

**NORTH COUNTY CORRIDOR
TRANSPORTATION EXPRESSWAY AUTHORITY
TECHNICAL ADVISORY COMMITTEE**

ITEM: 4a

SUBJECT:

Value Analysis Study

STAFF RECOMMENDATIONS:

Information only

FISCAL IMPACT:

None

DISCUSSION:

Information only

SUMMARY OF VA ALT. DISPOSITIONS

EA 0S800 North County Corridor Project

Stanislaus County

Alt. No.	Description	Potential Savings & Performance	Your Name	Disposition*			Comments
				A	CA	R	
ROADWAY ITEMS							
1.0	Semi-depress local roads grade separation Interchanges	\$21,252,000 +16%			X		<ul style="list-style-type: none"> This item is conditionally accepted to be studied further during PS&E. Each location to be evaluated separately. Depressing the local roads will depend on existing utilities, local access needs, drainage, constructability, maintenance costs, etc. Constructability and traffic staging will need to be taken into account before implementing this option.
2.0	Use Divergent Diamond Interchange (DDI) in lieu of Single Point Urban Interchange (SPUI)	N/A +15%				X	<ul style="list-style-type: none"> This item is rejected. It is not an approved interchange type by Caltrans. It would not provide consistency along the corridor unless all of the interchanges were DDIs. No potential savings costs identified. It potentially requires additional project footprint and could affect local driveway access.
3.0	Use rock/pipe trench in median and wide ditches.	See items 3.1 and 3.2			X		<ul style="list-style-type: none"> Items 3.1 and 3.2 have been combined into Item 3.0. This item is conditionally accepted to be studied further during PS&E. Various locations to be evaluated based on geotechnical soil recommendations. Maintenance issues to be evaluated for existing systems.
3.1	Use rock trench in lieu of wide ditches and retention basins	\$8,138,000					<ul style="list-style-type: none"> This item has been combined with item 3.2 into a new item 3.0.

*Disposition:
 A = Accept
 R = Reject
 CA = Conditionally Accepted

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		+8%					
3.2	Use rock/pipe trench in median and minimize ditches and retention basins	\$18,213,000 +10%					<ul style="list-style-type: none"> This item has been combined with item 3.1 into a new item 3.0.
4.0	Use back to back MSE walls between Roselle and Claus to minimize footprint and fill; Shift alignment to further south at BNSF crossing to minimize footprint	\$2,030,000 +46%		X			<ul style="list-style-type: none"> This item is accepted. It is to be implemented during the PA/ED or PS&E phase.
5.0	Make median slope to 4:1 in lieu of 10:1	\$2,841,000 +3%			X		<ul style="list-style-type: none"> This item is conditionally accepted to be studied further during PS&E. Requires Caltrans advisory design exception. Additional work required for future widening.
6.0	Use continuous flow intersection design in lieu of triple left turn at Claus and Albers	N/A +14%			X		<ul style="list-style-type: none"> This item is conditionally accepted to be studied further during PS&E. Traffic operations to be evaluated based on future Modesto realignment of Claus Road. Local driveway access will need to be taken into account before implementing.
7.0	Use light weight fill with pre-cast panel or shotcrete in lieu of imported borrow where	N/A +14%				X	<ul style="list-style-type: none"> This item is rejected. It is an option that is available to any project depending on foundation and or other structure specific need.

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				A	CA	R	
	applicable						
8.0	Use rubberized asphalt pavement	\$3,899,000 +10%		X			<ul style="list-style-type: none"> Item 8.2 has become a stand-alone item 8.0. This item is accepted. It is to be implemented during the PA/ED or PS&E phase.
8.1	Use FORTA-FI pavement additive to reduce pavement section	\$15,600,000 +14%					<ul style="list-style-type: none"> This item has become stand-alone Item 12.0
8.2	Use rubberized asphalt pavement	\$3,899,000 +10%					<ul style="list-style-type: none"> This item has become stand-alone Item 8.0.
9.0	Use "bench" to minimize shoulder structural section	\$7,749,000 +8%				X	<ul style="list-style-type: none"> This item is rejected. Requires Caltrans mandatory design exception for use at inside 5' shoulder. Concerned with maintenance issues. Difficult to construct.
10.0	Use Quicklime Plus treated base to reduce structural section	\$8,547,000 +8%				X	<ul style="list-style-type: none"> This item is conditionally accepted to be studied further during PS&E. Each location to be evaluated separately. Lime is to be used depending on geotechnical soil recommendations. Not to be implemented on local roads due to difficulty in accessing underground facilities.

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11.0	Minimize ROW to accommodate 4-lane only, from Oakdale Claus to SR-120 (Median reduction to 46')	\$2~10 million +24%			X		<ul style="list-style-type: none"> • This item is conditionally accepted to be studied further during PS&E. • Requires Caltrans advisory design exception in rural area. • Consider safety based on traffic volumes.
12.0	Use FORTA-FI pavement additive to reduce pavement section	\$15,600,000 +14%			X		<ul style="list-style-type: none"> • Item 8.1 has become a stand-alone item 12.0. • This item is conditionally accepted to be studied further during PS&E. • It may be implemented on local roads. • Currently not an approved material by Caltrans. It would need to be tested and approved by Caltrans prior to use on NCC mainline.

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