

Update on U.S. 50/Cameron Park Dr Interchange – Alternatives Analysis

Prepared for the Board of Supervisors

August 23, 2010

Legistar Item #10-0836

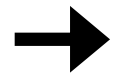
Purpose for this Planning Analysis/Study:

- The Purpose of this Planning Analysis/Study is to explore several alternatives for the Cameron Park Interchange Project Area at a gross level;
- The ultimate goal is to find an alternative that fulfills the needs and purpose for the future Cameron Park Interchange Project;
- And to identify alternatives having lower project costs in order to allow a reduction in the TIM Fees.

Purpose for this Presentation:

- Provide an update on the Cameron Park Drive Interchange Alternatives Analysis;
- **Get Board feedback on the alternatives and evaluation criteria developed thus far;**
- Answer questions;
- Review Next Steps.

Agenda



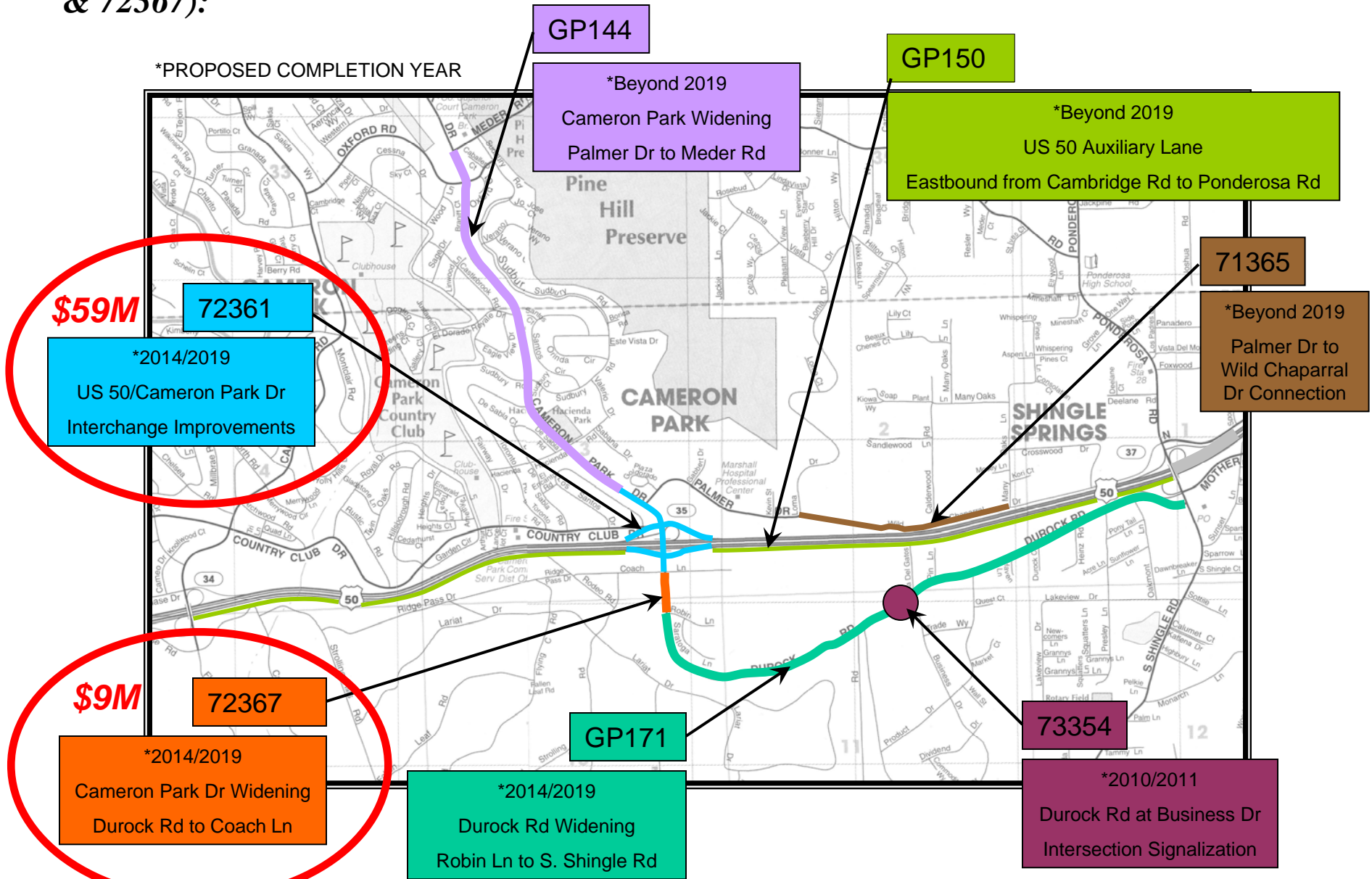
- Background / History

- Matrix of Alternatives and Evaluation Criteria
- Alternatives
- Next Steps

HISTORY:

- March, 2006: 2004 General Plan TIM Fee Program adopted which included a planning level estimate of \$24.8M for Cameron Park Dr Interchange
- 2007 - 2008 Several alternatives were screened; Caltrans approves 3 to be evaluated in the Project Study Report (PSR)
 - All 3 alternatives are \$54M+
- October, 2008: Caltrans approves PSR/PDS (Project Development Support)
- Early 2009: Alternative 1 is incorporated into the 2009 CIP (Board approved 5/5/09) and TIM Fee update (6/2/09)
 - \$68M alternative includes 8 lanes, bridge replacement, and over \$12M in right of way costs

Current Cameron Park Dr Interchange Projects (CIP #s 72361 & 72367):



August 23, 2010

On January 25, 2010, DOT provided the Board with an update on the U.S. 50/Cameron Park Dr. Interchange Project:

- DOT recommended that additional alternatives be developed and evaluated because of the large increase in cost and because all 3 alternatives in the PSR/PDS may impact existing residences and businesses.
- Some additional alternatives were identified prior to the PSR/PDS, but they were not fully analyzed.
 - They were not pursued because they likely would not meet Level of Service (LOS) requirements or receive Caltrans' approval.

DOT reviewed 14 possible alternatives with the Board:

ALTER-NATIVE #	NAME	COST	Cameron Park Dr and Coach Ln			POTENTIAL RIGHT OF WAY COSTS/ IMPACTS	OTHER IMPACTS
			LOS PM Peak Hour in 2015	LOS PM Peak Hour in 2025	LOS PM Peak Hour in 2035		
0	DO NOTHING	\$0	F	F	F	NO	
1	CURRENT PLAN - 8 LANE CAMERON PARK DR UNDER HWY 50 (PSR #1)	\$68M	D	N/A	E	\$12M	
2a	7 LANE CAMERON PARK DR (PSR #2) UNDER HWY 50	\$51.4M	E	E	F	\$12M	
2b	7 LANE CAMERON PARK DR w/Other Local Road Improvements (PSR #2 +)	> \$61M	E	E	E	\$12M+	
2c	OTHER LOCAL ROAD IMPROVEMENTS ONLY	Not Costed	Preliminary study shows benefits but unknown to what level			LIKELY + PLANT PRESERVE	
3	SINGLE POINT DIAMOND (PSR #3)	\$96.3M	C	N/A	E	\$20M	Lower Cam Park Dr 7 ft; add Pump Stn.
4a, b, c, d	WIDEN CAMERON PARK DR FROM DUROCK TO COACH +	\$9.1M and up	Not Studied			\$6.2M	
5	4a PLUS EXPAND HWY 50 RAMPS	Not Costed	Not Studied			AT LEAST \$6.2M	
6	CONNECT PALMER TO W. CHAPPARAL	\$9.6M + R/W cost	Preliminary study showed little benefit to making this connection alone			PLANT PRESERVE	
7	7 Lanes on Cam Park Dr now expanding to 8 lanes when needed	> \$51.4M	D	N/A	E	\$12M	Throw-away costs (e.g., retain. walls)
8	DIVERGING DIAMOND	Not Costed	Not Studied			UNKNOWN	Non Std. for Caltrans
9	ROUNDBOUT	Not Costed	Not Studied			YES	Non Std. for Caltrans
10	WIDEN CAMERON PARK DR. to 7 Lns.	Not Costed	Not Studied			YES	
11	EXPAND HWY 50 RAMPS; ALLOW FREE RIGHT FROM EB OFF-RAMP	Not Costed	Not Studied			YES	
12	REALIGN COUNTRY CLUB	Not Costed	Not Studied			YES	
13	MOVE THE INTERCHANGE EAST	Not Costed	Not Studied			?, PLANT PRESERVE	
14	"HOOK" EASTBOUND OFFRAMP TO COACH, ROBIN	Not Costed	Not Studied			UNKNOWN	Non Std. for Caltrans

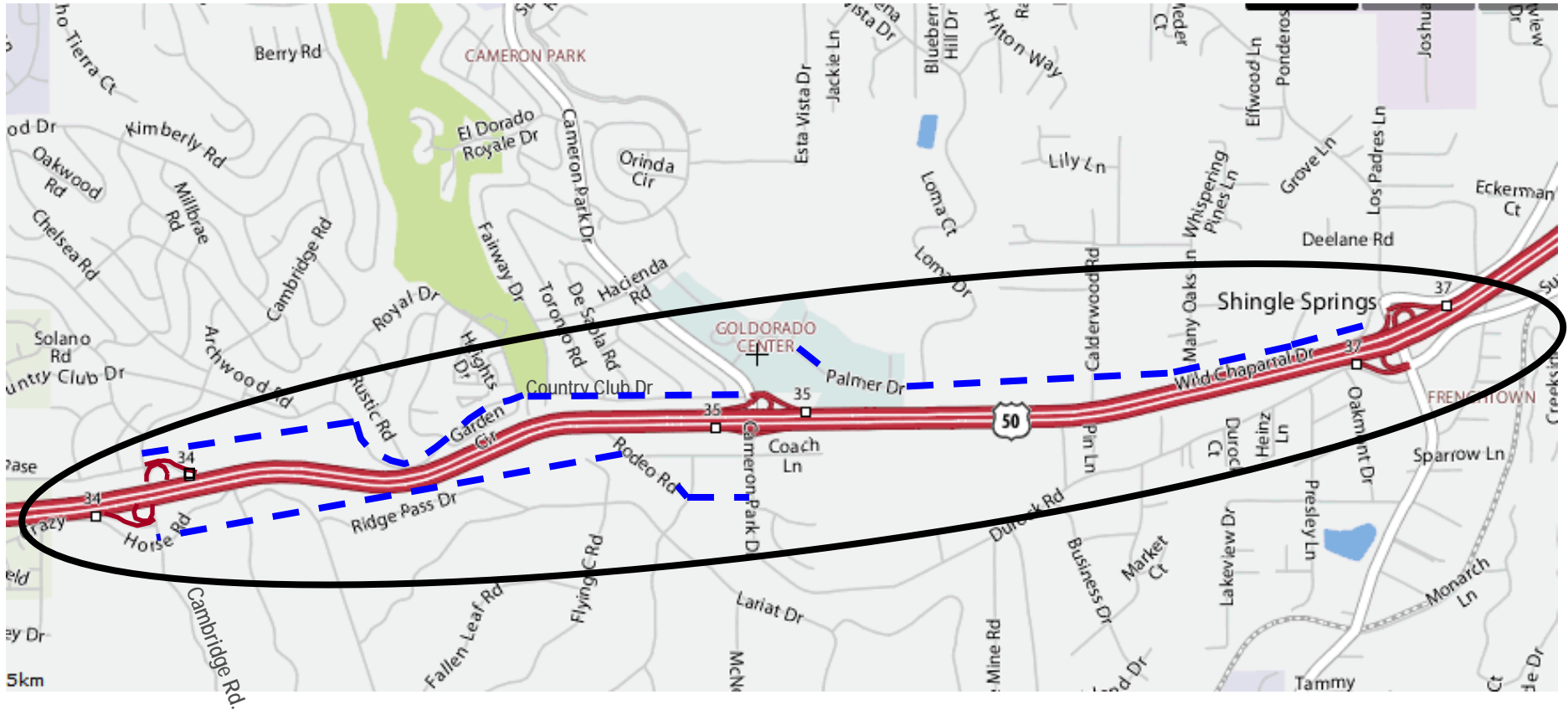
The Board recommended that DOT expand the preliminary matrix by adding other important evaluation measures:

- Impacts on economic development
 - Property tax and sales tax impacts
 - Public benefits e.g.,:
 - Lost time and fuel caused by delays
 - Impacts on Air Quality
 - Ease of finding way back to Hwy 50;
- Effects of Recent State Legislation i.e., SB375;
- Define and differentiate Regional vs. Local benefits;

The Board recommended that DOT expand the preliminary matrix by adding other important evaluation measures (cont.):

- Benefits of adding parallel capacity:
 - Expand area of analysis to include the Cambridge Rd. Interchange to the Ponderosa Rd. Interchange – look at the area as a system to include:
 - Rodeo Rd. connection from Cameron Park Dr. to the Cambridge Rd. Interchange,
 - Country Club Dr. connection from the Cambridge Rd. Interchange to the Cameron Park Dr. Interchange,
 - Wild Chaparral Dr. and Palmer Dr. connection (Ponderosa Rd. Interchange to Cameron Park Dr. Interchange).

