

JR-West, in its business plan through the fiscal year to March 2009, has allocated an additional ¥80 billion for safety-related capital expenditures over four years. This is just one part of our dedicated effort in a wide range of areas aimed at regaining the trust of customers by improving safety.

● **Installing and Upgrading**

**ATS Devices**

Automatic train stop (ATS) devices are part of a system that uses ground control information to sound an alarm to notify the driver or automatically apply the brakes when a train approaches a stop signal, ensuring that the train will stop before reaching the signal. The ATS-SW and ATS-P devices include additional functions to monitor the speed of the train as well.

Increasing the number of ATS-SW devices and ATS-P devices along heavily used sections of track is part of the operational and hardware safety measures in JR-West's Safety Enhancement Plan.

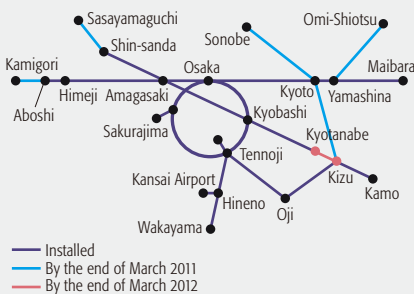
**ATS-SW Implementation Status**

- Devices were installed in 1,234 places along curved portions of track during fiscal 2006, while in fiscal 2007 were installed at points and crossings (1,107 places) and dead-end lines (57 places).

**ATS-P Implementation Status**

- During 2007, devices were installed along the Yamatoji Line (between Kamo and Oji), and along the Hanwa Line (between Hineno and Wakayama). Installation work is also proceeding for the Nara Line (between Kyoto and Kizu) and planned for other lines.

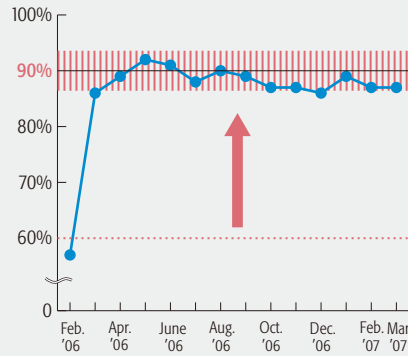
**Installation Plan of ATS**



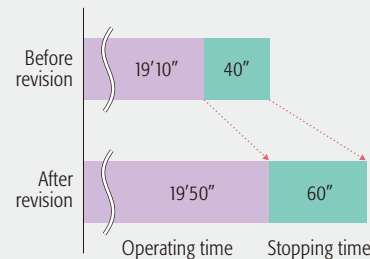
● **Revision of Timetables**

In accordance with the timetable revision policy stipulated in the Safety Enhancement Plan, on March 18, 2006, JR-West implemented a network-wide timetable revision, centered on its Urban Network operations, that provides more leeway in terms of travel times between stations and station stop times to ensure safer transport. One example is the Special Rapid Service on the Urban Network, where the daytime travel time has been lengthened from 19 to 20 minutes between Sannomiya and Osaka. Such revisions allow more time for passengers to board and alight from trains, providing a less stressful journey.

**Ratio of Scheduled Operation Achievement after Timetable Revision (Special Rapid Service)**



**Daytime Travel Times on the Special Rapid Service (Sannomiya–Osaka)**



● **Simulation Training for Train Crews**

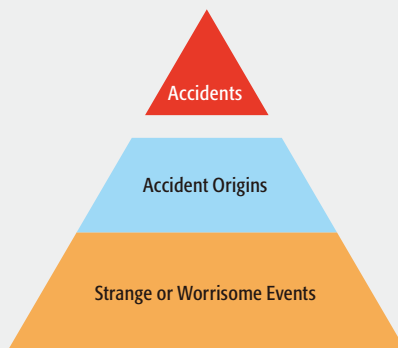
As a part of the efforts to make our education program more effective, JR-West has introduced simulators that allow crew members to train under a wide range of actual conditions that occur in everyday operation. Various simulations and training tailored to the skills and abilities of each crew member increase their ability to handle emergency and other types of situations. As of the end of March 2007, simulators for train drivers had been installed in 64 locations, and for conductors in 24 locations.



● **Reports on “Accident Origins” and “Symptom Control Activities”**

JR-West has long used danger anticipation training and other drills to help employees anticipate accidents before they occur, but is also working together as a company to prevent accidents by actively encouraging employees to report the nature of the potential causes of accidents, minor errors that did not result in an accident, as well as “strange or worrisome events” latent in daily operations in workplaces.

To encourage employees to report the nature of the potential causes of accidents on their own initiative an environment has been created in which such reports do not count against the employee, and new systems introduced to make such reporting easier.



● **Quake-Resistant and Earthquake Disaster Prevention Measures**

Drawing on its experience with the 1995 Hanshin-Awaji Earthquake, JR-West has undertaken seismic reinforcements and other measures to counter earthquakes. We are also working to ensure safety in the event of an earthquake with systems to detect seismic activity ahead of time, allowing trains to be stopped as quickly as possible.

**Quake-Resistant Reinforcement Construction**

- Elevated track pillars are being strengthened so that they will not collapse during a major earthquake. Sanyo Shinkansen: Work being conducted on entire line (completion planned in fiscal 2009)  
Urban Network: Work concentrated on high-speed portions of lines
- Bridge supports were expanded and other bridge sections reinforced along the entire Sanyo Shinkansen line to prevent the fall of bridge girders.

**Earthquake Disaster Prevention Systems**

- The safety of the Shinkansen service has been improved with the creation and improving of an earthquake early warning system.\*
- \* A system that picks up the preliminary tremors (P waves) of an earthquake at the “seaside detection point” near the epicenter, and applies the brakes of any Shinkansen train in operation prior to the arrival of the main shaking (S waves).
- A similar system is also being used on the Urban Network as part of a system to automatically transmit a warning signal to train crews.
- Additional seismometers are also being installed to more accurately detect seismic activity.

● **Accident Response Training**

JR-West has prepared a manual for employees should an accident occur, which places the highest priority to preventing additional accidents and aiding passengers, as well as stipulates specific actions with regard to quickly adopting an initial action framework, contacting relevant authorities and organizations, and methods to respond to customers. Comprehensive accident response training is regularly conducted to provide employees with practical experience in these areas, and to assess their response. During fiscal 2007, such training was conducted a total of 50 times, and a total of approximately 4,800 employees participated.

