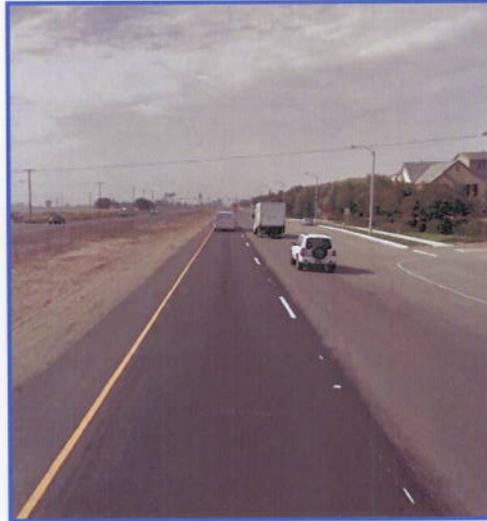




TRANSPORTATION CONCEPT REPORT
State Route 83
District 8
September 2012



Disclaimer: The information and data contained in this document are for planning purposes only and should not be relied upon for final design of any project. Any information in this Transportation Concept Report (TCR) is subject to modification as conditions change and new information is obtained. Although planning information is dynamic and continually changing, the District 8 Freight and System Planning Branch makes every effort to ensure the accuracy and timeliness of the information contained in the TCR. The information in the TCR does not constitute a standard, specification, or regulation, nor is it intended to address design policies and procedures.

California Department of Transportation
Caltrans Improves Mobility Across California

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ABOUT THE TRANSPORTATION CONCEPT REPORT

System Planning is the long-range transportation planning process for the California Department of Transportation (Caltrans). The System Planning process fulfills Caltrans' statutory responsibility as owner/operator of the State Highway Systems (SHS) (Gov. Code §65086) by identifying deficiencies and proposing improvements to the SHS. Through System Planning, Caltrans focuses on developing an integrated multimodal transportation system that meets Caltrans' goals of safety, mobility, delivery, stewardship, and service.

The System Planning process is primarily composed of four products: The District System Management Plan (DSMP), the Transportation System Development Plan (TSDP), Transportation Concept Report (TCR), the Corridor System Management Plan (CSMP). The district-wide **DSMP** is a strategic policy and planning document that focuses on maintaining, operating, managing, and developing the transportation system. The **TSDP** is a list of planned and partially programmed transportation projects used to recommend projects for funding. **The TCR** evolves from the development of the DSMP and TSDP and is used to document the existing and future route conditions as well as future needs for each route on the SHS. Similar to the TCR, the **CSMP** is a more complex, multi-jurisdictional planning document that identifies future needs within corridors experiencing or expected to experience high levels of congestion. The CSMP serves as a TCR for segments covered by the CSMP. These System Planning products are also intended as resources for stakeholders, the public, and partner, regional and local agencies.

TCR Need, Purpose, and Goals

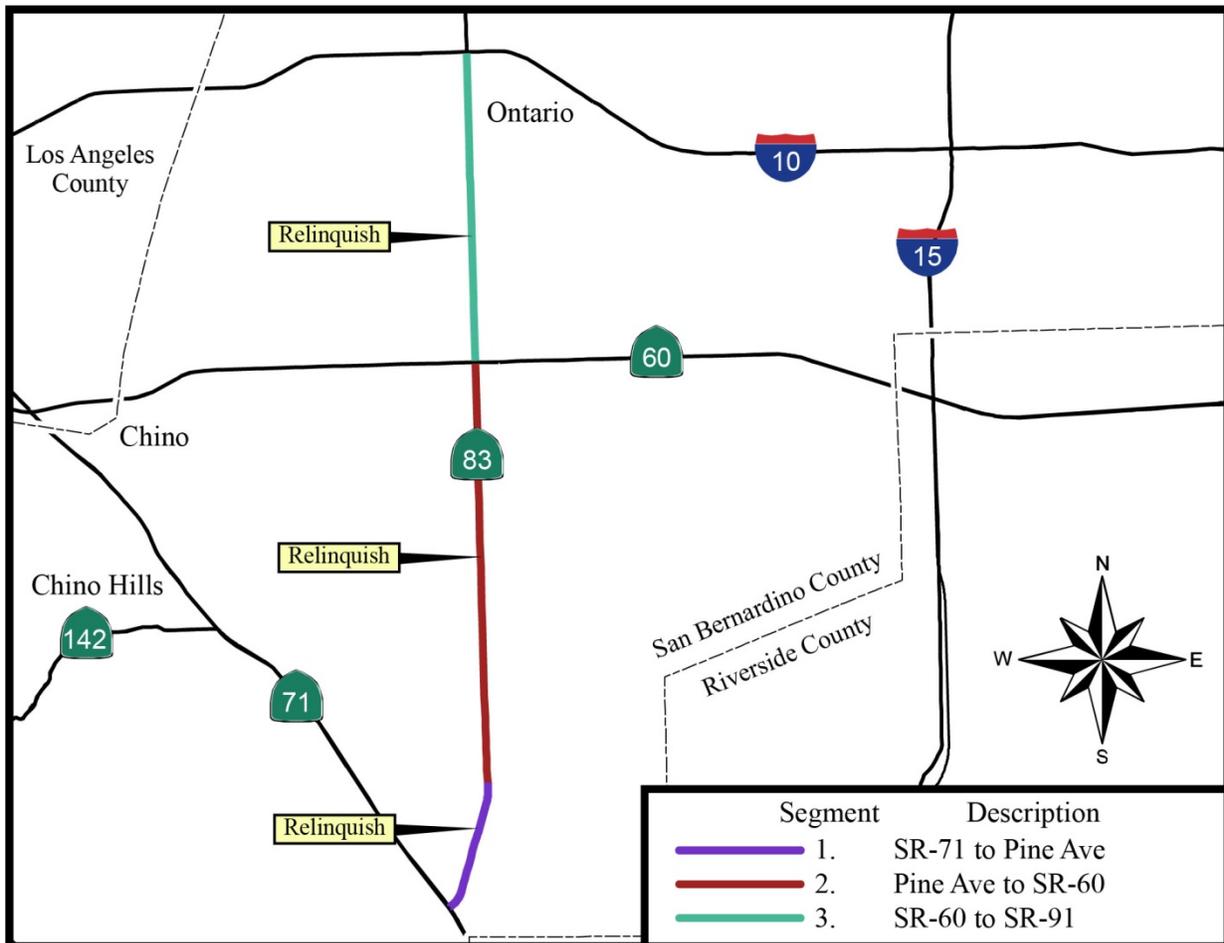
California's State Highway System needs long-range planning documents to guide the logical development of transportation systems as required by law and as necessitated by public, stakeholders, and system users. The purpose of the TCR is to evaluate current and projected conditions along the route and communicate the vision for the development of each route in each Caltrans District during a 20-25 year planning horizon. The TCR is developed with the goals of increasing safety, improving mobility, providing excellent stewardship, and meeting community and environmental needs along the corridor through integrated management of the transportation network, including the highway, transit, pedestrian, bicycle, freight, operational improvements and travel demand management components of the corridor.