The Board also recommended that DOT expand the area of interest and look at traffic circulation as a system.



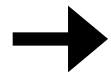
--- Alignment for illustrative purposes only

Proposed “Alternatives Analysis” Timeline and Process:

- May – Aug: Working with stakeholders/experts (e.g., Economic Development Coordinator, Caltrans, etc.) define/refine evaluation criteria and refine definitions of alternatives; add new alternatives if appropriate
 - Review with the Public
 - Review with the Board ← **Where we are Today**
- Aug – Oct: Evaluate alternatives (“matrix – level” evaluation) and recommend a subset for further, more detailed evaluation
 - Review with the Public
 - Review with the Board
- Oct – Jan: Do detailed evaluation on a viable subset of alternatives (i.e., 3 – 5) and make recommendation
 - Review with the Public
 - Review with the Board

Agenda

- Background / History



- Matrix of Alternatives and Evaluation Criteria

- Alternatives

- Next Steps

Review with the Public has included:

1. Meetings with, or presentations to:
 - Shingle Springs - Cameron Park Chamber of Commerce
 - Cameron Park Community Leaders
 - North State Building Industry Association
 - Cameron Park Visioning Committee

2. One-on-one meetings with representatives from:
 - Shingle Springs – Cameron Park Chamber of Commerce
 - North State Building Industry Association
 - Marshall Hospital
 - Economic Development Advisory Committee
 - EDC's Economic Development Coordinator
 - Cameron Park Design Review Advisory Committee
 - No Gridlock Committee
 - TIM Fee Working Group

Comments we received from the Public included:

- Echoed similar ideas as the Board suggested;
- Focus on creating jobs in the Cameron Park area;
- Support alternative forms of transportation: e.g., Bicycle, Pedestrian, and Transit.

The net effect of dialogues with various people has been to expand the matrix substantially.

- The matrix now includes more than twice as many Alternatives (42):
 - Several new ideas surfaced during the conversations with the Public and Staff;
 - Many of the alternatives are variations of a few key themes (e.g., parallel capacity).
- 36 “Evaluation Criteria” were identified.
 - Some of these may overlap and be combined eventually, but DOT believes it is important to capture them all at the outset.

Each of the 6 Evaluation Criteria Groups contains 1 or more criteria:

1. Level of Service (LOS) at Cameron Park Dr & Coach during the PM Peak Hour
2. Other Technical Impacts (e.g., Caltrans acceptance, impact on Ponderosa/Cambridge Interchanges)
3. Negative Economic Impacts (Taxes & Jobs)
4. Encourages/Impacts Economic Development
5. Local/Regional Concerns (e.g., air quality, local/regional benefits, creates walkable communities)
6. Public Buy-in (Support and Acceptance)

Evaluation Criteria – Group 1: Level of Service at Cameron Park Dr. and Coach Ln.

- A. LOS in the PM Peak Hour in 2015
- B. LOS in the PM Peak Hour in 2025
- C. LOS in the PM Peak Hour in 2035
- D. LOS Comparator (Control Project) – PSR Alternative 2

Evaluation Criteria – Group 2: Other Technical Impacts

- A. Requires acquiring Businesses/Residences
- B. Number of lanes on Cameron Park Dr. under Hwy 50
- C. Requires replacing the Hwy 50 bridges over Cameron Park Drive
- D. Restricts left turns from Coach Ln. onto Cameron Park Dr.
- E. Assumes Hwy HOV Lanes and Auxiliary Lanes are built?
- F. Includes widening of Hwy 50 on or off ramps
- G. Includes Project 72367 - Cameron Park Dr widening
- H. Includes 71365 – Palmer/Wild Chaparral Connection
- I. Caltrans Approval or Willingness of Acceptance
- J. Negative Impacts to Other Interchanges (i.e., Ponderosa or Cambridge)

Evaluation Criteria – Group 3: Negative Economic Impacts

- A. Impacts to residential property taxes collected by the County
- B. Impacts to business property taxes collected by the County
- C. Impacts to sales taxes collected by the County
- D. Impacts Employment (i.e., causes job loss)

Evaluation Criteria – Group 4: Economic Development

- A. Encourages employment (i.e., new jobs)
- B. Encourages new, or rejuvenates existing, Business Development Opportunities
- C. Encourages Community Investment / Reinvestment
- D. Encourages Parcel Development (Parcel Assembly)
- E. Encourages Better Traffic Flow and Access to Existing Businesses
- F. Helps Complete the Planning Vision of Cameron Park
- G. Leverages funding with alternative Economic Development sources (e.g., EDA) for the project or the Cameron Park community
- H. Provides for retail differentiation/cohesion from other County areas (e.g., areas around other interchanges like Missouri Flat)
- I. Impact to existing businesses during construction

Evaluation Criteria – Group 5: Local/Regional Concerns

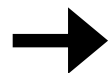
- A. Air Quality (Meets/exceeds AB32 requirements)
- B. Air Quality (Meets/exceeds SB375 requirements)
- C. Level of public delays due to construction
- D. Improves Highway 50 accessibility for the public
- E. Improves bicycle and pedestrian facilities
- F. Provides local benefits (e.g., shopping, commerce, goods and services)
- G. Provides regional benefits (e.g., County-wide transportation use and commercial use)
- H. Provides for super-regional benefits (e.g., tourism)

Evaluation Criteria – Group 6: Public Concerns

A. Public Buy-In: How well the public prefers a given alternative

Agenda

- Background / History
- Matrix of Alternatives and Evaluation Criteria



- Alternatives

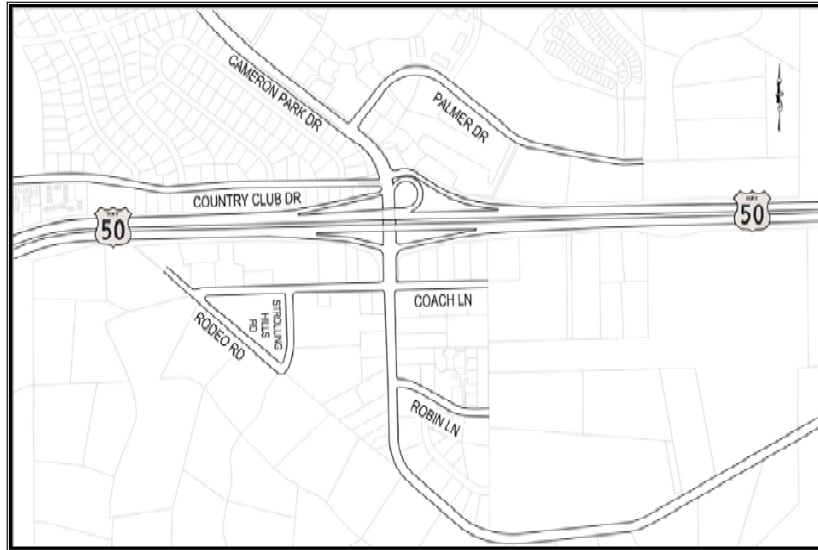
- Next Steps

There are 42 alternatives grouped into 7 “Families”:

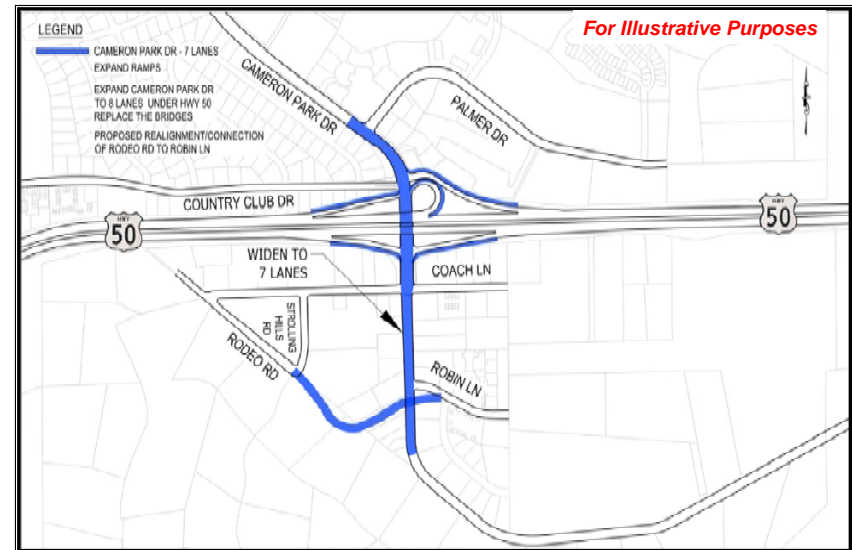
1. PSR Alternatives (13)
 - Alternatives in the PSR/PDS approved by Caltrans in October, 2008, and variations
2. Diverging Diamond Interchange Alternatives (DDI) (2)
3. Round-About Alternative (1)
4. Other Alternatives (5)
 - Do not fit into any of the other Families
5. Parallel Capacity (13)
 - Provide parallel capacity to Hwy 50
6. Combination (3)
 - Combinations of the above alternatives
7. Half Loop Roadway Alternatives (5)
 - Move the EB off ramp to Rodeo & the EB on ramp further east.

