed only to the extent that it does not interfere with the original function of the road.
- Therefore, the "Occupancy of Roads" system is a system that permits special use of roads in accordance with the law in order to coordinate it with general use.

Reference: Ministry of Land, Infrastructure, Transport and Tourism,
Road Occupancy System(<https://www.mlit.go.jp/road/senyo/01.html>)

5. Road management ①

Occupied properties

Properties that may occupy roads are described in laws and regulations.

(Article 32, Paragraph 1 of Road Law)

Category 1	Electric poles, electric cables, transformer towers, mailboxes, public telephone booths, advertising towers, and other similar structures
Category 2	Water pipes, sewer pipes, gas pipes, and other similar properties
Category 3	Railroads, tracks, and other similar facilities
Category 4	Walkways, snow shelters, and other similar facilities
Category 5	Underground malls, basements, passageways, septic tanks, and other similar facilities
Category 6	Street stalls, product storage areas, and other similar facilities
Category 7	<p>Structures, objects, or facilities that may interfere with the road structure or traffic, as specified in a Cabinet Order (Article 7 of the Road Law Enforcement Order) (see below).</p> <ul style="list-style-type: none">① Signboards, traffic signs, flagpoles, parking meters, curtains, arches② Solar power generation equipment, wind power generation equipment③ Tsunami evacuation facility④ Construction board enclosures, scaffolding, guard stations, etc.⑤-⑬ Omitted

5. Road management ①

Criteria for permission

- Road administrators may permit the occupation of a road if the following three requirements are met (Article 33 of the Road Law).
 1. The private property falls under the category of private property listed in laws and regulations.
 2. It is unavoidable because there is no space other than the road site.
 3. The occupied space, structure, etc. conform to the standards of the Cabinet Order.
- Road administrators should take the following three principles into account when determining occupancy permits:
 1. Principle of public nature: As a general rule, works for the commercial purpose of a specific person are not permitted. Prioritize things that are highly public.
 2. Principle of planning: It must be coordinated with future road plans, city plans, etc.
 3. Principle of safety: Occupation that impairs public safety is not permitted.

5. Road management ①

Occupancy fee

- Road managers can collect fees for exclusive use of roads. In addition, the amount of the occupancy fee and the method of collection are determined by the ordinances of the local government that is the road administrator. (Article 39 of the Road Law)
- In Okinawa Prefecture, the amount and method of collection of occupancy fees are stipulated in the Okinawa Prefecture Road Occupancy Fee Collection Ordinance.

Occupancy fee = Occupancy unit price x occupancy period

*** The unit price for exclusive use is set for each type of occupied property and location.**

5. Road management ①

Measures against illegal occupancy

- Unlawful use of a road without permission for road occupancy is called "illegal occupancy."
- If the road administrator finds a property illegally occupied, the road administrator will eliminate the illegal condition (removal of the property, application for permission to occupy the road, permission, etc.) through administrative guidance.
- If the illegal occupancy is not improved by the administrative guidance, the road administrator will issue an order to stop construction, relocate, remove, etc. as a supervisory action.
- If the illegal occupancy does not improve even after the supervisory measures are taken, the road administrator will remove the illegally occupied property by himself/herself through administrative substitute execution (Article 71 of the Road Law).
- Illegal occupants are subject to penalties of up to one year in prison or a fine of up to 500,000 yen. (Item 1, Paragraph 1, Article 103, Road Law.)

5. Road management ②

Other Licensing and Guidance

- In addition, we provide licensing services and guidance based on the Road Law in order to promote appropriate road use.
- Approved road construction (Article 24, Road Law)
If a person other than the road administrator wishes to carry out construction, maintenance, etc. on a road for his or her own needs, he or she must apply for and receive approval from the road administrator.
 - Construction to lower sidewalks to allow cars to enter
 - Installation and removal of guardrails, etc.
- Road damage restoration work (Articles 22 and 58 , Road Law)
If construction or activities other than road construction cause damage to a road, the person responsible for the damage can be ordered to take measures to deal with or restore the damage, and can be made to pay for the damage.
 - Recovery work for guardrails damaged due to car accidents, etc.



Lowering the sidewalk to allow boarding

5. Road management ③

Road management defects

Road administrators are responsible for compensating for damages caused to others due to defects in road installation and management.

(1) What is road management defect?

Cases in which damage is caused to a third party due to road installation or management. (Liability for buildings, Article 2, Paragraph 2, National Compensation Act).

It is established if the facility (building) lacks the safety that it normally has, and the principle is no-fault liability, and financial reasons cannot be used to exempt the liability.

***No-fault liability: Responsible regardless of whether or not there was fault.**

***The prefecture has an insurance contract in preparation for compensation claims.**

(2) Are all accidents due to management defects?

Not all accidents are due to management defects.

For example, accidents that occur under unique circumstances such as earthquakes or tsunamis that the road administrator cannot predict, or accidents that occur in a way that the administrator cannot predict, cannot be said to lack normal safety, and therefore are not subject to management defects.

However, this is a general judgment standard, and judicial precedents and past cases are examined in each case to determine whether or not it constitutes a management defect.

5. Road management ③

Management defects (accident cases)

(1) Accident case

When traveling on a racing bicycle, a tire was caught in a 3-cm gap between the grating and frame. The rider fell down while plunging forward and seriously injured his/her cervical spine, resulting neck-down paralysis.

(Occurred in 2009, legally settled with the victim in 2014 with compensation of 135 million yen)

(2) Cause of the accident

No damage was found in the grating and frame, and the administrator lacked recognition or awareness of a possible accident. The administrator did not notice the gap during patrols. As a result, the gap got overlooked until the accident occurred.

(3) Response

Emergency inspections are conducted after accidents, and inspections are conducted by patrols, etc.



5. Road management ④

Road register

A road register is a register that contains basic information about the roads managed by the road administrator, and is composed of reports and drawings.

○ Article 28 of the Road Law requires road administrators to fulfill the following two obligations:

- 1 The road administrator shall prepare and keep a road register for roads under his/her control.
- 2 The road administrator may not refuse a request to inspect the road register.

○ Practical tasks include confirming road width using the road register, road areas, and occupied properties.

○ Main items to be included in the "report"

1. Route name
2. Route length and details
3. Road area and details
4. Overview of tracks and other major occupancy properties

○ Main items to be included in the "Drawing"

1. Road area boundaries
2. City, town, village, and village boundaries
3. Longitudinal gradient

**Okinawa Prefectural
Government
Road Management
Division**

道 路 台 帳									
事 務 所 名		南部土木事務所		整理 番号		0077 図 面 対 照 番 号		001-002	
道 路 の 種 類		主要地方道		路 線 名		糸満与那原線(南城市大里)		道 路 管 理 者	
道 路 の 指 定 (認 定) 年 月 日		昭和31年12月9日		指 定 (認 定) の 該 当 条 項		道路法 第7条1項			
起 点		糸満市		主 要 な 経 過 地					
終 点		西原町		供 用 開 始 の 区 間 及 び 年 月 日		S53/03/10 001010 ~ 002150			
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舗 装		装 道		舗 装		装 道			
砂 利		砂 利		砂 利		砂 利			
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5. Road management ④

Road register (drawings)