EXECUTIVE SUMMARY: STATE ROUTE 83

Concept Summary Table

CONCEPT - 2035 Facility

Segment	ADT	Dir. Split	Peak Hour	Truck Peak Hour	No-Build		Planned SCAG RTP		LOS "D" Minimum Requirement	Concept
1	35,500	65%	3,400 (9.6%)	650 (19%)	2/4 MF		8 MF		6 MFE	Relinquish
					V/C	LOS	V/C	LOS		
					N/A	F	N/A	A-F		
2	146,300	65%	16,700 (11.4%)	1,570 (9.4%)	4 MF		8 MF		6 MF	Relinquish
					V/C	LOS	V/C	LOS		
					N/A	F	N/A	A-F		
3	40,000	56%	3,680 (9.2%)	140 (3.7%)	6 MF		6 MF		6 MFE	Relinquish
					V/C	LOS	V/C	LOS		
					0.36	B	0.36	B		



Concept Rationale

Traffic demand along SR-83 is consistent with many Inland Empire communities in that active agricultural areas are being converted into intense suburban landscapes using a master-planned community development strategy. Impact to surrounding transportation facilities is typically immediate, and not always mitigated sufficiently with development activity. General Plans recently updated by the Cities of Ontario and Chino now apply an 8-lane major arterial expressway classification to SR-83 along Segments 1 and 2. Existing environmental and flooding impacts associated with proximity to the Santa Ana River/Prado Dam Basin affect Segment 1 and may hinder locally planned SR-83 widening, as well as significantly increase design and construction costs. Segment 2 will experience the greatest change as master-planned community developments are completed along SR-83's westerly frontage (light industrial uses) and easterly frontage (residential/commercial uses). Although fully improved in both north and southbound directions, Segment 3 between Riverside Drive and Holt Boulevard includes 4 lanes and wide outside shoulders. Along the remainder, SR-83's 6-lane cross-section is already consistent with its classification, thus no major widening efforts are anticipated.

Proposed Projects and Strategies

To achieve the 8-lane arterial expressway described in Ontario's and Chino's General Plans, it is expected that as industrial and residential/commercial uses abutting Segment 2 are developed, one additional lane will be added in each direction. RTP projects are planned along Segments 1 and 2 for construction of the "final" two lanes to complete the 8-lane local expressway.

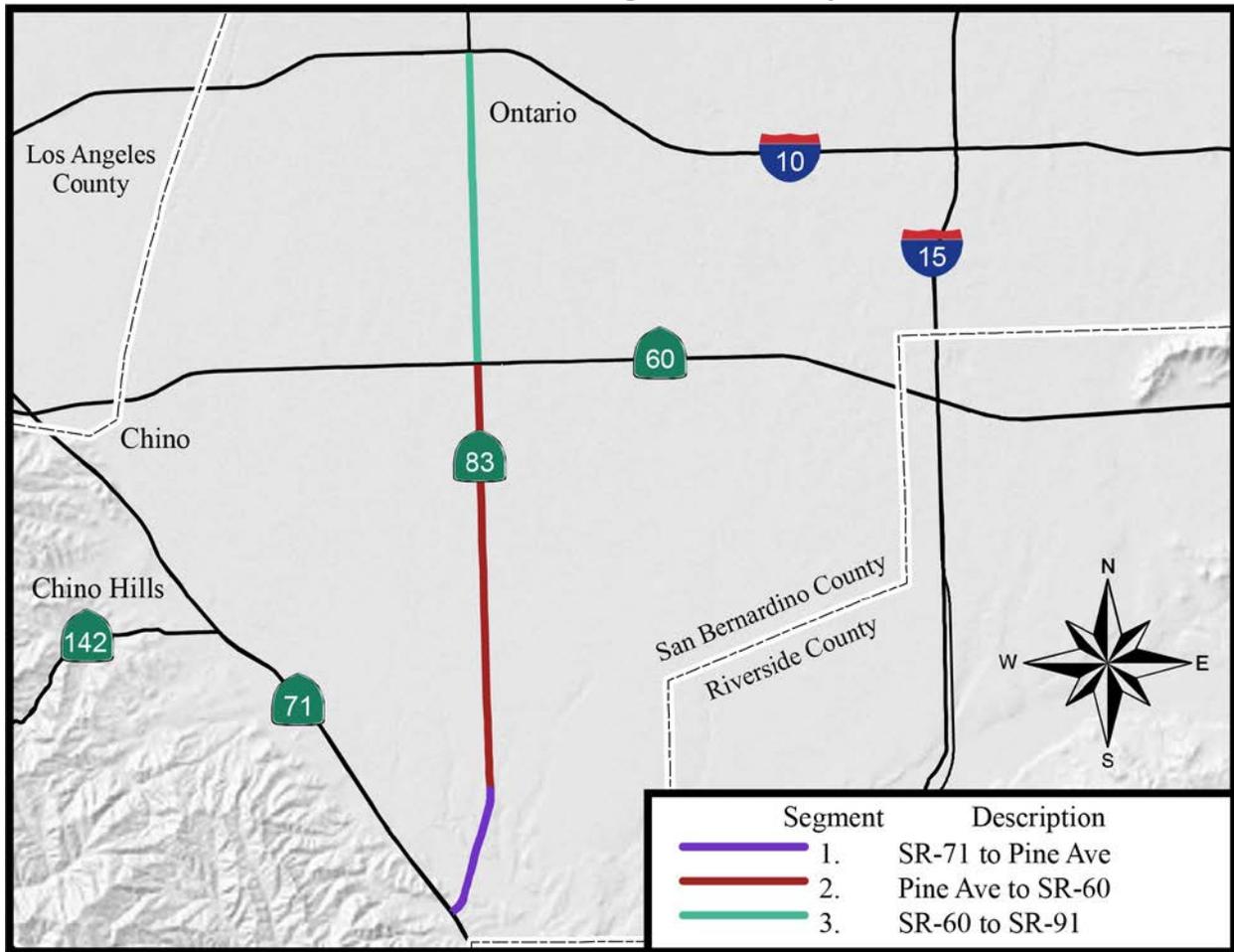
As this area of San Bernardino County urbanizes, SR-83 functionality is evolving to that of a local arterial roadway. Along with this change in functionality, the desire for local authority over the highway's operational control increases. This trend is evidenced by the 2008 relinquishment of the northernmost 3.21 miles of SR-83 to the City of Upland. Concurrently, the regional accessibility once provided by SR-83 has been replaced by SR-60, SR-71, SR-91 and I-15. For these reasons, SR-83 is recommended to be relinquished to the local jurisdictions.