Family 1: PSR Alternatives (I)

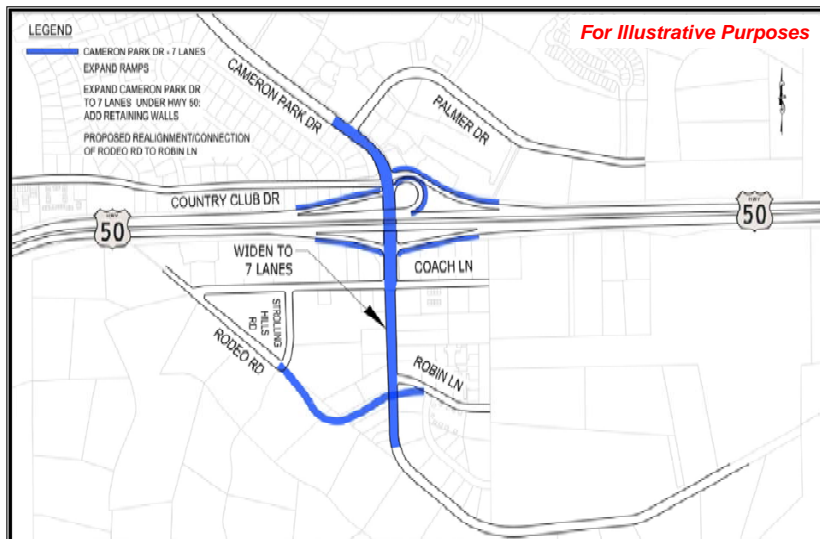
Alt 0. \$0M - DO NOTHING



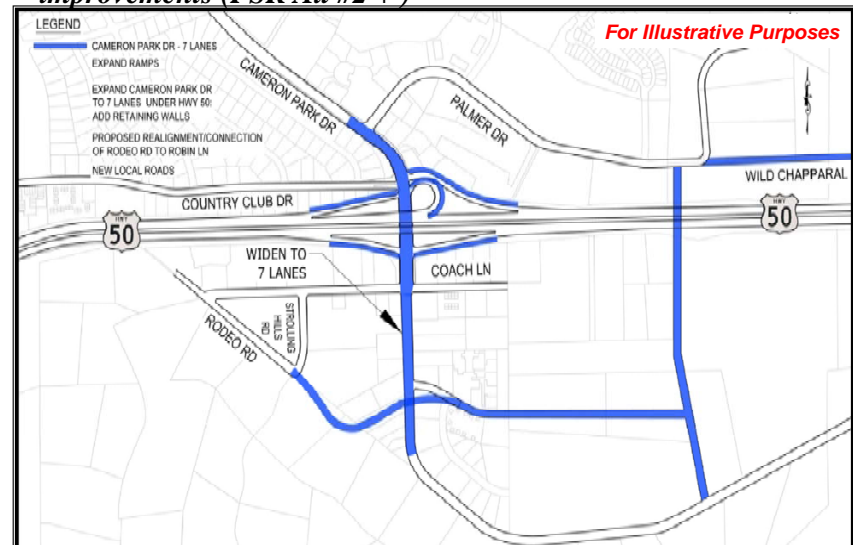
Alt 1. \$68M Current Plan: 8 Lane Cameron Park Dr (PSR Alt #1)



Alt 2a. \$51.4M: 7 Lane Cameron Park Dr (PSR Alt #2)

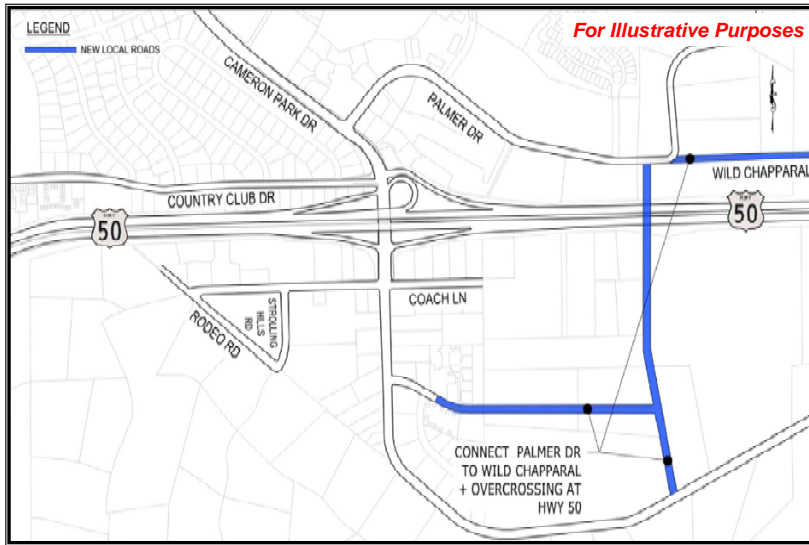


Alt 2b. \$??M: 7 Lane Cameron Park Dr + other local road improvements (PSR Alt #2 +)

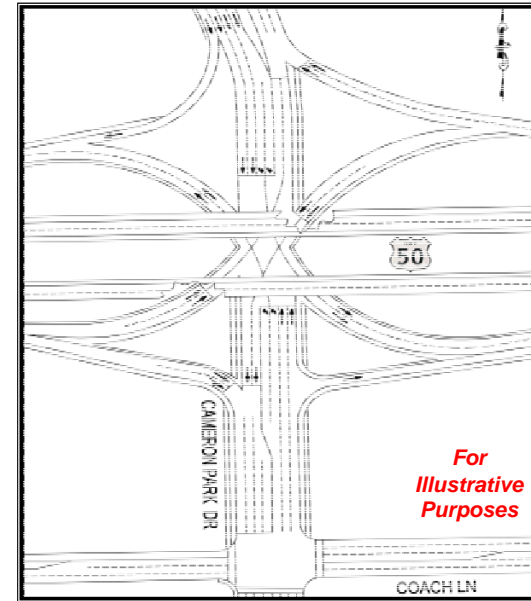


Family 1: PSR Alternatives (II)

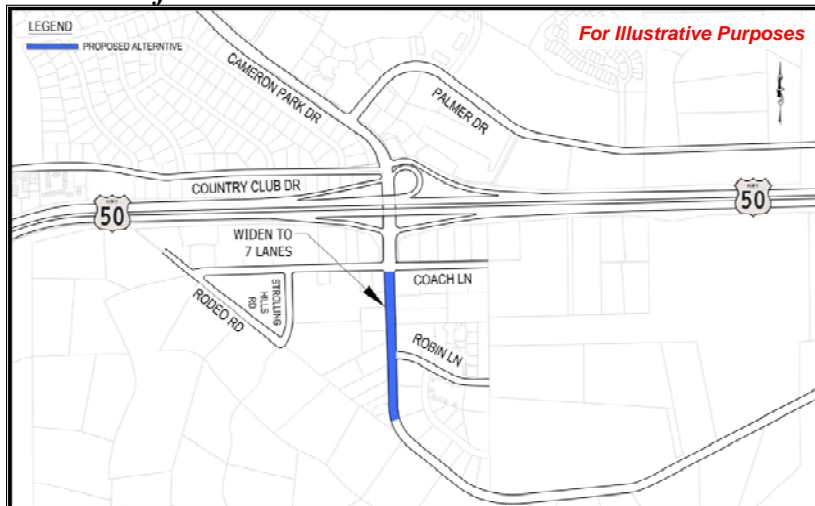
Alt 2c. \$??M: Other local road improvements only



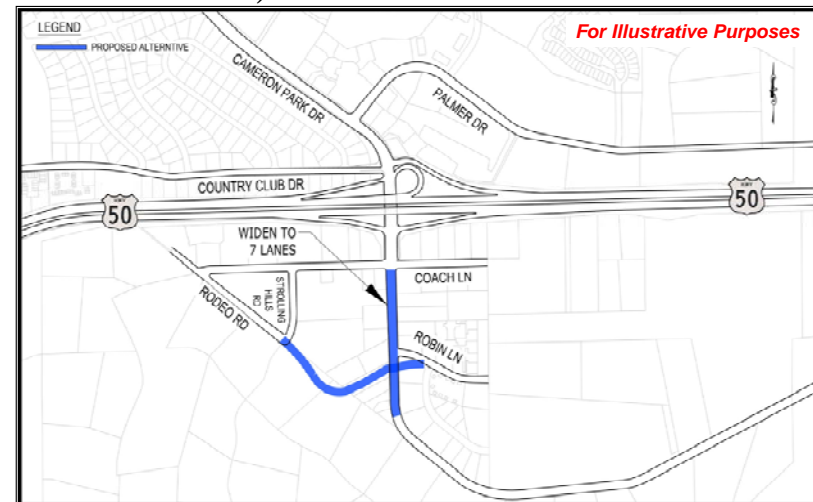
Alt 3. \$96M: Single Point Diamond (PSR #3)



Alt 4a. \$9.1M: Build 72367 Only – widen Cameron Park Dr from Durock to Coach

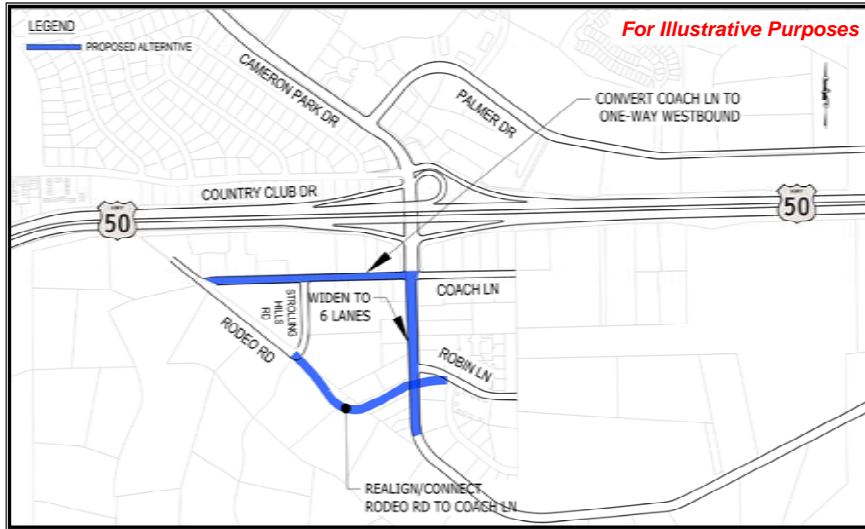


Alt 4b. \$??M: Build 72367 (widen Cameron Park Dr from Durock to Coach) and connect Rodeo to Robin

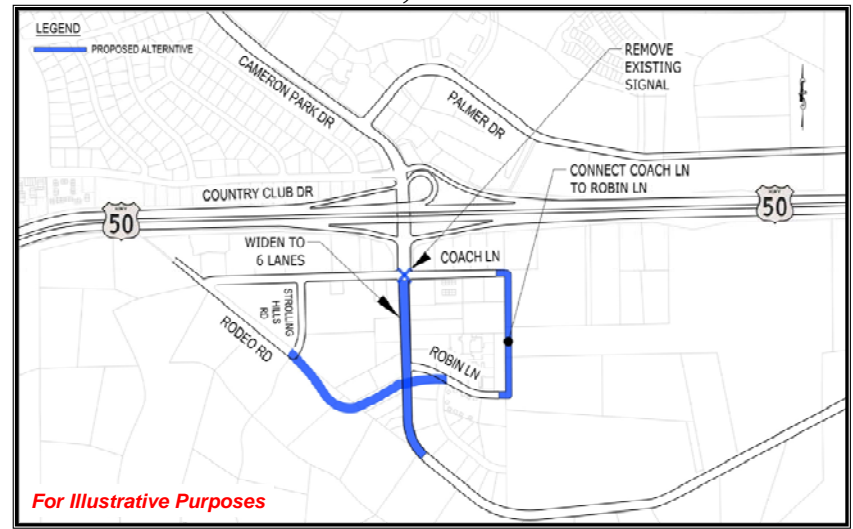


Family 1: PSR Alternatives (III)

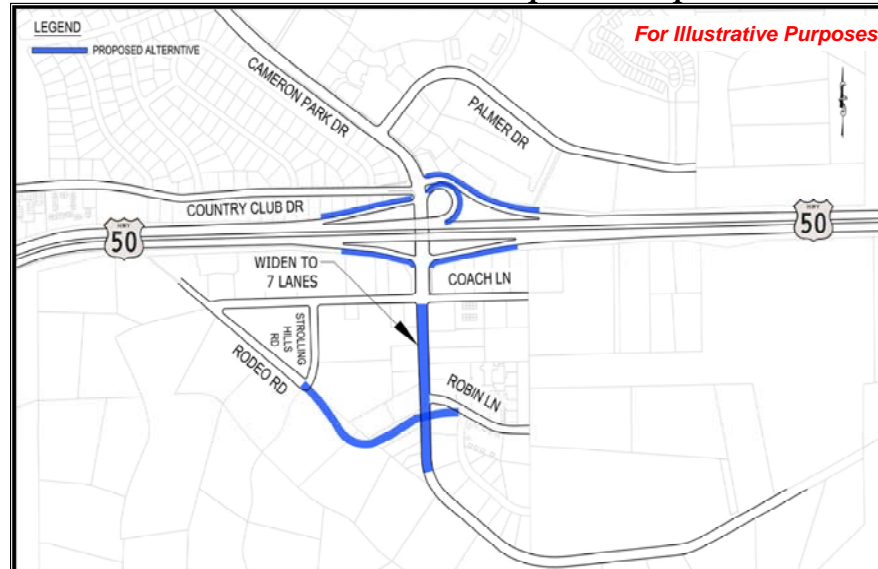
Alt 4c. \$??M: Make Coach one-way, widen Cameron Park Dr to 6 lanes and connect Rodeo to Robin



