## **Actions by Tohoku Construction Office**

In starting the operation of BRT on the Kesennuma and Ofunato lines, Tohoku Construction Office has successfully reduced waste and saved resources by utilizing existing facilities to decrease the use of various construction materials.

Specifically, the quantities of construction materials and steel were reduced by utilizing existing track ballast as roadbed material and by using rails that had been damaged by the earthquake to strengthen earth-retaining walls. We are using existing bridges instead of building new ones, with the aims of reducing costs and of maximizing the use of existing resources. Moreover, by installing white boards inside tunnels, we can reduce the number of new lights required, and thus save energy.



Removal of track materials (rails, ballast, sleepers) in the earthquake-affected area



Use of improved ballast as the BRT road bed Asphalt paving of BRT road



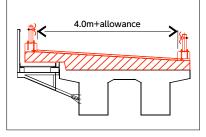


Use of damaged rails as earth retaining piles (driving-in of rails)



Earth retaining RC plates and damaged rails 
Completed BRT road and a bus running on it used at the road edge





Used as supports for concrete placement for ensuring the road width.



A bus running on a widened railway bridge

## Comments by employee in charge

The Tohoku Construction Office has engaged in the planning and implementation of such projects as the continuous grade separation of crossings, the renovation and improvement of stations, the upgrading of electrical equipment and the enhancement of facilities. Within these activities, we have provided for temporary restoration by BRT and achieved 100% recycling of materials in all work projects. Other work undertaken includes the protection of landscapes by designing structures that harmonize with their surroundings in scenic locations, as well as a range of eco-conscious activities such as the reduction of noise and vibration caused during construction work.

All employees are well aware of the importance of environmentally-sound activities and are committed to driving company cars efficiently, as well as to saving energy in the office.

The Tohoku Construction Office, together with all our construction sites, will make a concerted effort to continue ecologically-sound activities, and will constantly bear in mind the importance of the Three Rs: Reduce, Reuse and Recycle.



Yutaka Sato Construction management division Tohoku Construction Office