CORRIDOR OVERVIEW

ROUTE SEGMENTATION

Segment #	Location Description	Beginning PM	End PM
1	SR-71 to Pine Avenue	R000.000	001.888
2	Pine Avenue to SR-60	001.888	007.179
3	SR-60 to I-10	007.179	011.215

State Route 83 Segmentation Map



ROUTE DESCRIPTION

Euclid Avenue (SR-83, Segments 2, 3 and beyond) was originally established under San Bernardino County’s jurisdiction, with subdivision activity dating back to the late 1800’s. Right of way (R/W) was established at 200 feet, beginning north of 26th Street in what is now the city of Upland, and extending

as far south to Pine Avenue in what is now the city of Chino. Continuing south from Pine Avenue, (Segment 1,) SR-83 R/W was acquired for state highway purposes in 1948.

At 11.3 miles in length, State Route 83 (SR-83) connects residential neighborhoods of the South Ontario/Chino Valley areas in San Bernardino County to major employment centers located in Orange and Los Angeles counties via access to State Routes 60, 71, and 91. In addition, SR-83 provides access to warehouses and distribution zones that serve as inland goods transfer facilities between the Ports of Los Angeles/Long Beach and the eastern United States via rail (long-haul shipping) and trucks (local delivery). An indirect access to Ontario International Airport is also provided via SR-83 to provide an option for air shipment of goods by air in addition to serving as a hub for worldwide travel. SR-83 connects the local road network and surrounding residential neighborhoods to retail centers, community colleges, a local airport (Chino Airport,) state penal facilities (California Institutions for Men and Women) and regional recreational amenities (Prado Regional Park).

Segment 1 begins at the SR-71/SR-83 interchange (PM 000.000) in the city of Chino Hills, and extends to Pine Avenue (PM 001.888,) through the Santa Ana River/Prado Dam basin. At 1.88 miles, this segment traverses riparian habitat known to support special-status species, and is impacted by flooding during winter months. Segment 1 is also affected by a United States Army Corp of Engineers (USACOE) flood control plan to raise the Prado Dam spillway and increase basin capacity. With a new basin spillway elevation of 566 feet above sea level, Segment 1 will be effectively inundated. Although substantially a 4-lane divided highway throughout, Segment 1 drops to an undivided, 2-lanes at the Chino Creek Bridge (No. 54-426, PM 000.934) and adds a passing lane (3-lanes) at the San Bernardino County-Prado Regional Park entrance (PM 001.375).

Extending north to State Route 60 (SR-60) from Pine Avenue, Segment 2 is 5.29 miles in length and overlaps the city limits of Ontario and Chino (PM 003.920 to PM 006.413). Primarily a divided, 4-lane configuration, a lane drop occurs in the northbound direction just north of Pine Avenue. Segment 2 transitions to an undivided condition at this location, but the unimproved grass median and the second northbound lane is immediately restored (PM 001.88 to 002.248.) An existing earthen channel parallels the northbound roadbed between Pine Avenue and Eucalyptus Avenue (PM 001.888 to 004.420) that functions as a tributary to the Prado Basin. Along the westerly frontage, the City of Chino has made considerable progress in achieving their General Plan build-out goals. However to the east, master planned suburban development including residential neighborhoods, regional commercial-retail centers, recreational uses, and schools remain to be completed. A considerable increase in traffic along Segment 2 is expected to result with development of these proposed land uses.

At 4.036 miles in length, Segment 3 has been fully improved to local, divided arterial roadway standards rather than Caltrans highway standards. A fully landscaped and irrigated median supplies locally historic significance to the city of Ontario. From SR-60 (PM 007.179) to Holt Boulevard (PM 009.458), 4 lanes are included along with a wide outside shoulder used for curb-side parking. From Holt Boulevard to 7th Street (PM 011.215) just north of Interstate 10 (I-10), 6-lanes already exist, thus satisfying the General Plan designation.

Other important details regarding SR-83 are available in the following table and in the Key Corridor Issues section, (Page 12).