Alt 4d. \$??M: Remove signal at Coach; disallow all lefts at Cam Park Dr & Coach; connect Rodeo & Robin

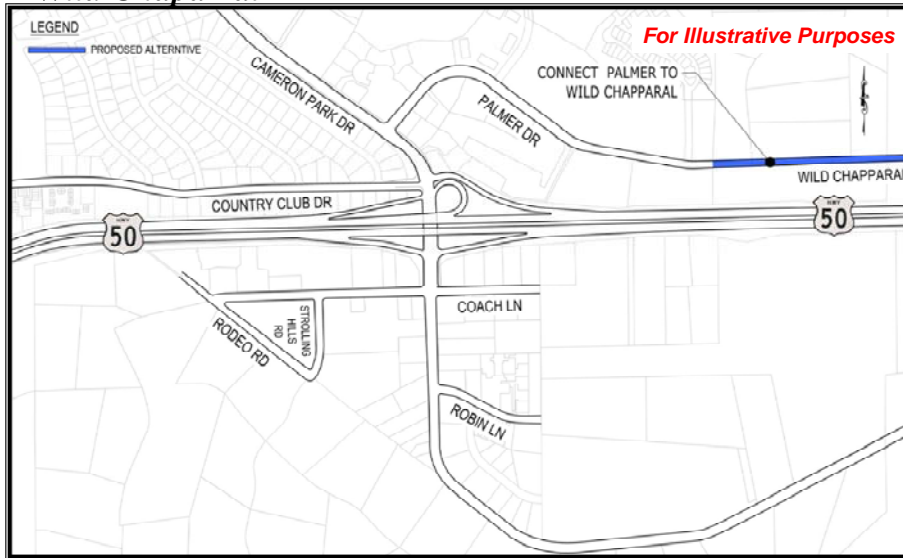


Alt 5. \$??M: Build 72367 and expand ramps

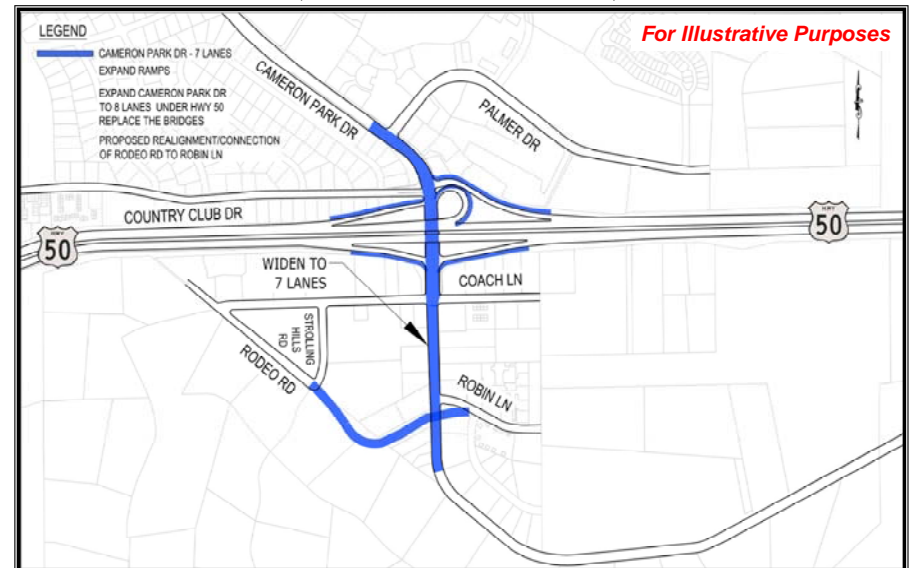


Family 1: PSR Alternatives (IV)

Alt 6. \$9.6M+R/W+ mitigation cost: Connect Palmer to Wild Chaparral

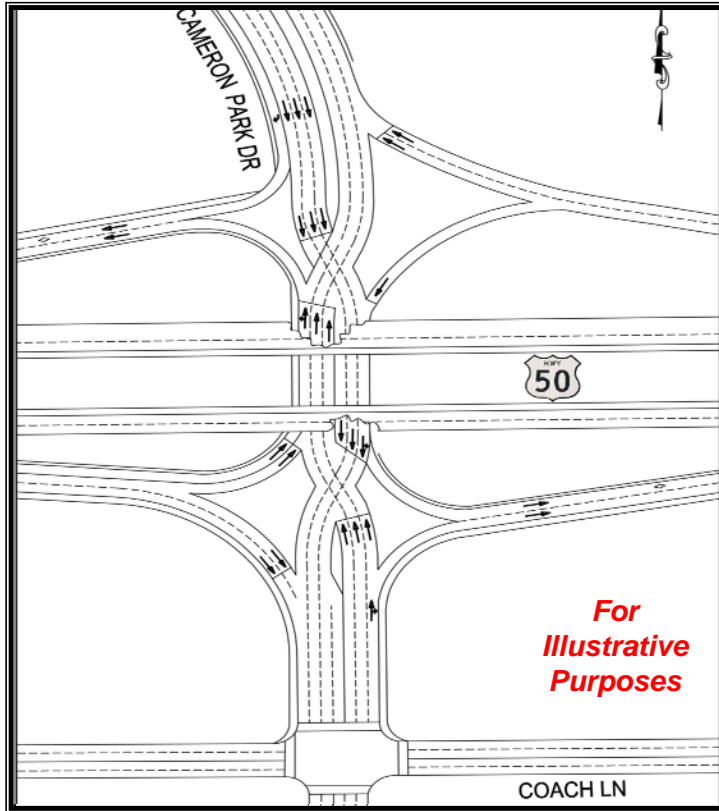


Alt 7. \$??M: 7 Lanes on Cameron Park Dr now expanding to 8 lanes when needed (Starts out as PSR Alt. 2)

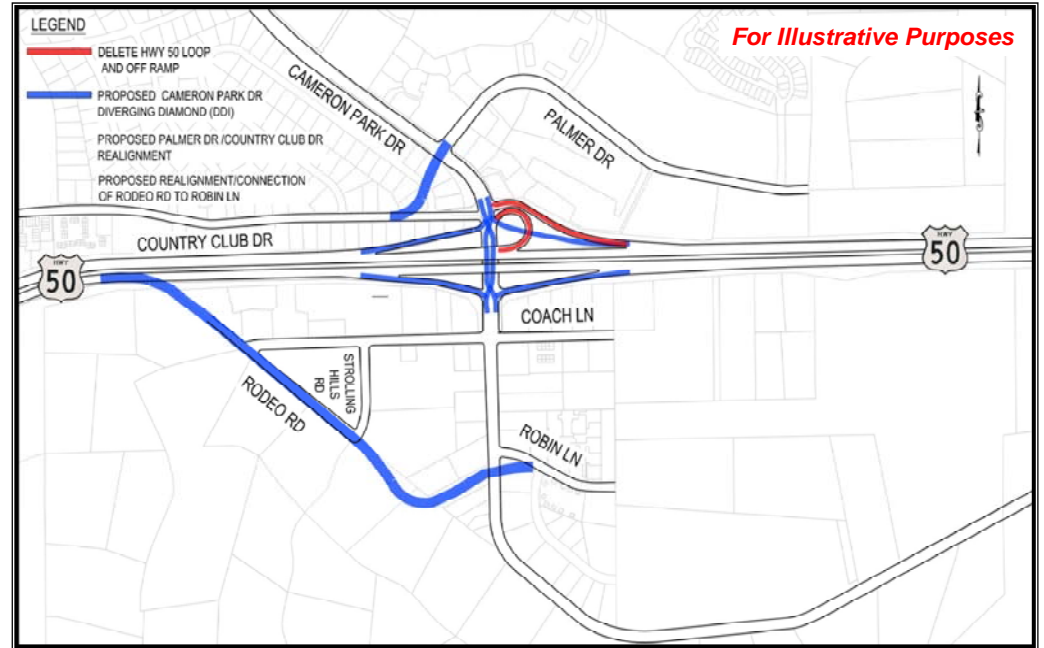


Family 2: DDI Alternatives

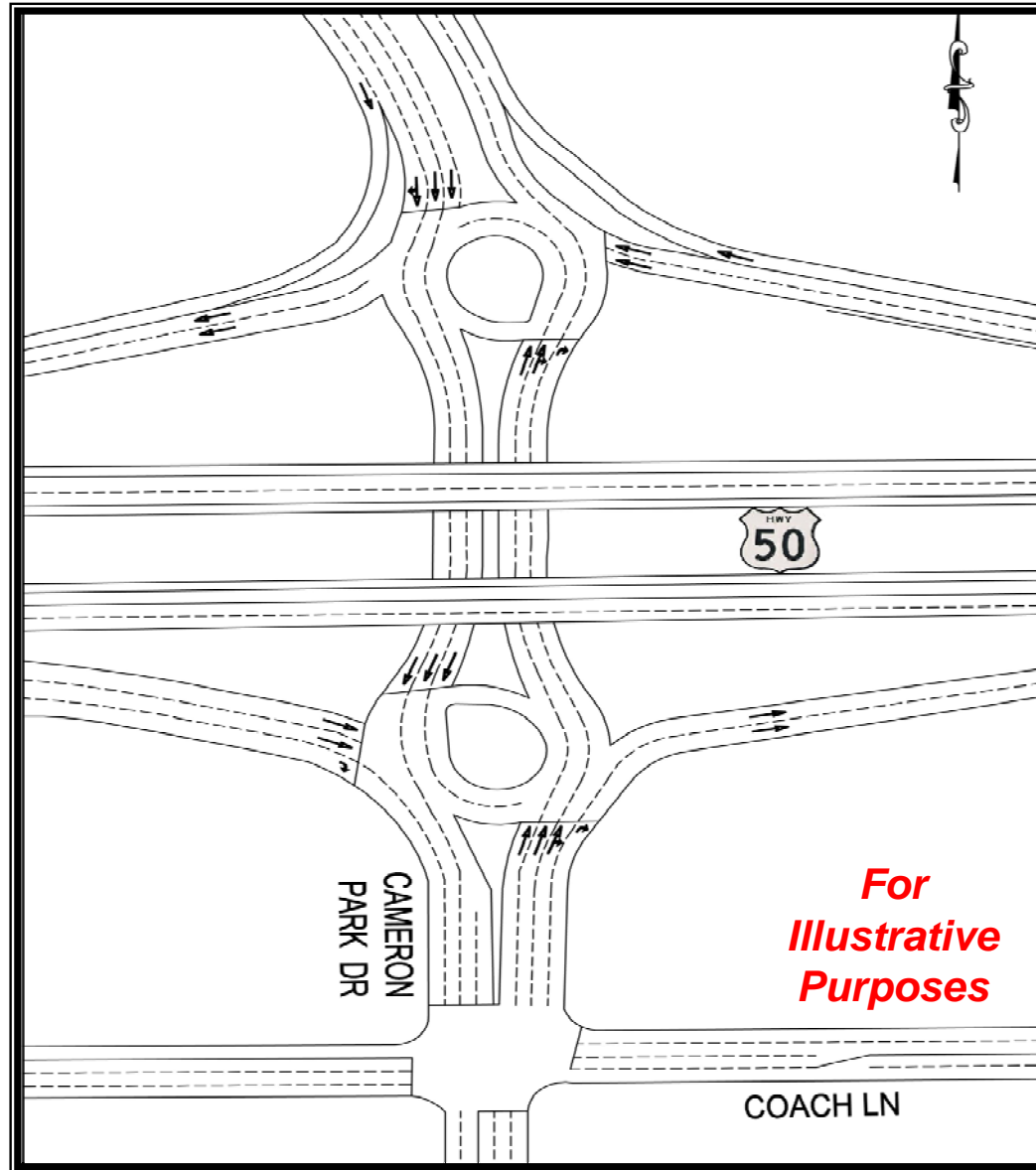
Alt 8. \$??M: Diverging Diamond



Alt 8a. \$??M Diverging Diamond Interchange (DDI), with a Rodeo Rd Off-Ramp and Robin Ln Tie-In, Country Club Dr/Palmer Dr Realignment

