

HIGHWAY GEOMETRIC DESIGN

– Factors Influencing Highway Design

Highway design is based on several design standards & controls, which depend on;

- ü Functional classification
- ü Expected traffic volume and vehicle mix
- ü Design speed

– Design of the Alignment

- q Horizontal alignment
- q Vertical alignment
- q Super-elevation

ROUTE LOCATION

- **Techniques for Highway surveys**

- ü Ground surveys

- ü Remote sensing

- **Principles of Highway location**

- √ Office study: engineering, topography, geology etc.

- √ Reconnaissance : is to identify several feasible routes

- √ Preliminary location survey are used to evaluate the economic & environmental feasibility of the alternatives routes

- √ Final location survey

- **Preparation of highway plans**