

Popular science

Efficient traffic flow plays a big role in modern cities. Increasing trend in cities is to move traffic underground to lower noise pollution, use the area above ground for further development and enhance safety for both traffic users and pedestrians.

Even though tunnels can be made safer than open roads, there are possibilities that incidents develop into catastrophic events. While designing road traffic tunnels the safety of users is one of the main focus. When incidents take place, fire departments first responders are called to the scene, by doing so, there is a possibility to minimize the consequences and steer the emergency development towards a better outcome for people in distress as well as the tunnel owners.

To increase the possibilities for the fire departments to proceed their mission, it is important to include their need and limits in the tunnel design and support them to operate safely and efficiency during emergencies. How can firefighters safety and efficiency be supported by different design solutions and regulations?

In this report I analyse how tunnels are designed in the Nordic countries, regarding fire fighters safety and efficiency, by literature study and interviews, interviewing personell both related to the design and management side as well as experienced on scene commanders from different fire departments.

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