ROUTE DESIGNATION AND CHARACTERISTICS

Segment	Freeway and Expressway System	National Highway System	Strategic Highway System	Scenic Highway	Interregional Road System Route	High Emphasis Route	Focus Route	Federal Functional Classification	Goods Movement Route	Truck Designation	Rural/Urban/Urbanized	Metropolitan Planning Organization	Regional Transportation Planning Agency	Congestion Management Agency	Local Agencies	Tribes	Air District	Terrain
1	Yes	No	No	No	No	No	No	Other Principal Arterial	Yes	Terminal Access	Rural	Southern California Association of Governments	San Bernardino Associated Governments	San Bernardino Associated Governments	City of Chino	N/A	South Coast Air Quality Management District	Level
2	Yes	No	No	No	No	No	No	Other Principal Arterial	Yes	Terminal Access	Urban	Southern California Association of Governments	San Bernardino Associated Governments	San Bernardino Associated Governments	Cities of Ontario and Chino	N/A	South Coast Air Quality Management District	Level
3	Yes	No	No	No	No	No	No	Other Principal Arterial	Yes	Terminal Access	Urbanized	Southern California Association of Governments	San Bernardino Associated Governments	San Bernardino Associated Governments	City of Ontario	N/A	South Coast Air Quality Management District	Level

COMMUNITY CHARACTERISTICS AND LAND USE

Historically, SR-83 served as an important agricultural highway, linking the vineyards, citrus orchards and dairies that dominated the region's economy during the 1800's. These agricultural uses gradually succumbed to the suburbanization that defines the post World War II era for many communities in Southern California. By the 1980's, development activity reached inland to the South Ontario/Chino Valley area from coastal communities and the conversion of remaining agricultural land into suburban landscapes began in earnest.

Master planned developments proposed in previously unincorporated territory of San Bernardino and Riverside Counties propelled incorporation of new cities affecting this sub-region: Chino Hills, 1991; Eastvale, 2010; Jurupa Valley, 2011. In addition, several thousand acres of adjacent agricultural land were annexed by the Cities of Ontario (1999) and Chino (2003) to facilitate master-planned development surrounding SR-83. The New Model Colony development plan within the city of Ontario and the Preserve development plan in the city of Chino will essentially complete the suburbanization of remaining vacant parcels along SR-83.

Currently, Segment 1 is predominately a rural, 4-lane, divided roadway that includes an unimproved, grass median and dirt shoulders. Narrowing occurs along Segment 1 at the Chino Creek Bridge, (undivided, 2 lanes) and along the Prado Regional Park frontage (divided, 2 lanes plus 1 passing lane). SR-83 through Segment 1 traverses riparian habitat, golf courses, an Olympic shooting range, recreational campground, and, nursery/agricultural activities.

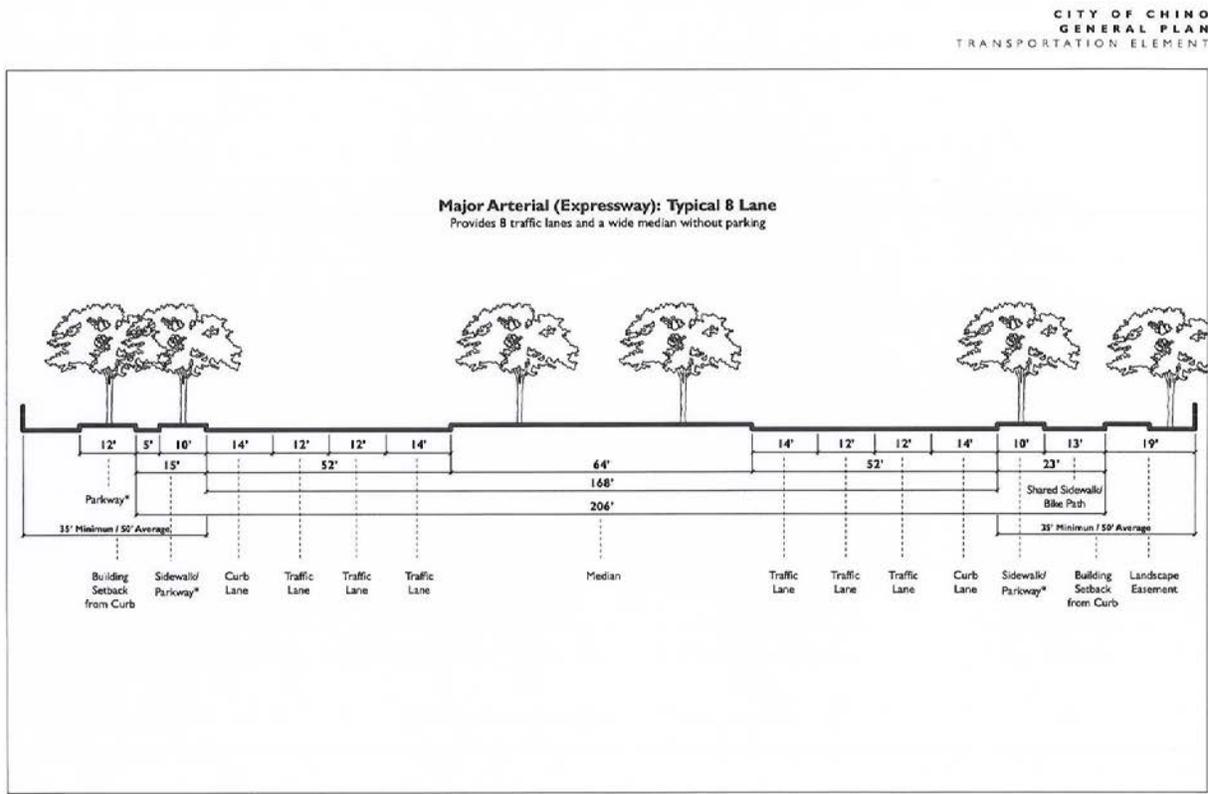
The same rural, divided, 4-lane configuration exists along much of Segment 2, except at locations where remnant agricultural parcels remain. For example, a lane drop in the northbound direction occurs just north of Pine Avenue, leaving a single lane for approximately 0.36 miles. Where local development activity has been recently completed, SR-83 frontage is fully widened and improved with curb, gutter, sidewalks and irrigated landscaping. However, the 2-lane configuration is striped through these locations thus bypassing the widened pavement areas to minimize interruptions to traffic flow. Existing land uses abutting Segment 2 include industrial warehouse/distribution facilities, governmental facilities (Chino Institution for Men and Chino Airport,) commercial-retail and residential neighborhoods.