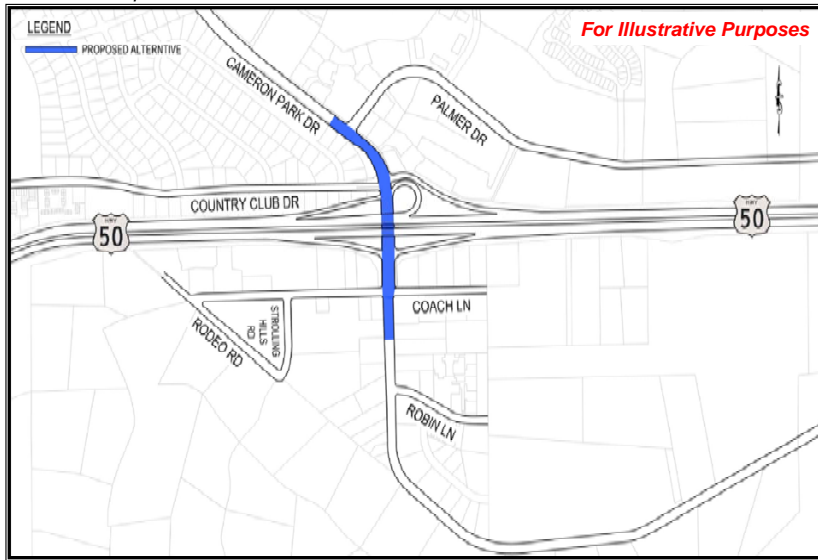


Family 3: Alt 9. \$??M Roundabout Alternative

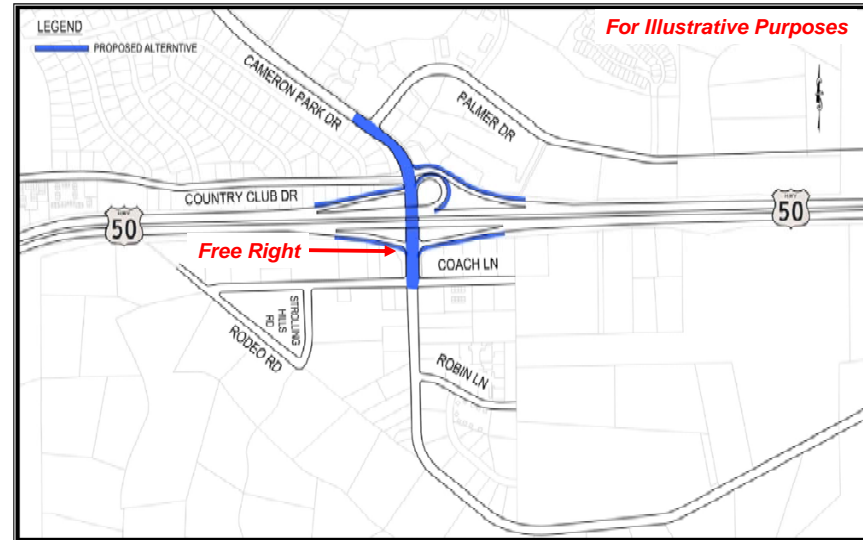


Family 4: Other Alternatives (I)

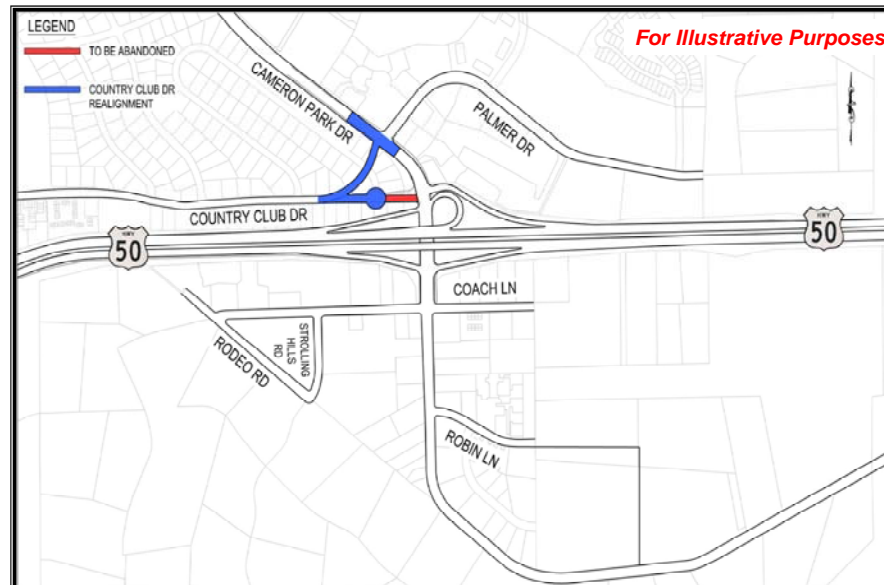
Alt 10. \$??M: Widen Cameron Park Dr to 7 lanes



Alt 11. \$??M: Expand ramps; move retaining walls back under Hwy 50 to allow free right from EB off-ramp.

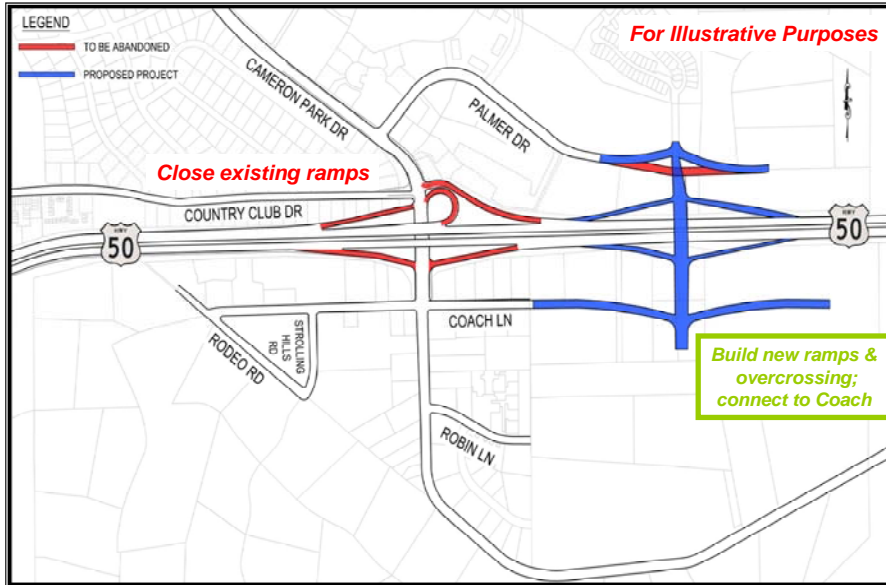


Alt 12. \$??M - Realign Country Club Dr.

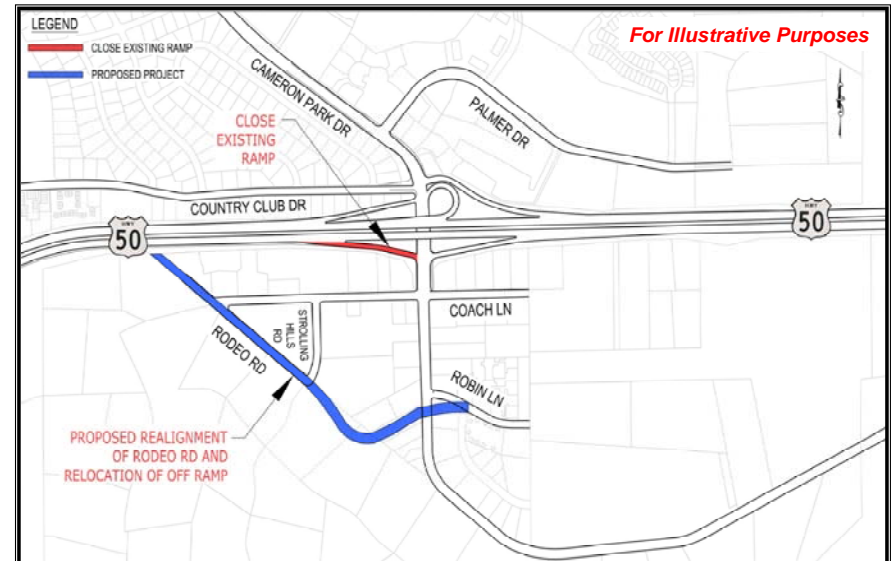


Family 4: Other Alternatives (II)

Alt 13. \$??M: Move the Interchange East

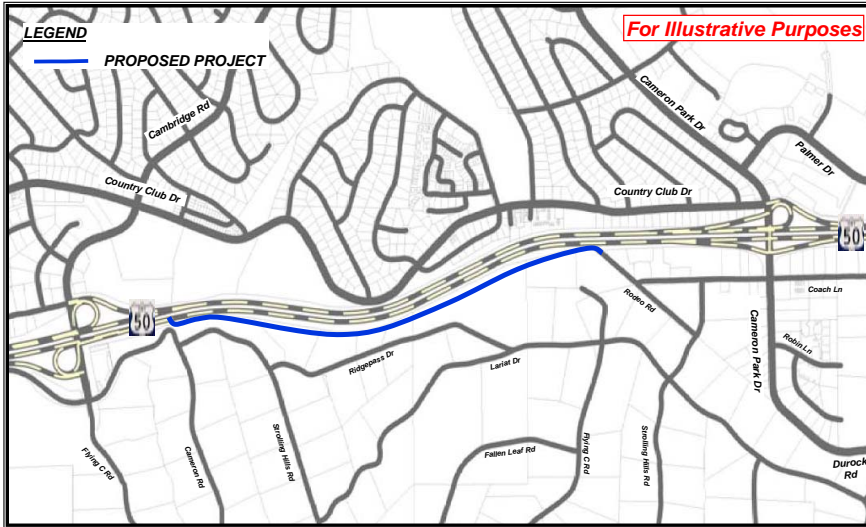


Alt. 14: \$??M: "Hook" eastbound offramp to Coach/Robin:

