



Final Report

Assessment Area #3: Funding Concepts

Prepared for:
Yolo Rail Realignment Partnership

Prepared by:
Nossaman, LLP, and Economic & Planning Systems, Inc. (EPS)

March 1, 2016

EPS #142135

Table of Contents

<i>Abstract</i>	1
1. INTRODUCTION.....	2
2. YOLO RAIL REALIGNMENT CONCEPT	4
Rail Removal and Redevelopment Opportunities	7
Rail Relocation.....	7
Rail Support	8
Flood Control Connection	8
Yolo Rail Realignment Conceptual Cost Estimates.....	9
3. PROJECT PHASING APPROACH.....	11
Distribution of Economic Benefits of the Yolo Rail Realignment Project.....	11
Proposed Project Phasing	13
4. PHASE 1 DETAIL AND FUNDING CONCEPT	19
Phase 1 Funding Concept.....	21
Other Phase 1 Funding Sources	23
5. PHASE 2 DETAIL AND FUNDING CONCEPT	27
Funding Concept.....	28
Other Funding Sources	30
Other Phase 2 Considerations.....	30
6. IMPLEMENTATION MEASURES AND NEXT STEPS	31

Appendices:

Appendix A: Other Financing Mechanisms and Grant Funding Opportunities

List of Maps

Map 1	Yolo County Rail Relocation Base Conditions.....	5
Map 2	Conceptual Overview—All Phases.....	6
Map 3	Conceptual Overview—Phase 1	14
Map 4	Conceptual Overview—Phase 2A	15
Map 5	Conceptual Overview—Phase 2B/C.....	17
Map 6	Conceptual Overview—All Phases.....	18

List of Tables

Table 1	Estimated Rail Realignment Costs	10
Table 2	Summary of Estimated Redevelopment Benefits	12
Table 3	Phase 1 Conceptual Project Costs	20
Table 4	Summary of Phase 1 Funding Opportunity—Conceptual Estimates	26
Table 5	Summary of Phasing and Funding Concept.....	32

Abstract

Plans to realign and relocate three key railways in Yolo County will require a multiphased strategy to align related flood control projects, redevelopment opportunities, and available funding sources. Initial efforts are focused on securing funding for the first phase of rail realignment to facilitate funding sources for initial and subsequent phases. For the first phase, the Yolo Rail Relocation Partnership proposes to partner with state and federal government entities to accomplish rail realignment in concert with federal and state flood control objectives. Phase 1 therefore relies on identifying planned flood protection projects for which a rail relocation-compatible alternative can be identified and securing federal and state funding participation for those elements. This approach has the additional advantage of bringing federal authority related to freight rail operations to bear in support of rail realignment objectives.

Accomplishing initial phases will further redevelopment of key opportunity areas, namely in the City of West Sacramento. Public revenues associated with new development activity (e.g., sales and property tax revenues) then may be leveraged to fund future phases and elements of rail realignment in concert with other sources of funds discussed in this report.

This report is the third part of three areas of analysis supported by a Yolo Rail Realignment Economic Development Assistance Grant, including assessment of redevelopment opportunities, economic impacts, and funding strategies. This report outlines a preliminary Yolo Rail Realignment phasing and funding concept based on the above-described elements. This document sets the context for a financing strategy and engineering analysis, integrated with more detailed planning efforts, to be conducted in concert with establishing various interagency and public/private partnerships needed to further rail realignment objectives in Yolo County.

1. INTRODUCTION

The Yolo Rail Realignment project is an ambitious concept to remove most of the existing short-line rail infrastructure in Yolo County and relocate it along new alignments. The concept has long been a topic of discussion in Yolo County, as it has the potential to create several benefits, but has garnered renewed attention in recent years because of its connection to flood control improvements and economic development objectives. Several of the public agencies in Yolo County formed an informal partnership to pursue collective action and begin a process of studying the various aspects of the Yolo Rail Realignment project.

