

COURSE OUTLINE

	SUBJECTS	Task Statements*	Associative Knowledge*
1.	CIRCULATION		
	1.1 Traffic Flow Fundamentals		
	 Roadway - Classifications, Speeds 		K42
	 Roadway - Features, Capacity, Level of Access, Land Use 		K11, K12, K13
	 Traffic Volume Analysis 		К9
	 Intersection - Capacity, Geometrics 		K7
	1.2 Transportation Planning		
	• Land Use	T4	K1, K7
	 Travel Demand Model Development 	T6	K5, K42
	Traffic Forecasting	T6	K18
	 Transit, Trucks, Bicycle, Pedestrian Facilities 	T11	
	 Capital Improvements, Mitigation 	T15	K15, K16
	1.3 Traffic Impact Analysis		
	• Land Use	T4	K5, K6, K22
	 Trip Generation, Modal Split, Distribution, Assignment 	T14	K5, K6, K22, K44
	• Level of Service, Delays	T4	K1, K2
	 Queuing, Access Point, Warrants for Left Turn Lane 		K12
	 Driveway Design & Placement 		K13
	Bicycle and Pedestrian Facilities	T26	K25
	 Warrants for 2-Way Stop, All-Way Stop, Signal 		K51
	• Intersection Mitigation, Signal Phasing Optimization	T47	
2.	LEVEL OF SERVICE & CAPACITY		
	2.1 Data Evaluation		
	 Traffic Volumes, Vehicle Characteristics 	T2	K14
	2.2 Measures of Effectiveness (MOE)		
	 Design, Operations, Safety 	T8, T11	
	 Transportation System Management (TSM) 	T1	K9
	 Corridor Analysis of Alternative Modes 	T12	

^{*} Source: Traffic Engineer Examination Content Outline (version 022410) California Board for Professional Engineers and Land Surveyors



COURSE OUTLINE (continued)

	SUBJECTS	Task Statements*	Associative Knowledge*
3.	EVALUATION OF TRAFFIC-RELATED IMPACTS 3.1 Mitigation • Traffic Mitigation Measures • Effectiveness of Mitigation Measures • Transportation Demand Management (TDM), Trip Reduction	T14	K12 K3
4.	TRANSPORTATION FACILITIES DESIGN 4.1 Basic Design Policies 4.2 Geometric Design Standards 4.3 Intersection at Grade 4.4 Intersection Design Standards 4.5 Interchanges 4.6 Highway Lighting 4.7 ADA Compliance	T28 T30	K29, K30 K29, K30 K27 K31, K50 K34 K33
5.	TRAFFIC SIGNAL DESIGN 5.1 Signal Warrants 5.2 Signal Features 5.3 Signal Standards 5.4 Signal Layout 5.5 Signal Operation and Detection 5.6 Pedestrian Signals 5.7 Signing and Striping	T54 T54 T54 T54 T54	K51 K55 K55 K55 K52 K55 K52

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COURSE OUTLINE (continued)

	SHR	BJECTS	Task Statements*	Associative Knowledge*
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6.	TRAFFIC CONTROLS			
	6.1	Protocol, Standards, Guidelines, Regulations		K54
	6.2	Speed Zone, Control, Engineering Surveys		K42
	6.3	Signal Warrants		K51
	6.4	Signal Operations, Timing, and Coordination		
		• Cycle Length, Split, Offsets, Phasing, Accident Pat	tern	K58
		 Vehicle Detection 		K59
		 Isolated Intersection 	T41	
		 Coordinated System 	T41	
	Emergency Vehicle - Priority, Implementation, Potential Hazards		K60	
		Railroad Crossing	T50	
		Operational and Safety Improvements		K45
		• Effectiveness of Improvements		K47
	6.5	Construction Zones		K57
	6.6	Traffic Engineering Studies		K44
	6.7	TDM / ITS	T21	K37
7.	BIC	YCLES, PEDESTRIANS AND PARKING		
	7.1	Bicycle Facilities Planning	T11	
	7.2	Bicycle Facilities Design	T11	K39
	7.3	Bicycle Facilities Signing and Marking	T11	K39
	7.4	Pedestrians	T32	
	7.5	School Zone	T32	
	7.6	Parking Study and Design	T5	K22

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COURSE OUTLINE (continued)

	SUBJECTS	Task Statements*	Associative Knowledge*
8.	TRAFFIC FLOW		
	8.1 Traffic Calming		
	 Traffic Problems 	T19	
	 Strategies and Implementation 	T19	
	 Effects on Traffic Volumes and Speed 		K41
	Effects on Adjoining Streets		K41
	 Effects on Environment 		K41
	8.2 Hazard and Safety Deficiencies		
	 Studies and Site Investigation 	T35	K49
	 Data Collection and Analysis 		K49
	 Accident Patterns 		K49
	8.3 Mitigation		
	 Corrective Measures 	T36	K19
	 Alternative Strategies 	T18	
	 Effectiveness of Safety Improvements 		K49

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