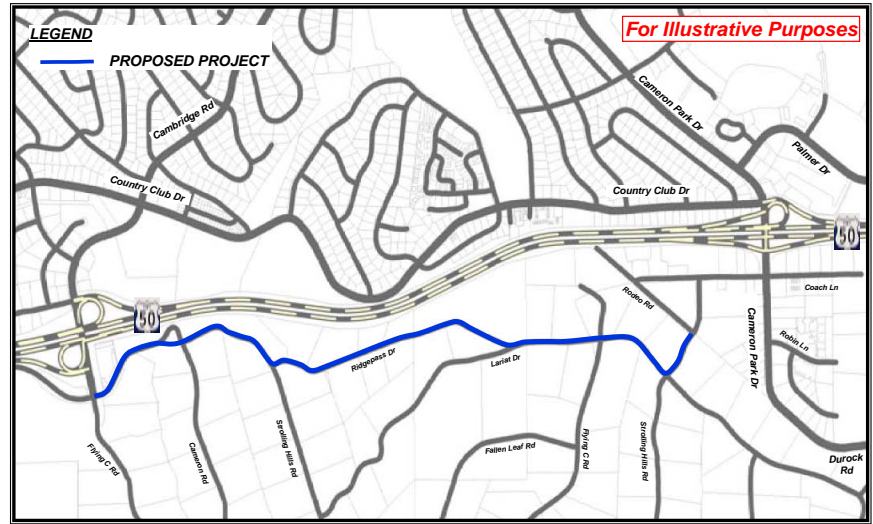


Family 5: Parallel Capacity Alternatives (I)

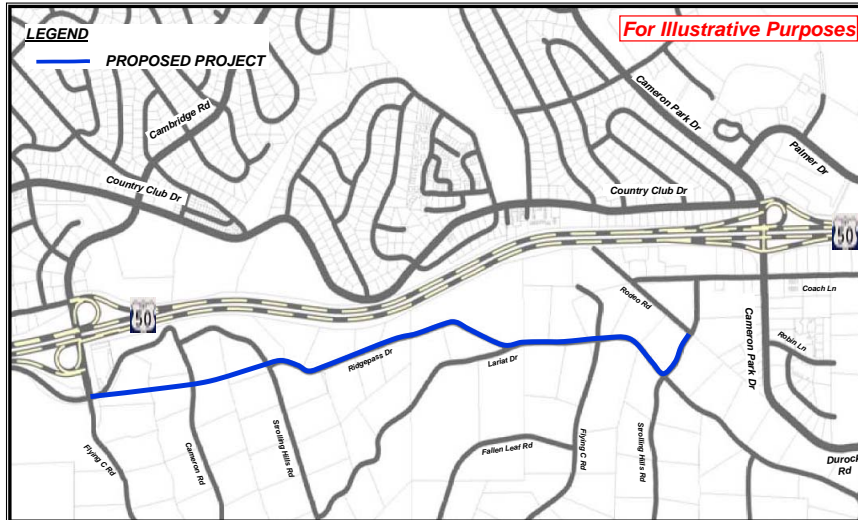
Alt 15. Southerly Parallel Capacity – “New Roadway” Cambridge Rd to Cameron Park Dr (Rodeo Rd or Coach Ln)



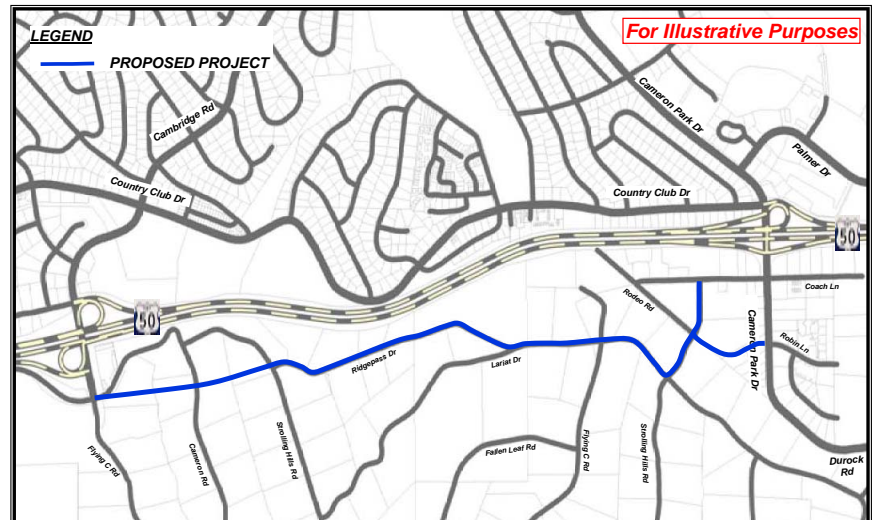
Alt 16. Southerly Parallel Capacity – Cameron Rd / Strolling Hills Rd / Ridgeway Dr



Alt 16a. Southerly Parallel Capacity – New Direct Route Cameron Rd / Strolling Hills Rd / Ridgeway Dr

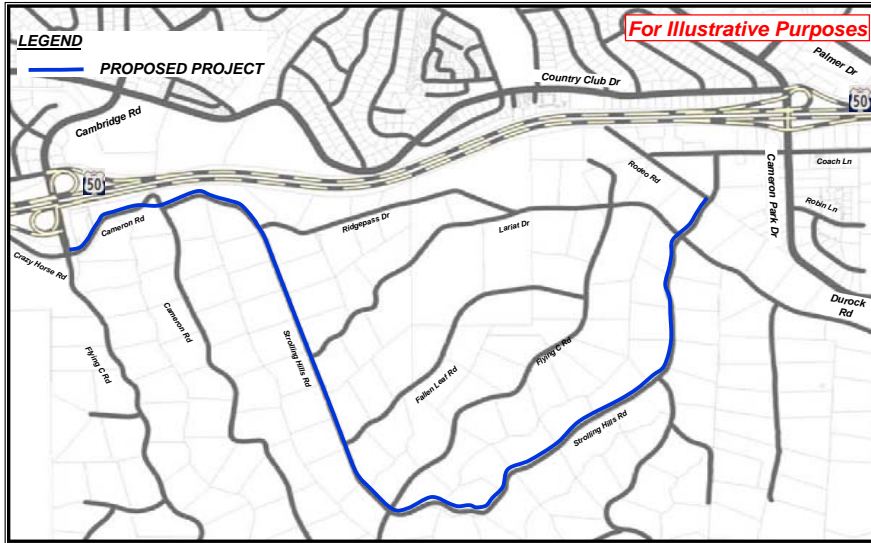


Alt 16b. Southerly Parallel Capacity – New Direct Route Cameron Rd / Strolling Hills Rd / Ridgeway Dr, Coach Ln or Robin Ln Tie in

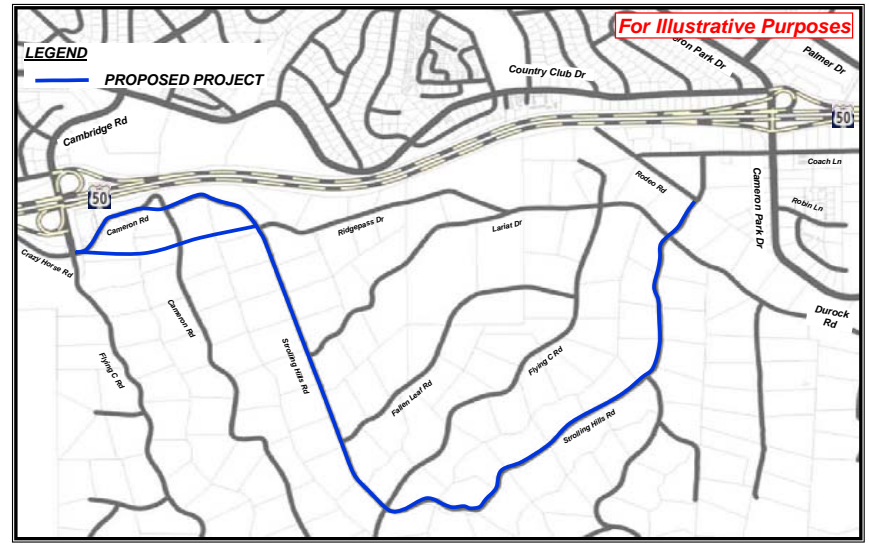


Family 5: Parallel Capacity Alternatives (II)

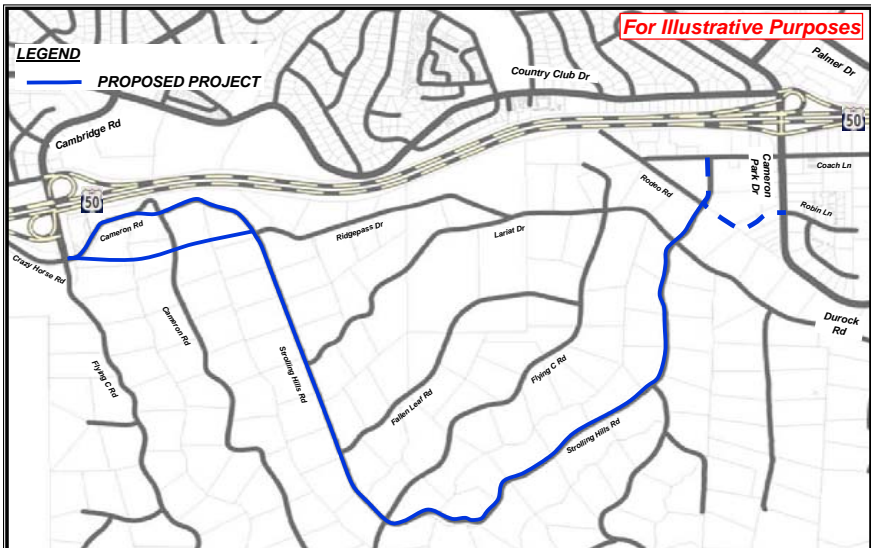
Alt 17. Southerly Parallel Capacity –
Lariat Rd / Fallen Leaf Rd / Flying C Rd



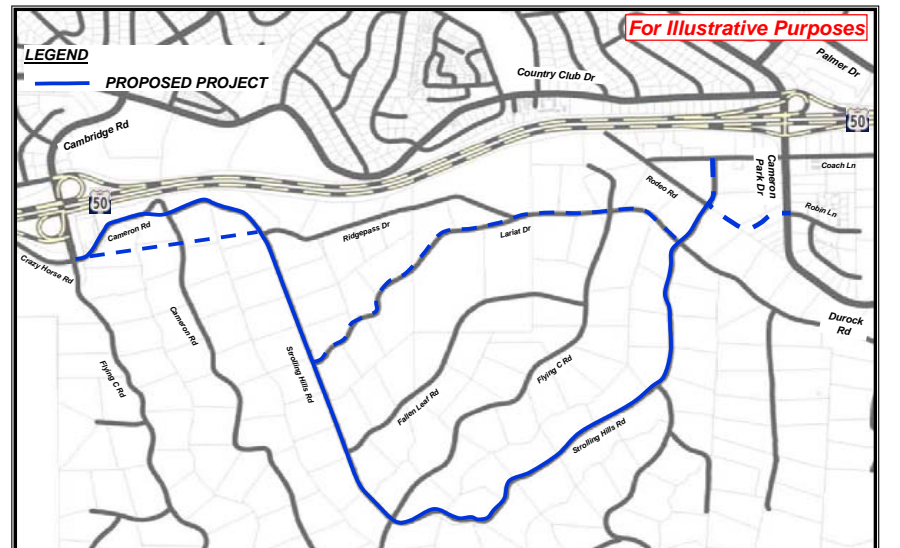
Alt 17a. Southerly Parallel Capacity - New Roadway Direct Route –
Cameron Rd / Strolling Hills Rd



Alt 17b. Southerly Parallel Capacity - New Roadway Direct Route – Cameron Rd /
Strolling Hills Rd – Coach Ln or Robin Ln Tie in