Partnership Representatives:

- City of Davis
- City of West Sacramento
- City of Woodland
- Sacramento Area Flood Control Agency
- Yolo County
- Yolo County Transportation District
- Sacramento-Yolo Port District

As a first step in advancing the concept, the partnership group obtained grant funding from the Economic Development Administration to study the potential economic benefits of the project and identify possible funding sources for future planning and development activities. The partnership engaged a multidisciplinary consultant team, consisting of Economic & Planning Systems, Inc. (EPS); Nossaman, LLP (Nossaman); CH2M HILL; and The Tioga Group, Inc., to complete assessments in three main areas:

1. Redevelopment Opportunities (led by EPS)
2. Economic Benefit (led by EPS)
3. Funding Sources (led by Nossaman)

For this Assessment Area #3, Nossaman and EPS worked with the Yolo Rail Realignment Partnership (Partnership), composed of Yolo County; the Cities of Davis, West Sacramento, and Woodland; the Sacramento Area Flood Control Agency (SAFCA); the Yolo County Transportation District; and the Sacramento-Yolo Port District, to develop an initial phasing concept for the Rail Realignment project, identify potential funding opportunities, and outline concepts for accessing funding to accomplish the project. Supplemental planning, engineering, environmental, and financial analysis will be needed to further specify the feasibility of the project and to determine more specific new rail alignments, phasing concepts, associated project costs, and funding sources.

Analysis in this report relies in large part on the outcomes of Assessment Area #1, which estimated the possible range of net new commercial and residential development in the conceptual track removal areas, and Assessment Area #2, which included a quantitative economic impact analysis and a qualitative discussion of other potential economic benefits of the conceptual project. Assessment Area #1 and Assessment Area #2 were produced by EPS under separate cover.

This report describes a conceptual phasing and funding strategy for the Rail Realignment project, offering an initial funding concept that may be used by the Partnership to further rail realignment objectives and to secure the necessary interagency partnerships to continue these efforts.

In addition to this **Chapter 1:** Introduction, this report includes the following chapters:

- **Chapter 2:** Yolo Rail Realignment Concept
- **Chapter 3:** Project Phasing Approach
- **Chapter 4:** Phase 1 Detail and Funding Concept
- **Chapter 5:** Phase 2 Detail and Funding Concept
- **Chapter 6:** Implementation Measures and Next Steps

It is important to note that all information presented in this study is conceptual and is meant for general discussion, project planning, and coordination purposes only. More detailed and comprehensive financing strategies should be developed as the Rail Realignment project concept is further defined; participation from key stakeholders is secured; and additional engineering, environmental, design, cost, and feasibility studies are conducted.

Successful implementation of the project will depend on a series of interrelated events and contingencies and the number of hurdles the Partnership will need to overcome. The funding concept is founded on the notion that the Partnership can secure sufficient state and federal flood control funds (likely a long and difficult process), that buy-in and cooperation from key stakeholders (i.e., rail operators and property owners) can be secured, and the Partnership can execute a multijurisdictional funding strategy that provides priority funding to each phase of the Rail Realignment project. These essential elements must be in place to successfully execute the phased implementation strategy contemplated herein.

2. YOLO RAIL REALIGNMENT CONCEPT

The Yolo Rail Realignment concept contemplates the removal and relocation of three separate and distinct rail lines located in the Cities of Davis, West Sacramento, and Woodland. The current configuration and operation of each line is summarized below and shown in **Map 1**, with the relocation concept documented in further detail in the sections to follow:

1. Union Pacific Railroad (UPRR) leases the rail line running between Woodland and Davis to California Northern Railroad—Genesee & Wyoming (CNFR). Railcars connect to the UPRR mainline at an interchange yard in Davis and run north through Woodland and beyond into the Sacramento Valley.
2. Sierra Northern Railway (SERA) operates a freight rail operation, as well as recreational rail excursions, originating in Woodland and West Sacramento. The SERA line runs eastward from Woodland across the Yolo Bypass and through the Elkhorn Basin into the City of West Sacramento. Under a joint-use agreement with UPRR, SERA's freight traffic originating in Woodland crosses UPRR tracks south of the Sacramento Weir to reach UPRR's transfer station (Westgate Yard) in West Sacramento. SERA's freight cars then are transferred onto UPRR's main line for shipment to destinations east and west of Westgate Yard. Sacramento River Train rail excursions run along the same approximately 16-mile line between West Sacramento and Woodland.
3. The third line, owned by the Port of West Sacramento and UPRR, connects the Westgate Yard to the Port of West Sacramento and the surrounding industrial districts. Both UPRR and SERA operate on this line, running daily trains to various rail shippers.