Segment 3 is a fully improved divided arterial highway that includes 4 lanes between SR-60 and Holt Boulevard, and 6 lanes between Holt and I-10. An existing landscaped and irrigated median within Segment 3 carries local significance. The City of Ontario has placed Euclid Avenue (SR-83) between Philadelphia Street and I-10 on the National Register of Historic Places. Future projects to add 2 lanes south of Holt may be complicated since alternate access for parcels abutting SR-83 may be required without adverse impacts to the median. Existing land uses surrounding Segment 3 consist primarily of residential neighborhoods interspersed with schools and minor commercial zones.

Although employment opportunities exist in the immediate area, it is not sufficient to meet the income needs of the local population. The resulting commute to employment centers in Orange and Los Angeles counties creates congestion during the morning and afternoon peak periods along SR-83. This commute pattern extends to the neighboring city of Eastvale, located in Riverside County abutting Chino to the east. Incorporated in 2010 with a population of 42,000 residents, Eastvale exemplifies the agricultural-to-suburban transition underway in Ontario's New Model Colony and in The Preserve in Chino.

The diagram below depicts the Major Arterial (Expressway) 8-lane local classification designated by the City of Chino’s General Plan for SR-83. Whereas a minimum 200-foot R/W currently exists throughout Segments 1 through 3, minimal R/W acquisition will be required to accommodate the “parkway-to-parkway” portion of SR-83 R/W shown as 206 feet wide. Additional public easements may also be required to accommodate proposed landscape buffers, and/or special uses along the roadway. This cross-section incorporates some important elements of Caltrans’ Complete Streets goals; however, ensuring continuous accessibility for all transportation modes, particularly for pedestrians, bicyclists, and consistency with applicable ADA standards will require Caltrans review of all proposed improvement projects.

Although the General Plan for the city of Ontario does not include a similar 8-lane, local expressway diagram, a cross-section comparable to Chino’s concept for SR-83 will be defined as Ontario’s master-planned development occurs in the near future.



*Sidewalk/Parkway typically 5' parkway and remainder sidewalk, but varies as conditions warrant. Bicycle lane where applicable.

FIGURE TRA-7A
STREET CROSS-SECTIONS

SYSTEM CHARACTERISTICS

Existing Facility					
Segment	Facility Type	Mixed-Flow Lanes	Managed Lanes	Centerline Miles	Lane Miles
1	Rural Expressway	2-4	-0-	1.888	5.134
2	Urban Conventional Highway	4	-0-	5.291	20.804
3	Urban Conventional Highway	4-6	-0-	4.036	19.658

Concept Facility					
Segment	Facility Type	Mixed-Flow Lanes	Managed Lanes	Centerline Miles	Lane Miles
1	Relinquish	-	-	-	-
2	Relinquish	-	-	-	-
3	Relinquish	-	-	-	-

TMS Elements				
Segment	Signalized Intersection 2008	Signalized Intersection 2035	Ramp Meters 2008	Ramp Meters 2035
1	3	3	-0-	-0-
2	13	13	-0-	-0-
3	17	17	-0-	-0-

BICYCLE FACILITY

Bicycle usage along SR-83 is not prohibited, and exists throughout Segments 1, 2 and 3 as a Shared Roadway.

Bicycle/Trails plans found in the General Plans of the cities of Ontario and Chino both include bicycle facilities within SR-83 R/W. Bicycle facility design details have not yet been established; however, Chino is anticipating a Class II or III On-Street facility, while Ontario anticipates further study to refine Euclid Bicycle Corridor requirements.

State Bicycle Facility Table		
Segment	Bicycle Access Prohibited	Facility Description
1	No, Shared Roadway	Terrain is gently rolling; 4 foot (minimum) paved shoulders predominate in both directions.
2	No, Shared Roadway	Terrain is level; 4 foot (minimum) paved shoulders predominate in both directions.
3	No, Shared Roadway	Terrain is level; paved shoulders range from 8' to 16' in width. Shared roadway section includes curb parking along this segment.

PEDESTRIAN FACILITY

Although pedestrian access is substantially available along the three SR-83 segments, sidewalks are not provided along Segment 1 R/W. Pedestrian crossing is prohibited across SR-83 at Red Bud Lane. Along Segment 2, some sidewalks exist where they were constructed with recent development activity. A wide dirt shoulder is available along both segments that can accommodate pedestrians a safe distance from the travel lanes. Segment 3 is fully improved in both directions with sidewalks; however, crosswalks are not uniformly provided for all directions at all intersections.

Pedestrian Facility Table		
Segment	Pedestrian Access Prohibited	Facility Description
1	No	4' minimum paved shoulder
2	No	4' minimum paved shoulder
3	No	6' to 10' concrete sidewalks, typical

TRANSIT FACILITY

Omnitrans' Route 83 currently extends southerly along SR-83 from north of I-10 to Chino Avenue, providing service to all of Segment 3 and Segment 2 north of Chino Avenue. Other transit agencies offer service to the South Ontario/Chino Valley areas; however, service routes and stations are located west of SR-83. General Plans for Ontario show that SR-83 from I-10 to Merrill Avenue (Segments 2 and 3) as a Bus Rapid Transit (BRT) Corridor. This BRT Corridor is also reflected in SANBAG's Long Range Transit Plan dated October 2009.

Transit Facility Table			
Segment	Mode & Collateral Facility	Name	Route End Points
1	None	N/A	N/A
2	Traditional Bus	Omnitrans Bus Route 83	SR-60 and Chino Ave.
3	Traditional Bus	Omnitrans Bus Route 83	I-10 to SR-60

FREIGHT

SR-83 is designated a Truck Route in the General Plans for the cities of Ontario and Chino. At present, active agricultural uses and truck repair/storage facilities in the area of Segment 2 generate truck traffic along SR-83. However, property zoned light industrial along the westerly highway frontage of Segment 2 are planned for warehouse/distribution facilities that will intensify truck trips once development is complete. SR-83 will provide the arterial connection between these facilities and SR-60, 71 and 91.

