

Roads

Ensure safety and security

Promotion of countermeasures against Nankai Trough Earthquake, etc

Disaster prevention measures and earthquake disaster countermeasures continue to be implemented to reduce damage at the time of disaster occurrence and to support smooth and prompt emergency activities.

- Disaster prevention measures**
 Measures to enhance safety are implemented at the places where there is a risk of landslides and falling rocks caused by heavy rain and typhoons.

Before taking measures



➔

After taking measures



Measures to stabilize the slopes



Example of damage slope face
- Earthquake disaster countermeasures**
 Based on the experiences of the disaster, earthquake-resistant reinforcement for road bridges that are built on old standards is implemented.

Before taking measures



➔

After taking measures



Implementation of equipment for pier reinforcement and preventing falling bridge



Implementation of equipment for preventing falling bridge


- [Major projects]
- National Route No. 8, Minami Echizen-cho Otani district disaster prevention measures (sight frontage, Otani, Minami Echizen-cho, Fukui Prefecture)
 - National Route No. 2, Tamate elevated bridge earthquake resistance measure (sight frontage, Chuji to Tamate, Himeji city Hyogo prefecture)

Promotion of undergrounding


From the viewpoints of improving disaster prevention of roads, ensuring a safe and comfortable passage space, forming a good landscape, and promoting tourism, etc., undergrounding is promoted. Based on the amendments to the Road Law etc., undergrounding is promoted regarding roads that are important for disaster prevention such as emergency transportation roads. Thus road blockage caused by collapse of utility poles etc. will be prevented



Osaka National Route No. 1 Electric Wire Utility Tunnel (Miyakojima Electric Wire Utility Tunnel)

Project location



Plan view



Before implementation



After implementation

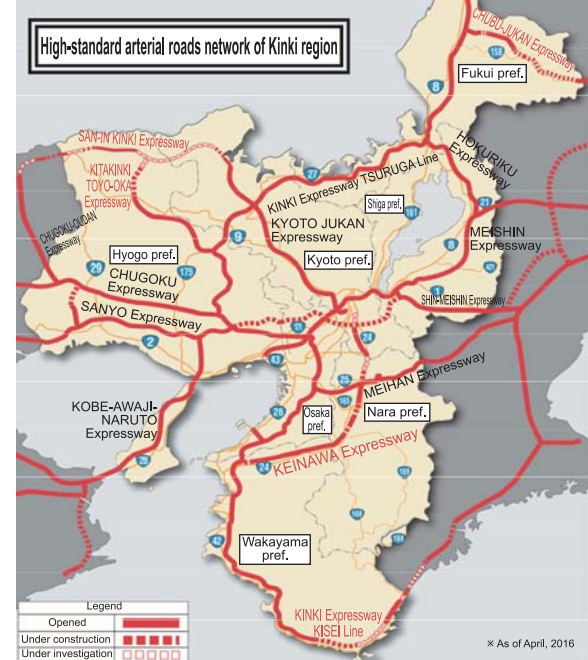


Improvement of disaster prevention function by undergrounding (Kita-ku, Osaka-shi (National Route No. 1))

Promotion of wide area network development

In order to construct a wide area network resistant to disasters, with regard to the section where there is a risk of influencing the wide area traffic due to the shredding of the current road caused by earthquakes, tsunami and heavy rain disasters in the future, the development of high-standard arterial roads, etc., which connect major cities shall be promoted.

- [Major projects]
- Chubu Jukan Expressway :Eiheiji Temple Ohno Road
 - North Kinki Toyooka Expressway :Yoka Hidaka Highway, etc.




Strategic maintenance and updates for infrastructure aging measures, etc.

Inspection of road facilities (bridges, tunnels, pavements, slope surfaces, earthwork constructions, road accessories, etc.) to grasp safety continues steadily. Measures against aging by maintenance cycles such as inspections, diagnoses etc. are also promoted.


- The ratio of the number of bridges over 50 years after construction that are managed by the Kinki Regional Development Bureau is 32% as of 2015, but it will increase to 66% after 20 years.
- Based on the long life of road bridge repair plan, repairs are implemented systematically.
- By proactively repairing before reaching large-scale repair, long-life plan for bridge is applied.

Case of bridges




Inspection situation

Before taking measures




Corrosion of girder bridge rebar

After taking measures




Cross section repair work

Case of tunnels




Inspection situation

After taking measures



Cross section restoration / peeling prevention

After taking measures



Peeling prevention

- [Major projects]
- National Route No. 9 New Hazegawa Bridge Inspection (sight frontage, Haze to Hori, Fukuchiyama-city, Kyoto prefecture)
 - National Route No. 2 Yodogawa Ohashi repair (sight frontage, Fukushima-ku to Nishiyodogawa-ku, Osaka-city, Osaka prefecture)
 - National Route 161 Nagara Tunnel Repair (sight frontage, Onjojicho to Fujiokumachi, Otsu City Shiga Prefecture)

Economic revitalization

Promoting maintenance of the Kinki area ring road

To realize prompt and smooth logistics, strengthen international competitiveness, and alleviate traffic jams, etc., the development of ring roads will be promoted.

Loop road network in the Kinki area