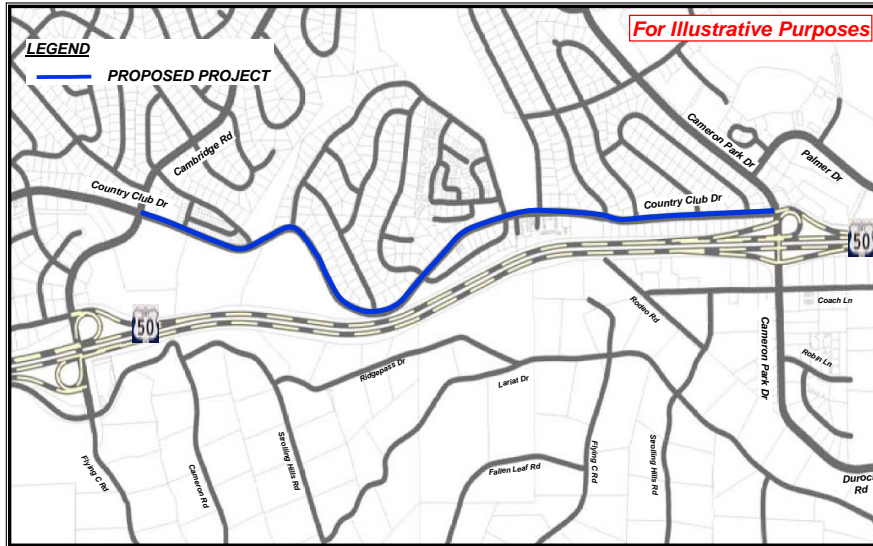
Alt 17c. Southerly Parallel Capacity - New Roadway Direct Route – Cameron Rd /
Strolling Hills Rd – Lariat Dr Option



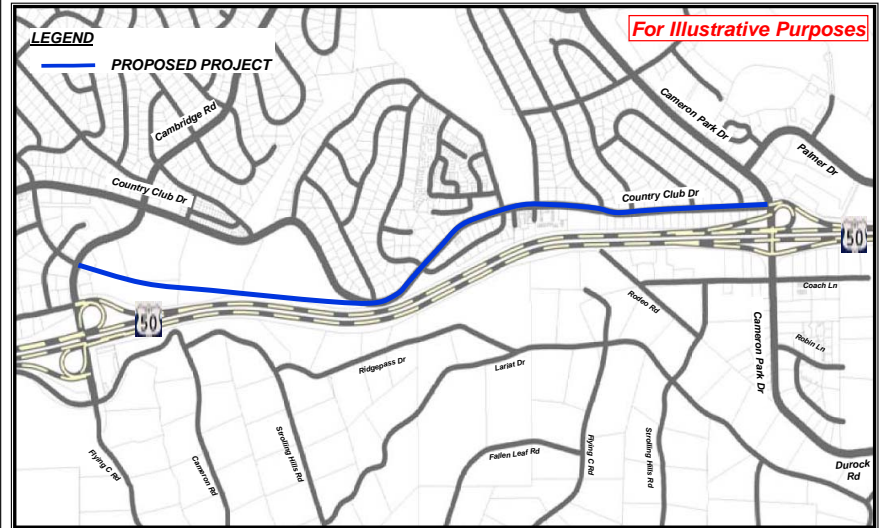
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Family 5: Parallel Capacity Alternatives (III)

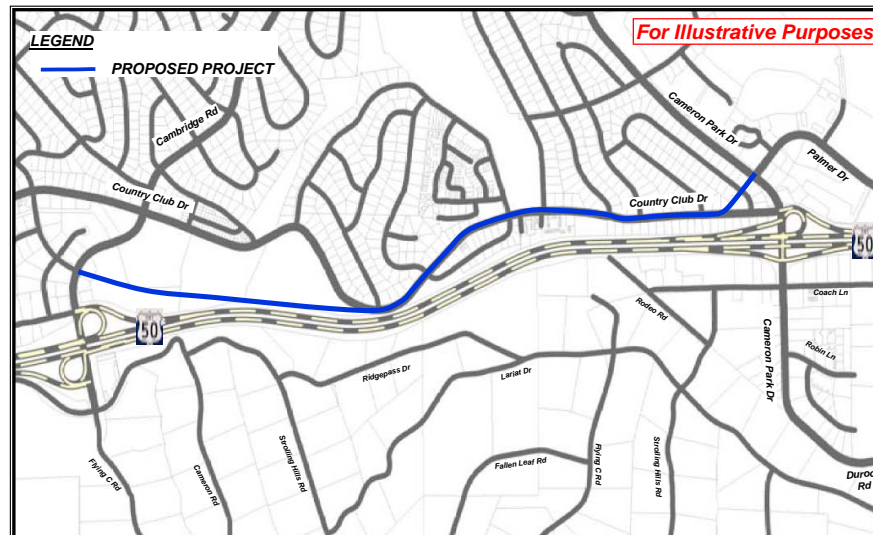
Alt 18. Country Club Dr –
Cameron Park Dr to Cambridge Rd (existing alignment)



Alt 18a. Country Club Dr northerly parallel capacity- “New Roadway”
Direct Route (similar to 12a and 12b)

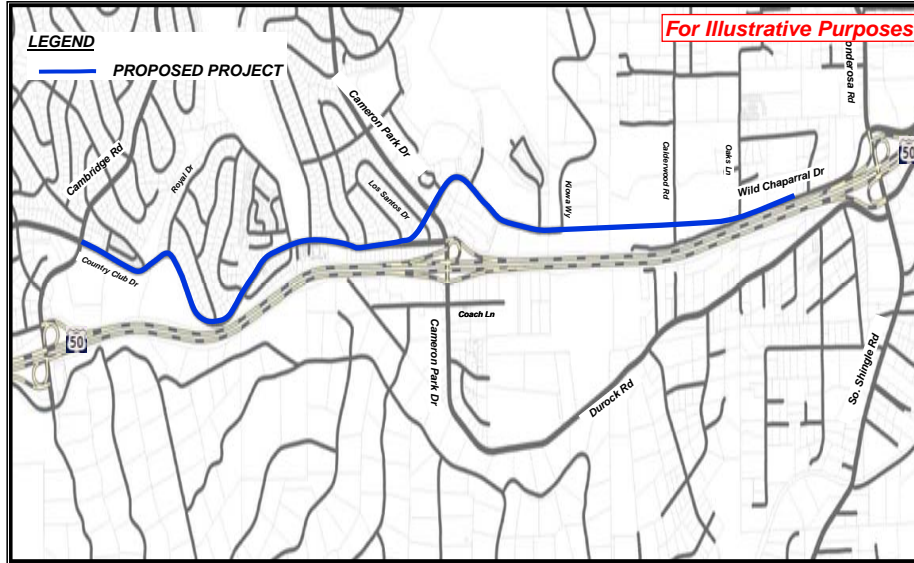


Alt 18b. Country Club Dr northerly parallel capacity- “New Roadway”
Direct Route

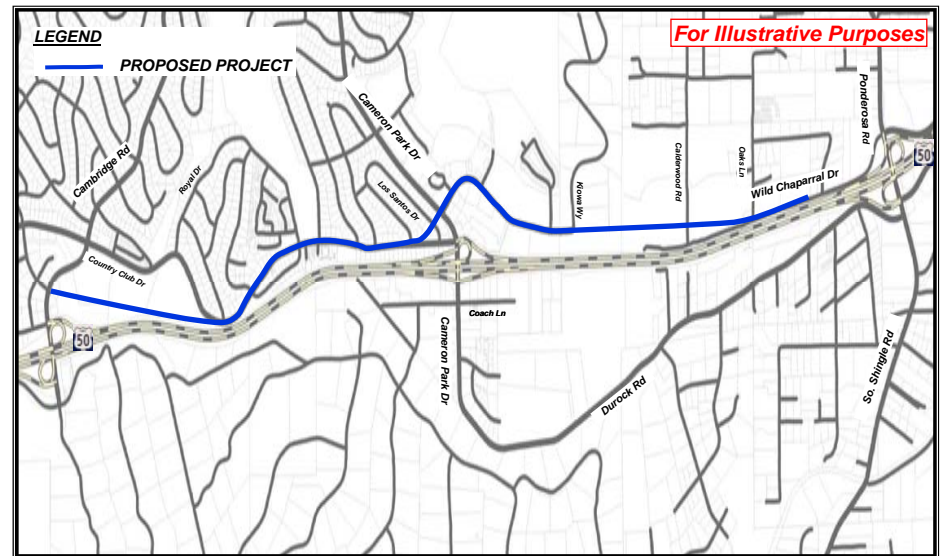


Family 5: Parallel Capacity Alternatives (IV)

Alt 19. Country Club Dr /Wild Chaparral / PalmerDr
w/ or w/o Country Club Dr Tie In to Palmer

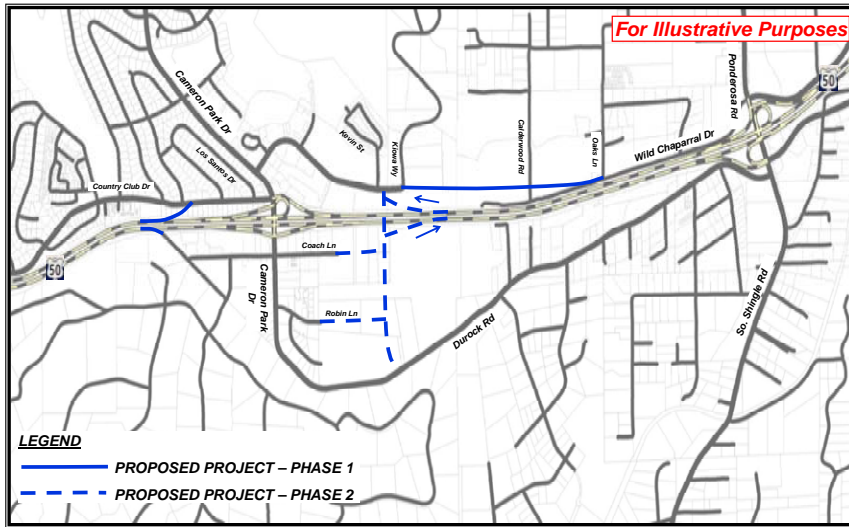


Alt 19a. "new Roadway" Direct Route Option – Country Club Dr /Wild
Chaparral / Palmer Dr w/ or w/o Country Club Dr Tie In to Palmer

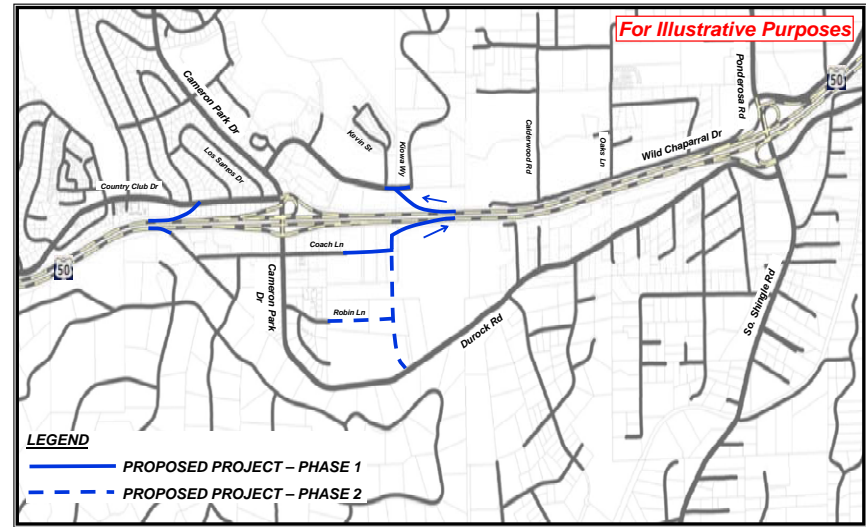


Family 6: Combination Alternatives

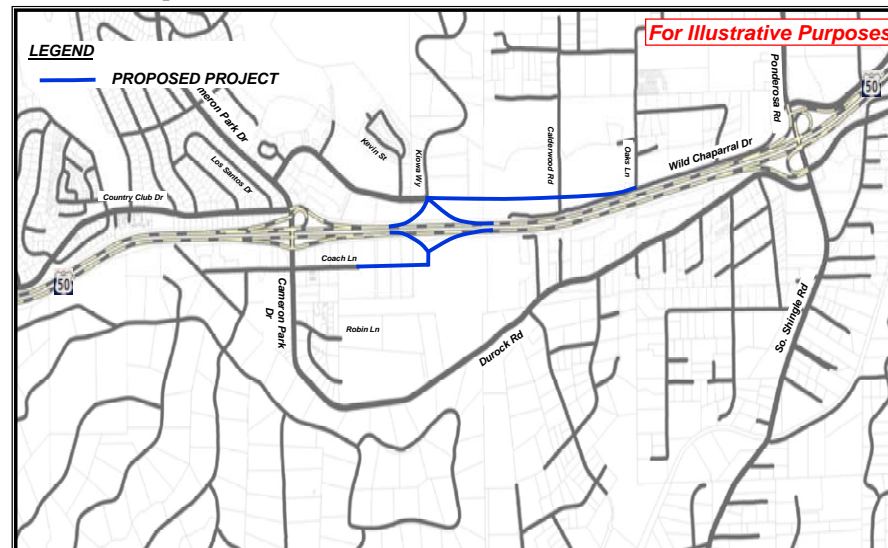
Alt 20. Combinations of ALT 2c,2b,14 with added off and on ramps to alleviate CPDI traffic pressure. Also can be phased to see how it operates.