Existing freight rail facilities located west of Segment 2 in the city of Chino are planned for expansion; however, these modifications will not impact SR-83 R/W as shown. Existing Union Pacific (UPRR) freight and passenger rail lines located in the city of Ontario intersect Segment 3 at two locations between State Street and Holt Boulevard. Future grade-separation projects are planned to eliminate existing at-grade crossings at these SR-83/UPRR locations.

Freight Facility Table			
Facility Type/Freight Generator	Location	Mode	Name
Warehouse-Distribution	West side SR-83 between Pine Ave. and Kimball Ave.	Truck	Chino Commerce Center

CORRIDOR PERFORMANCE¹

Several state freeways traversing this sub-region are available in both east-west (SR-60 and 91) and north-south directions (SR-71 and I-15) to provide alternate inter-regional accessibility. Caltrans expressway functionality cannot be achieved without the elimination of several existing intersections and/or access driveways constructed over decades with local development activity.

The following table summarizes the operational performance of SR-83:

Basic System Operations							
Segment	AADT 2008	AADT 2035	LOS 2008	LOS 2035	LOS Concept	VMT 2008	VMT 2035
1	20,500	35,500	B	D	Relinquish	38,704	67,024
2	23,306	48,800	B	D	Relinquish	123,312	258,201
3	30,950	39,745	B	D	Relinquish	124,914	160,411

Truck Traffic				
Segment	Total Average Annual Daily Truck Traffic (AADT) 2008	Total Trucks (% of AADT) 2008	5+ Axle Average Annual Daily Truck Traffic (AADT) 2008	5+ Axle Trucks (% of AADT) 2008
1	4,100	20%	1,804	44%
2	3,729	16%	1,603	43%
3	1,875	6%	668	36%

Peak Period Traffic Data				
Segment	Peak Direction	Time of Day	VMT 2008	VMT 2035
1	SB	6:00-9:00 am 3:00-7:00 pm	3,587	4,248
2	SB	6:00-9:00 am 3:00-7:00 pm	11,138	12,751
3	NB	6:00-9:00 am 3:00-7:00 pm	10,655	14,711

¹ Corridor Performance table is based on 2008 Caltrans traffic data and SCAG Model 2035.

KEY CORRIDOR ISSUES

Most notable activities or characteristics affecting SR-83 include the following:

- An increased inundation zone resulting from an Army Corp of Engineers Santa Ana River/Prado Dam Basin enlargement project currently in the approval/construction process will result in a basin inundation level 566' above sea level, 10' higher than present capacity; a rise in elevation that is expected to significantly affect Segment 1
- Environmentally significant species (least bell's vireo) and habitat are located within the Santa Ana River and Prado Dam Basin. Design criteria and construction activities for any highway improvement projects proposed within the Basin are likely to be affected.
- SR-83 centerline between Merrill Avenue and Riverside Drive is also the common city limit line shared by the cities of Chino and Ontario. Differences in the circulation elements of each city's General Plan results in slight conflicts in roadway cross-sections at some local road intersections.
- SR-83 (Euclid Avenue) between I-10 and Philadelphia Street has been enlisted in the National Register of Historic Places by the City of Ontario. Alterations of the existing Euclid Avenue median will be affected.
- Modifications to add two through lanes to Segment 3 between I-10 and Holt Boulevard may be restricted by the Historic Designation of Euclid Avenue. Alternate access along with R/W acquisition for parcels abutting SR-83 along Segment 3 may be required to avoid major median impacts resulting from the addition of travel lanes.
- Completion of proposed developments within the cities of Ontario (New Model Colony) and Chino (The Preserve) will impact extensive frontage along Segments 1 and 2, and will significantly increase area traffic.
- The General Plan roadway classification for SR-83 for both Chino and Ontario describes an 8-lane, divided arterial highway. This cross-section exceeds typical urban street standards and complicates integration of Caltrans' Complete Streets goals.
- Although existing R/W along SR-83 is 200 feet in width along all segments, additional R/W at many local street intersections will be required to accommodate lane configurations necessitated by the 8-lane arterial expressway classification.
- Access control currently exists only along Segment 1, and was established with R/W acquisition for state highway purposes in 1948. No restrictions exist along Segments 2 and 3.
- Opportunities for operational improvements to SR-83 are constrained by insufficient access control, the prevalence of closely spaced signalized intersections, and a need to acquire R/W at street intersections. Extraordinary design and funding efforts will be required to overcome these factors.
- Major interchange modification at SR-60 and SR-71 will be required to accommodate the 8-lane, local arterial highway cross-section. No Projects have been identified to achieve necessary interchange modifications.

CORRIDOR CONCEPT

CONCEPT RATIONALE

Traffic demand along SR-83 is increasing as remaining agricultural uses are converted into intense suburban landscapes using a master-planned community development strategy. Immediate impacts to the surrounding transportation network are expected to result, and may not be mitigated sufficiently with development activity.

General Plans recently updated by the Cities of Ontario and Chino now apply an 8-lane major arterial expressway classification to SR-83 along Segments 1 and 2. Existing environmental and flooding impacts associated with proximity to the Santa Ana River/Prado Dam Basin affect Segment 1 and may hinder locally planned SR-83 widening, as well as significantly increase design and construction costs. Segment 2 will experience the greatest change as master-planned community developments are completed along SR-83's westerly frontage (light industrial uses) and easterly frontage (residential/commercial uses). Although fully improved in both north and southbound directions, Segment 3 between Riverside Drive and Holt Boulevard includes 4 lanes and wide outside shoulders. Along the remainder, SR-83's 6 lane cross-section is already consistent with its classification, thus no major widening efforts are anticipated.

