

## AP5 Design Exception Cost-Benefit Assessment

### AP 5.1 Background

In 2007 the Commerce and Compliance Division (CCD), completed a study on the frequency of permitted loads that were over dimensional for height, which resulted in the Vertical Clearance Standards we use today. From the collected data, it was determined that the actual measured height of bridges needs to be at least 17' – 4". The study also identified the routes that are of major significance for the mobility of high loads. These "High Routes" are primarily on the National Highway System (NHS), but there are portions that are on non-NHS highways.

In rare cases, the cost of increasing the vertical clearance will be very high with little or no benefit to freight traffic using the route. This may occur when there are several unrestricted routes near the route in question. In these cases, the Mobility Services Team, in collaboration with the CCD Over-Dimension (OD) Permits Unit, will contact industry representatives and will perform an informal cost-benefit assessment to determine whether the load routing will be impaired if the vertical clearance for a substandard structure is not addressed. If the Mobility Services Team and OD Permits Unit determines that the load routing will not be impaired and the industry representatives concur, then the project can be reviewed for a design exception.

### AP 5.2 Potential Project Scenarios

- a) A local jurisdiction is replacing a structure that crosses over a state highway. There is a significant cost increase if they are required to maintain the current vertical clearance and are inquiring if a lower height would be adequate.
- b) A structure on the Interstate that crosses over a local road is being replaced. The Region indicates that increasing the height to meet the vertical clearance standards will be difficult and want to know if oversize loads are routed under this structure at all. Are they able to maintain the existing vertical clearance instead of increasing the height?
- c) The Bridge Unit is trying to prioritize structures that need work and want to know which ones would benefit the trucking industry more if they were able to provide more height.

### AP 5.2 Course of Action

#### 1. Formulate a request:

The Region Manager should send an email request to the Commerce and Compliance Division (CCD) Administrator. The CCD Administrator would ask the Over-Dimension Permit Manager to perform an informal cost-benefit assessment to determine whether the load routing will be impaired if the vertical clearance is not maintained or increased.

#### 2. CCD OD Permits will perform an informal cost-benefit assessment and contact industry:

The CCD review/response would include the following (as applicable):

- Identification of the over-dimension permits allowed (e.g. allows continuous trip log truck/pole trailers, mobile homes, etc.)
- Identify the highway classification per the Vertical Clearance Standards – Section 317 of the Highway Design Manual (e.g. High route, NHS Non-High Route, Non-NHS & Non-High Route).
- Indicate pilot vehicle requirements & any special requirements.
- Identify the types & frequency of loads moving.
- Include pinch point, up & over, and detour routes information
- An analysis indicating why increasing the height would or would not improve routing; or an analysis why maintaining or potentially lowering the height would be acceptable.

If the CCD analysis indicates load routing will not be impaired, the CCD Administrator will approach the affected industry and seek their concurrence.

**3. If CCD determines that the load routing will not be impaired and the industry representatives concur, then the project can be reviewed for a design exception.**

- The CCD Administrator will notify the Region that the industry is supportive of the vertical clearance standard.
- The region should seek a design exception from the statewide roadway engineer and provide supporting documents.