Reimagine the Cross Bronx

Highway Capping Fact Sheet

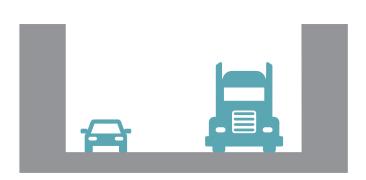


What is this study?

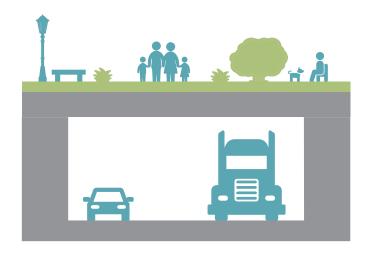
Reimagine the Cross Bronx is an effort to re-imagine the Cross Bronx Expressway. This is a collaboration with communities from the Harlem River to Westchester Creek. Together we will help reconnect communities divided by the highway. We will also develop concepts to address related problems in neighborhoods around the Cross Bronx. The study is a partnership between New York City Departments of Transportation (NYC DOT), City Planning (NYC DCP), and Health and Mental Hygiene (DOHMH), and New York State Department of Transportation (NYSDOT).

What is capping?

A highway cap (also known as a deck, stitch, or highway lid) covers a highway that runs below ground. Capping can create new opportunities to increase public space, connect communities, and reduce some of the negative effects of the highway.



Before capping: a below-ground highway is open to the surrounding area

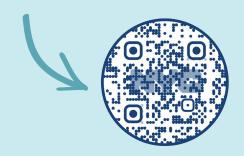


After capping: the new area can be used for features such as public space

How can capping potentially affect air quality?

- Capping can lower pollutant concentrations at places along the cap. However, it does not eliminate air pollution from vehicles.
- The type of ventilation used affects traffic-related air pollution in surrounding neighborhoods. Some types of ventilation can also contribute to noise pollution.
- There are many strategies to manage vehicle emissions. Some systems use fans to push it out the ends of the capped section. Others use exhaust stacks to release it high into the air. Passive ventilation through grates can also be an option.

To access reports, register for events, and learn more about the study, scan the QR code or visit our website at nyc.gov/CrossBronx

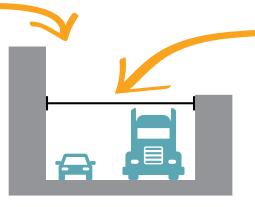


Where can a highway cap go?

Creating a new cap is a major engineering project and construction process. It involves designing, funding, and building. There are many constraints on where a cap can go and what it can look like.

Elevation Differences

If there is a large height difference on either side of the highway, it can be difficult to create a cap.



Highway Width

In some cases, the road must be wide enough to fit a foundation that supports a new cap structure.



Vertical Clearance

A completed cap must have at least 14.5 feet of space between the road surface and the new ceiling. Structures like ventilation fans need even more space.

Other Considerations

- Caps that cover areas longer than a typical block (300 feet) are more likely to require active ventilation.
- This can include tall above-ground structures such as exhaust stacks or ventilation buildings.
- Considerations for capping also include federal, state, and city regulations for fire life safety standards.



Ventilation structure for the Battery Park Underpass (Google Street View, March 2023)

What are potential benefits of capping a highway?



Expand access to green space



Increase safety on nearby local streets



Lower community exposure to noise



Reconnect communities