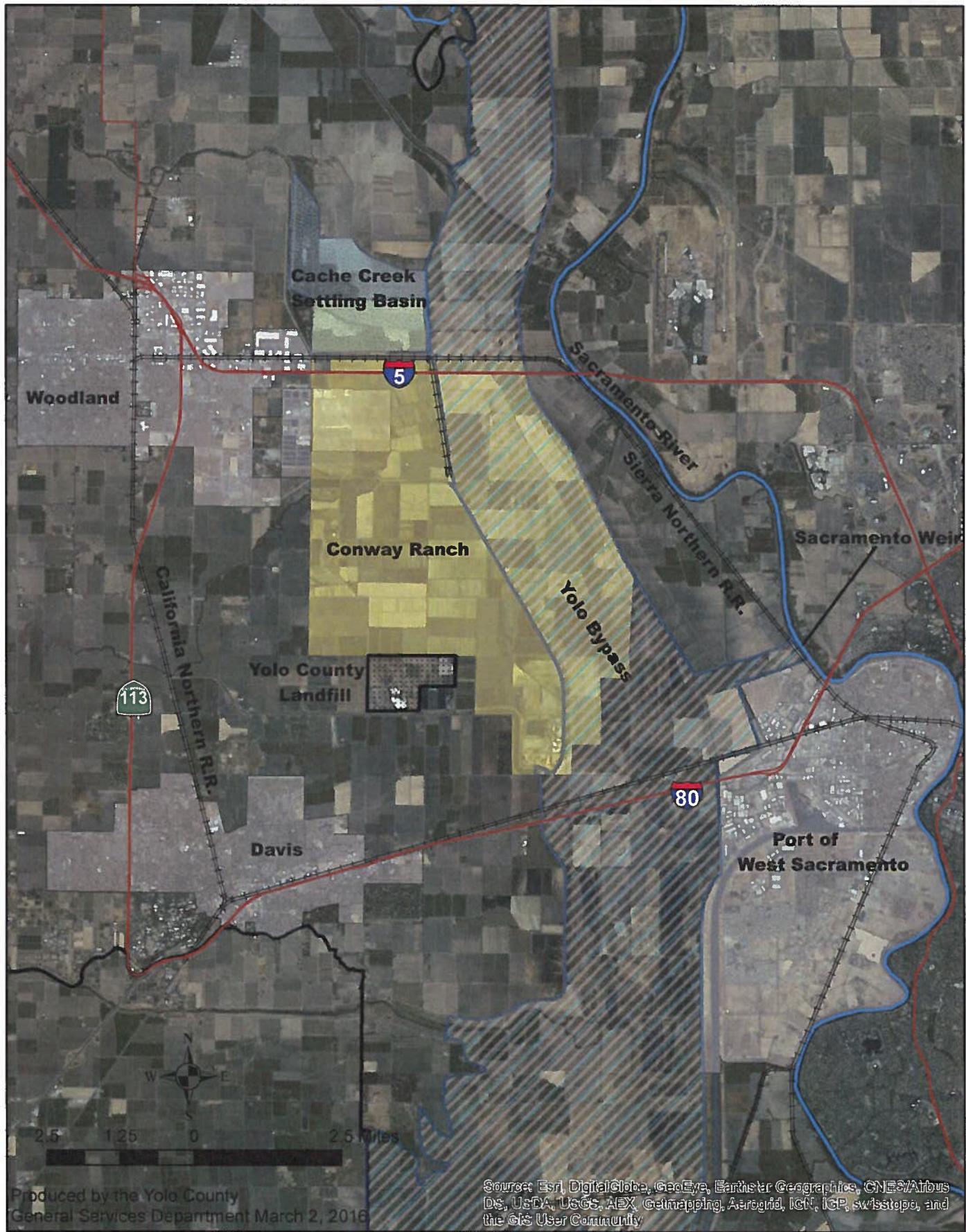
The Partnership is evaluating the feasibility of replacing these three alignments with two new alignments. One new line would extend along the northern perimeter of Woodland around the southwesterly edge of the Cache Creek Settling Basin (CCSB), through Conaway Ranch and the area west of the Yolo Bypass, and connect to the UPRR main line at Swingle, east of Davis. This line would be available for joint use by UPRR and SERA and would allow abandonment of the UPRR/CNFR line through Woodland and Davis and the SERA line through the Elkhorn Basin and West Sacramento.

The second new line would extend from the westerly edge of the City of West Sacramento northward under Interstate 80 to connect with the UPRR main line at a new interchange yard. This line would allow abandonment of the Westgate Yard and the line connecting the yard to the city's industrial districts and the Port of West Sacramento from the east.

