### Initiative 1: Ring Roads for Bypass Traffic

**Description:** The construction of bypasses (high speed ring roads, or beltways) to move through-trucks to the periphery of the urban area. Only viable if they lead to cost savings to carriers.

**Targeted mode:** Through traffic  
**Geographic scope:** Corridor

**Type of Initiative:** Infrastructure management: major improvements  
**Primary objective:** Reduce congestion

**Expected costs and level of effort to implement:** The cost and effort to construct a new ring road can be very high, involving construction of a new roadway, roadway crossings, and interchanges. Such a construction project will involve long-term planning and implementation, elaborate needs assessments, and impact analyses.

**Advantages:**
- Reduce congestion
- Enhance safety
- Environmental sustainability
- Reduce infrastructure damage

**Disadvantages:**
- High probability for unintended consequences
  - May lead to new development outside urban core
  - Environmental impacts on the communities affected by the new road
- Environmental impacts associated with new construction
- Require very high capital investments
- Require private-sector acceptance

**Typical example:**
- Sydney Orbital Network, Australia (Transport for NSW 2012)
- “Through” Corridors in Atlanta, Georgia, United States (Georgia Department of Transportation 2011b)

Source: OpenStreetMap Contributors 2010  
Source: Georgia Department of Transportation 2011b

**Related alternatives:** 1. New and Upgraded Infrastructure, Intermodal Terminals; 2. Truck Routes; 3. Exclusive Truck Lanes (Dedicated Truck Lanes)

**References:** Marquez et al. 2004; PIARC 2011