

Build Alternative – Tunnel Ventilation with Jet Fans

- Longitudinal ventilation with jet fans
 - Jet fans at 3 locations: near south portal, near middle of tunnel, and near north portal
 - No exhaust stacks required at portals
- Air quality sensors will monitor emissions in the tunnel. Jet fans will activate if the following sensors detect threshold exceedances:
 - NOx Sensor – Monitors for Nitrogen Oxides (NOx)
 - CO Sensor – Monitors for Carbon Monoxide (CO)
 - Visibility Sensor – Detects particulate matter/dust/smoke
- Anemometers to monitor air speed within the tunnel for jet fan control
- Jet fans would operate when needed, drawing in fresh air from the entrance portal to reduce emission concentrations both within the tunnel and at the exit portal

LEGEND:



Jet Fan



Air Quality Sensor



Visibility/Smoke Detector



Anemometer



Longitudinal Profile of Tunnel



Office of the Governor

KATHY HOCHUL
Governor



Department of Transportation

MARIE THERESE DOMINGUEZ
Commissioner



U.S. Department of Transportation
Federal Highway Administration