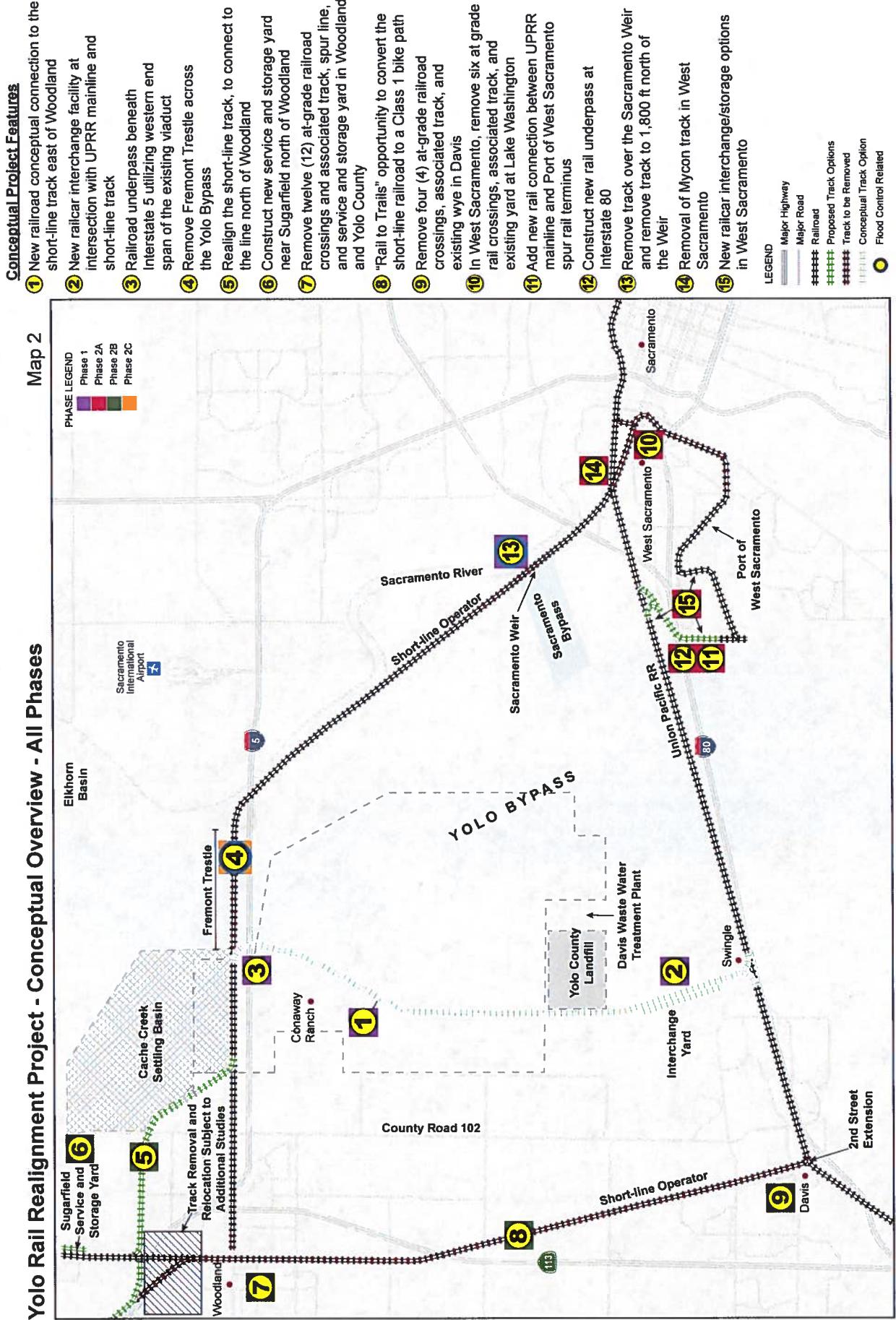
Map 1 offers an illustration of existing conditions, identifying the current rail alignment relative to key flood control features and transportation infrastructure. **Map 2** depicts the full spectrum of the Yolo Rail Realignment project concept as defined by the consultant team in collaboration with the Partnership. A detailed discussion of the concept, broken into its constituent elements—rail removal and associated redevelopment opportunities, rail relocation, rail support, and flood control—follows.

Yolo County Rail Relocation Base Conditions

Map 1



Yolo Rail Realignment Project - Conceptual Overview - All Phases



All Features Conceptual and Subject to Change

Rail Removal and Redevelopment Opportunities

The project concept calls for removal of rail infrastructure, including track, equipment, at-grade crossings, and service and storage yards along the rail alignment in the Cities of Davis, West Sacramento, and Woodland, as well as the segment that runs between Davis and Woodland in unincorporated Yolo County. Removal of the rail infrastructure will create opportunities for redevelopment in key locations in the three cities. As specified in the Assessment Area #1 analysis, planning staff in the three cities project the following redevelopment opportunities could result from the proposed removal and relocation of the three rail lines identified above:

- Davis estimates net new development could total up to 2,230 residential units and 2.43 million square feet of commercial space in four subareas affected by rail removal: the Downtown Core, Downtown North, Central Davis, and North Davis.
- West Sacramento anticipates net new development will include up to 7,250 residential units and 10.09 million square feet of commercial space in the Washington District, Bridge District, Pioneer Bluff, and Snow Cone subareas.
- Woodland estimates net new development will comprise up to 2,390 residential units and 1.15 million square feet of nonresidential space in the Central Business District, East Street District, North East Street District, and a proposed annexation area adjacent to Woodland's southern boundary.

