

## **SECTION 2 – INTERSECTION DESIGN; SPACING STANDARDS**

### **Intersection Design Objectives**

Intersection design, including entrances, must consider the following items:

- Total approach traffic, design hourly volumes, and turning volumes.
- Composition of traffic (percent of passenger cars, buses, trucks, etc.)
- Operating speed of vehicles
- Functional Classification of Highways
- Adjacent land use
- Physical and Environmental Characteristics
- Pedestrian and Bicycle Accommodation

Major objectives of traffic design concern safety, operational efficiency and driver expectation through consideration of the following:

- The design should fit the natural transitional paths and operating characteristics of drivers and vehicles. Smooth transitions should be provided for changes in direction.
- Grades at intersections should be as nearly level as possible.
- Sight distances must be sufficient to enable drivers to prepare for and avoid potential conflicts.
- On major roadways, intersections must be evenly spaced to enhance the synchronization of signals, increase driver comfort, improve traffic operation, and reduce fuel consumption and vehicle emissions.