PLANNED AND PROGRAMMED PROJECTS AND STRATEGIES

The following 2012 RTP project list is provided for information purposes:

ID	Segment	Post Miles	Location	Lead Agency	Project
2012 Federal Transportation Improvement Program (FTIP) Projects					
FTIP 200207	1	N/A	Pine Ave. from El Prado Rd. to SR-71	City of Chino	Extend Pine Ave. and widen existing bridge from 2 to 4 lanes
FTIP SBD88086	3	009.458/009.712	Holt Blvd. to D St.	City of Ontario	Storm drain extension
2012 Financially Constrained Regional Transportation Plan (RTP) Projects					
RTP 4120215	1, 2, 3	011.113/000.558	I-10 to Pomona-Rincon Rd.	SANBAG	Bus Rapid Transit (BRT)
RTP 4A01384	2	002.919/003.920	From Merrill Ave to Kimball Ave	City of Chino	Widen SR-83 from 2 to 4 lanes each direction
RTP 4120106	2	002.919/003.920	From Merrill Ave to Kimball Ave.	City of Chino	Widen SR-83 from 2 to 4 lanes
RTP 4A04035	2	001.888/002.919	From Pine Ave. to Kimball Ave.	City of Chino	Widen SR-83 from 2 to 4 lanes, each direction
RTP 4A04036	1	000.000/001.888	From SR-71 to Pine Ave.	City of Chino	Widen SR-83 from 1 to 4 lanes, each direction
RTP 4A04201	2	003.920/006.413	From Merrill Ave. to Riverside Dr.	City of Ontario	Widen east half of SR-83 from 2 to 4 lanes
RTP 4M07001	3	011.113	I-10 at SR-83 Interchange	City of Ontario	Widen exit ramps from 2 to 3 lanes
Strategic Plan Projects (Unconstrained)					
N/A	None	N/A	N/A	N/A	N/A

PROJECTS AND STRATEGIES TO ACHIEVE CONCEPT

Implementation of the 8-lane local expressway concept as defined by Ontario and Chino may be facilitated if the remaining highway is converted to local road status and relinquished to local agencies.

Segment	Post Miles	Location	Description
1	R000.000/001.888	SR-83 from SR-71 to Pine Ave.	Relinquish
2	001.888/007.179	SR-83 from Riverside Dr. to SR-60	Relinquish
3	007.179/011.215	SR-83 from SR-60 to I-10	Relinquish

Appendix A

GLOSSARY OF TERMS AND ACRONYMS

Acronyms

- AADT** – Annual Average Daily Traffic
- ADA** – Americans With Disabilities Act
- ADT** – Average Daily Traffic
- AQMD** – Air Quality Management District
- Caltrans** – California Department of Transportation
- CMA** – Congestion Management Plan
- CSS** – Context Sensitive Solutions
- FHWA** – Federal Highway Administration
- GHG** – Green House Gas
- HCP** – Habitat Conservation Plan
- HCS** – Highway Capacity Software
- HOV** – High Occupancy Vehicle Lane
- HOT** – High Occupancy Toll Lane
- IC** – Interchange
- ITS** – Intelligent Transportation System
- LOS** – Level of Service
- MF** – Mixed-Flow Lane
- MFE** – Mixed-Flow Lane Equivalent
- ML** – Managed Lane
- MPO** – Metropolitan Planning Organizations
- NOA** – Naturally Occurring Asbestos
- NCCP** – Natural Community Conservation Plan
- OC** – Overcrossing
- PID** – Project Initiation Document
- PM** – Post Mile
- PSR** – Project Study Report
- RCTC** – Riverside County Transportation Commission
- Riv** – Riverside County
- RTP** – Regional Transportation Plan
- RTIP** – Regional Transportation Improvement Program
- RTPA** – Regional Transportation Planning Agency
- SANBAG** – San Bernardino Associated Governments
- SBd** – San Bernardino County
- SCAG** – Southern California Association of Governments
- SCS** – Sustainable Community Strategies
- SHOPP** – State Highway Operation Protection Program
- STIP** – State Transportation Improvement Program
- T** – Truck Lane
- TDM** – Transportation Demand Management
- TMS** – Transportation Management System
- TSN** – Transportation System Network
- UC** – Undercrossing
- V/C** – Volume to Capacity Ratio
- VMT** – Vehicle Miles Travel

Definitions

Annual Average Daily Traffic (AADT) – Annual Average Daily Traffic is the total volume for the year divided by 365 days. The traffic count year is from October 1st through September 30th. Traffic counting is generally performed by electronic counting instruments moved from location throughout the State in a program of continuous traffic count sampling. The resulting counts are adjusted to an estimate of annual average daily traffic by compensating for seasonal influence, weekly variation and other variables which may be present. Annual ADT is necessary for presenting a statewide picture of traffic flow, evaluating traffic trends, computing accident rates, planning and designing highways, and other purposes.

Bikeway Class I (Bike Path) – Provides a completely separated right of way for the exclusive use of bicycles and pedestrians with cross flow by motorists minimized.

Bikeway Class II (Bike Lane) – Provides a striped lane for one-way bike travel on a street or highway.

Bikeway Class III (Bike Route) – Provides for shared use with pedestrian or motor vehicle traffic.

Capacity – The maximum sustainable hourly flow rate at which persons or vehicles reasonably can be expected to traverse a point or a uniform section of a lane or roadway during a given time period under prevailing roadway, environmental, traffic, and control conditions.

Capital Facility Concept – The 20-25 year vision of future development on the route to the capital facility. The capital facility can include capacity increasing, state highway, bicycle facility, pedestrian facility, transit facility (Intercity Passenger rail, Mass Transit Guideway etc.), grade separation, and new managed lanes.

Concept LOS – The minimum acceptable level of service over the next 20-25 years.

Conceptual Project – A conceptual improvement or action is a project that is needed to maintain mobility or serve multimodal users, but is not currently included in a financially constrained plan and is not currently programmed. It could be included in a General Plan or in the unconstrained section of a long-term plan.

Corridor – A broad geographical band that follows a general directional flow connecting major sources of trips that may contain a number of streets, highways, bicycle, pedestrian, and transit route alignments. Off system facilities are included for informational purposes and not analyzed in the TCR.

Facility Concept – Describes the facility and strategies that may be needed within 20-25 years. This can include capacity increasing, state highway, bicycle facility, pedestrian facility, transit facility, non-capacity increasing operational improvements, new managed lanes, conversion of existing managed lanes to another managed lane type or characteristic, TMS field elements, transportation demand management, and incident management.

