

Chapter 1: Highway Functions

Functional Classification, Functional System Characteristics, Functional Highway Systems in Urbanized Areas

Chapter 2: Design and Controls Criteria

Design Vehicles, Driver Performance, Highway Capacity, Access Control and Management, The pedestrian, Bicycle Facilities, Safety, Environment, Economic Analysis

Chapter 3: Elements of Design

Sight Distance, Horizontal Alignment, Vertical Alignment

Chapter 4: Cross Sections Elements

Pavement, Lane Widths, Shoulders, Horizontal Clearance to Obstructions, Curbs, Drainage Channels and Side Slopes, Illustrative Outer Cross Sections, Traffic Barriers, Medians, Frontage, Roads, Outer Separations, Noise Control, roadside Control, Tunnels, Pedestrian Facilities, Bus Turnouts, On-Street Parking,

Chapter 5: Local Roads and Streets

Local Rural Roads, Local urban Streets, Special Purpose Roads.

Chapter 6: Collector Roads and Streets

Rural Collectors, Urban Collectors.

Chapter 7: Rural and Urban Arterials

Rural Arterials, Urban Arterials: General Design Characteristics, Access Management, Bikeways and Pedestrian Facilities Operation Control and Regulations, Provisions for Utilities, Public Transit Facilities.

Chapter 8: Freeways

General Design Considerations, Rural Freeways, Urban Freeways, Elevated Freeways, Ground Level Freeways.

Chapter 9: Intersections

General Design Considerations and Objections, Capacity Analysis, Alignment and Profile, Islands, Turning Roadways, with Corner Islands, Free- Flowing Turning Roadways at Intersections, Superelevation for Turning Roadways at Intersections, Traffic Control Devices, Intersection Sight Distance.

Chapter 10: Grade Separations and Interchanges

Introduction and General Types of Interchanges, Warrants for Interchanges and Grade Separations, Adaptability of Highway Grade Separations and other Interchange Design Features.