Alt 21. Pressure off Coach Lane Alternative – Phase 1 and Phase 2

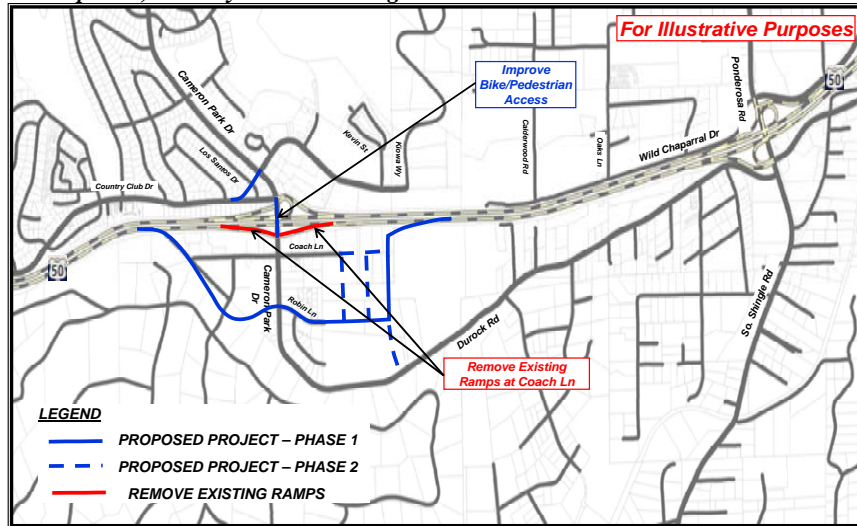


Alt 22. Relocate Ramps Alternative – No Bridge, No Fly-Over (but ramps moved with Wild Chaparral /Palmer Tie-In)

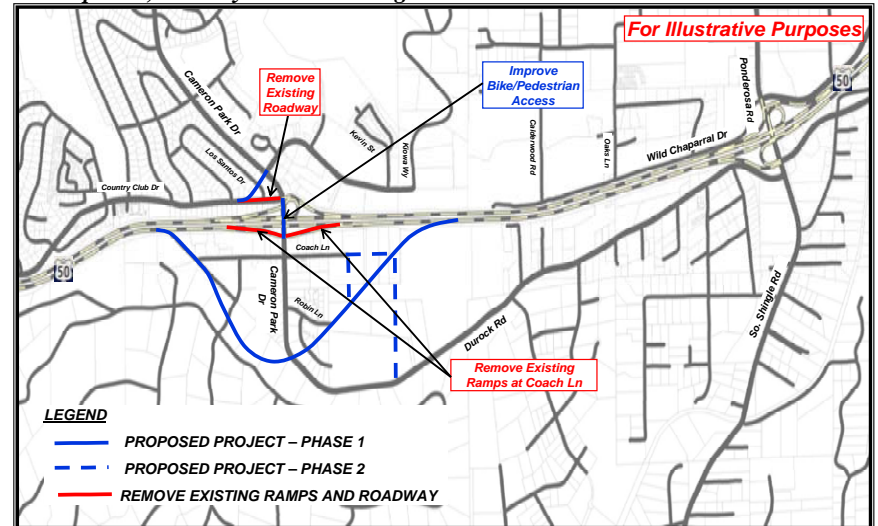


Family 7: Half Loop Roadway Alternatives (I)

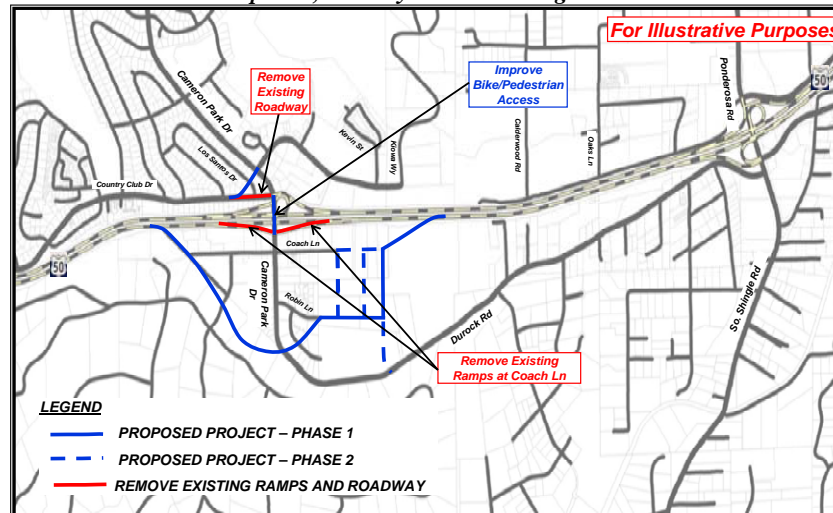
Alt 23. Half Loop Road 1 – Phase 1 Remove Existing Ramps, Improve Bike/Pedestrian Access. Phase 2 Complete Local Road Tie-ins for Future Business Development, Country Club Dr Realignment



Alt 24. Half Loop Road 2 – Phase 1 Remove Existing Ramps, Improve Bike/Pedestrian Access. Phase 2 Complete Local Road Tie-ins for Future Business Development, Country Club Dr Realignment

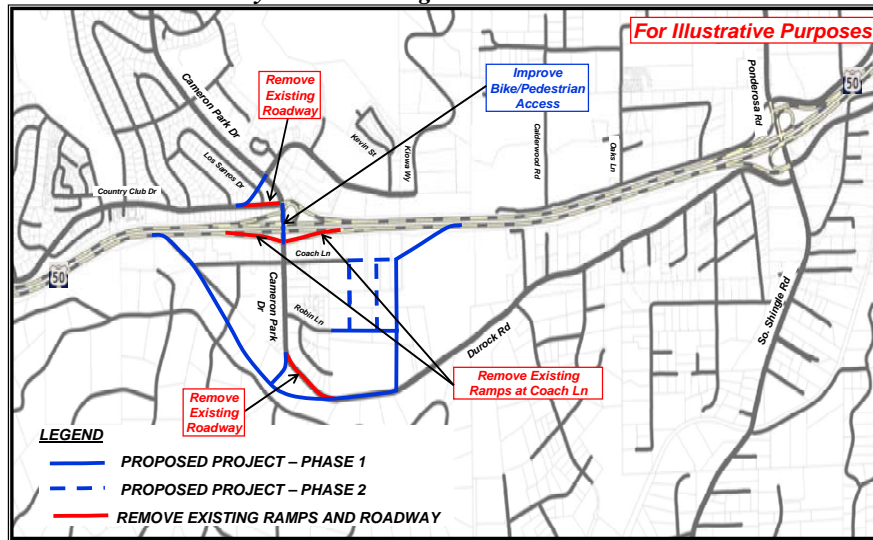


Alt 25. Half Loop Road 3 – Phase 1 Rodeo Rd Wide Swing-Out, Remove Existing Ramps, Improve Bike/Pedestrian Access. Phase 2 Complete Local Road Tie-ins for Future Business Development, Country Club Dr Realignment

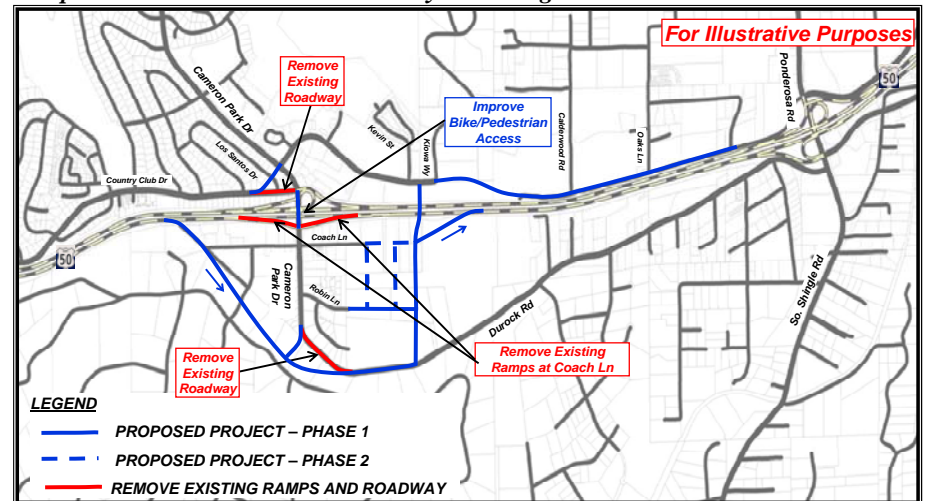


Family 7: Half Loop Roadway Alternatives (II)

Alt 26. Half Loop Road 4 – Phase 1 Rodeo Rd Durock Rd main Road, Cameron Park Dr lane Minor Road, Remove Existing Ramps, Improve Bike/Pedestrian Access. Phase 2 Country Club Dr Realignment and Local Road

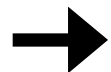


Alt 27. Half Loop Road 5 – Phase 1 Rodeo Rd Durock Rd main Road, Cameron Park Dr lane Minor Road, Remove Existing Ramps, Improve Bike/Pedestrian Access. Phase 2 Country Club Dr Realignment and Local Road buildout, Wild Chaparral/Palmer Connection and Flyover Bridge



Agenda

- Background / History
- Matrix of Alternatives and Evaluation Criteria
- Alternatives



- Next Steps

Schedule (1 of 3):

Completed

May – Aug: Working with stakeholders/experts (e.g., Economic Development Coordinator, Caltrans, etc.) define/refine Evaluation Measures and refine definitions of alternatives; add new alternatives if appropriate

- Review with the Public
- Review with the Board ← ***Where we are Today***

Schedule (2 of 3):

Next Step:

Aug – Oct: Evaluate Alternatives (fill in the Matrix with assistance from experts/stakeholders) and recommend subset for further evaluation (i.e., 10-20)

- Which technical experts and stakeholders to involve?
- DOT recommends a qualitative evaluation
- Review with the Public and Caltrans
- Review with the Board

Schedule (3 of 3):

Future Step:

- Oct – Jan: Do Detailed Evaluation on a viable subset of alternatives (i.e., 3 – 5) and make recommendation
 - Review with the Public and Caltrans
 - Review with the Board

Board Feedback:

1. Comments on Evaluation Criteria?
2. Comments on Alternatives?
(e.g. impacts to rare plants)
3. Comments on Process, Timeline, Next Steps?
4. Other Comments/Direction?