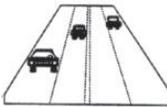
Facility Type – The facility type describes the state highway facility type. The facility could be freeway, expressway, conventional, or one-way city street.

Freight Generator – Any facility, business, manufacturing plant, distribution center, industrial development, or other location (convergence of commodity and transportation system) that produces significant commodity flow, measured in tonnage, weight, carload, or truck volume.

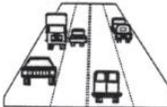
Headway – The time between two successive vehicles as they pass a point on the roadway, measured from the same common feature of both vehicles.

Intelligent Transportation System (ITS) – Improves transportation safety and mobility and enhances productivity through the integration of advanced communications technologies into the transportation infrastructure and in vehicles. Intelligent transportation systems encompass a broad range of wireless and wire line communications-based information and electronics technologies to collect information, process it, and take appropriate actions.

Level of Service (LOS) – It is a qualitative measure describing operational conditions within a traffic stream and their perception by motorists. A LOS definition generally describes these conditions in terms of speed, travel time, freedom to maneuver, traffic interruption, comfort, and convenience. LOS can generally be categorized as follows:



LOS A describes free flowing conditions. The operation of vehicles is virtually unaffected by the presence of other vehicles, and operations are constrained only by the geometric features of the highway.



LOS B is also indicative of free-flow conditions. Average travel speeds are the same as in LOS A, but drivers have slightly less freedom to maneuver.



LOS C represents a range in which the influence of traffic density on operations becomes marked. The ability to maneuver with the traffic stream is now clearly affected by the presence of other vehicles.



LOS D demonstrates a range in which the ability to maneuver is severely restricted because of the traffic congestion. Travel speed begins to be reduced as traffic volume increases.



LOS E reflects operations at or near capacity and is quite unstable. Because the limits of the level of service are approached, service disruptions cannot be damped or readily dissipated.



LOS F is a stop and go, low speed conditions with little or poor maneuverability. Speed and traffic flow may drop to zero and considerable delays occur. For intersections, LOS F describes operations with delay in excess of 60 seconds per vehicle. This level, considered by most drivers unacceptable often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the intersection.

Mainline – Includes travel way for through traffic but not freeway to freeway interchanges, local road interchanges, ramps, or auxiliary lanes.

Multimodal – The availability of transportation options using different modes within a system or corridor, such as automobile, subway, bus, rail, or air.

Peak Hour – The hour of the day in which the maximum volume occurs across a point on the highway.

Peak Hour Volume – The hourly volume during the highest hour traffic volume of the day traversing a point on a highway segment. It is generally between six percent and 10 percent of the Annual Daily Traffic (ADT). The lower values are generally found on roadways with low volumes.

Planned Project – A planned improvement or action is a project in a financially constrained section of a long-term plan, such as an approved Regional or Metropolitan Transportation Plan (RTP or MTP), Capital Improvement Plan, or measure.

Post-25 Year Concept – This dataset may be defined and re-titled at the District's discretion. In general, the Post-25 Year concept could provide the maximum reasonable and foreseeable roadway needed beyond a 20-25 year horizon. The post-25 year concept can be used to identify potential widening, realignments, future facilities, and rights-of-way required to complete the development of each corridor.

Post Mile (PM) – A post mile is an identified point on the State Highway System. The milepost values increase from the beginning of a route within a count to the next county line. The milepost values start over again at each county line. Mile post values usually increase from south to north or west to east depending upon the general direction the route follows within the state. The mile post at a given location will remain the same year after year. When a section of road is relocated, new milepost (usually

noted by an alphabetical prefix such as "R" or "M") are established for it. If relocation results in a change in length, "mile post equations" are introduced at the end of each relocated portion so that mile posts on the remainder of the route within the county will remain unchanged.

Programmed Project – A programmed improvement or action is a project in a near-term programming document identifying funding amounts by year, such as the State Transportation Improvement Program or the State Highway Operations and Protection Program.

Route Designation – A route's designation is adopted through legislation and identifies what system the route is associated with on the State Highway System. A designation denotes what design standards should apply during project development and design. Typical designations include but not limited to National Highway System (NHS), Interregional Route System (IRRS), and Scenic Highway System.

Rural – Fewer than 5,000 in population designates a rural area. Limits are based upon population density as determined by the U.S. Census Bureau.

Segment – A portion of a facility between two points.

System Operations and Management Concept – Describes the system operations and management elements that may be needed within 20-25 years. This can include Non-capacity increasing operational improvements (Auxiliary lanes, channelization's, turnouts, etc.), conversion of existing managed lanes to another managed lane type or characteristic (e.g. HOV lane to HOT lane), TMS Field Elements, Transportation Demand Management, and Incident Management.

Transportation Demand Management (TDM) – Programs designed to reduce or shift demand for transportation through various means, such as the use of public transportation, carpooling, telework, and alternative work hours. Transportation Demand Management strategies can be used to manage congestion during peak periods and mitigate environmental impacts.

Transportation Management System (TMS) – Is the business processes and associated tools, field elements, and communications systems that help maximize the productivity of the transportation system. TMS includes, but is not limited to, advanced operational hardware, software, communications systems, and infrastructure, for integrated Advanced Transportation Management Systems and Information Systems, and for Electronic Toll Collection System.

Urban – 5,000 to 49,999 in population designates an urban area. Limits are based upon population density as determined by the U.S. Census Bureau.

Urbanized – Over 50,000 in population designates an urbanized area. Limits are based upon population density as determined by the U.S. Census Bureau.

Vehicle Miles Traveled (VMT) – Is the total number of miles traveled by motor vehicles on a road or highway segments.

Appendix B

RESOURCES

California Department of Transportation: *District 8 District System Management Plan*, December 2011.

City of Ontario: *The Ontario Plan-A Framework for the Future*, December 2009

City of Chino: *Chino General Plan*, June 2011

Omnitrans: *Maps for Routes 63, 65, 68, and 83*; June 2012