Realization of the projected level of redevelopment in the three affected cities is anticipated to take many years. Additional market analysis would be necessary to better define the projected development timeline, but full buildout is not expected for 20 to 40 years after rail removal.

The concept accounts for removal of rail track infrastructure on the Sacramento Weir, which would allow for weir and bypass improvements that also would benefit flood control efforts in the area.¹ In addition, the concept includes removal of the Fremont Trestle and associated track across the Yolo Bypass, which would reduce the water surface level at flood stage by increasing flow capacity of the bypass. This element is not necessary to achieve the primary redevelopment objectives associated with rail realignment, but rail relocation may present an opportunity to achieve the ancillary flood benefits associated with removal of the Fremont Trestle.

Rail Relocation

A new north-south rail line traversing Conaway Ranch and the area south of Conaway Ranch west of the Yolo Bypass would be constructed to replace the infrastructure removed between Davis and Woodland and between Woodland and West Sacramento. While engineering and

¹ If the rail infrastructure associated with the Fremont Trestle and Sacramento Weir is removed, then the segment of track that runs between West Sacramento and Interstate 5 to the north essentially would be inoperative. Although it has not been identified as a primary feature in the rail realignment concept, this track segment could present an opportunity for rail-to-trail conversion similar to the track between Davis and Woodland, if desired by the local community and decision makers.

design studies are necessary to define feasible alignment options, a conceptual option is illustrated in **Map 2**, with one end point near the Swingle area east of Davis, connecting to the other end point near Interstate 5, west of the Fremont Trestle. This line then would connect to a reconfigured track that would run along the outskirts of Woodland's industrial zone to the north near the CCSB. The conceptual north-south alignment would use the western-end span of the existing viaduct under Interstate 5 and incorporate a new 2,000-foot grade-separated crossing at County Road 32A. At-grade crossings also would be necessary at other road intersection points.

In West Sacramento, the conceptual track realignment would add a new segment to the west in the existing industrial area along the Yolo Bypass east levee and connecting to existing track running to the Port of West Sacramento spur rail terminus. This conceptual alignment includes a new underpass at Interstate 80, which would be accomplished through use of a tunnel.²

Rail Support

Three new rail support facilities would be necessary to restore effective functionality to the realigned rail system. First, a new interchange, sorting, storage, and transload facility would be incorporated along the new north-south line, conceptually placed just south of the Yolo County Central Landfill. Second, the short-line storage and service yard removed from Woodland would be relocated north of Woodland near the Sugarfield area. Finally, a new interchange, sorting, and storage area would be included along the new track in West Sacramento. These new facilities would replace the function of the removed yards in West Sacramento, Davis, and Woodland. Optimal designs and locations for these new service yards will require further analysis as part of future project phases.

Flood Control Connection

The project concept also includes two features that involve the removal of rail infrastructure but are specifically oriented toward flood control improvements: the Fremont Trestle and a portion of the rail embankment directly north of the Sacramento Weir. Removing these features would facilitate improvements in the flow of floodwater in the Yolo Bypass and, in the case of the Sacramento Weir, would present an alternative to plans for a new Sacramento Trestle to support a planned weir extension accompanying a widened bypass. Alternative flood control solutions consistent with the proposed rail realignment could be more cost effective and simple than currently contemplated.

A large system of flood control improvements will still be necessary to allow for relocation of the north-south line. The conceptual alignment runs through floodplain areas in and around the City of Woodland that are protected by levee systems along lower Cache Creek and the west side of the Yolo Bypass that do not meet applicable federal and state engineering standards. The most recent locally preferred plan for flood protection along lower Cache Creek includes construction of a new levee along the northern edge of the developed portion of the city that could be configured

² The rail realignment concept in West Sacramento focuses on a tunnel option for the Interstate 80 underpass. This also could be accomplished through a cut-and-cover option; the cost differentials are outlined in **Exhibit 2**.

to form a bypass channel commencing at the southwestern corner of the CCSB and extending east for about 4 miles to the Yolo Bypass. This new levee and bypass channel could protect the relocated rail line from uncontrolled flooding along Cache Creek. Additional improvements would be needed to protect the line from a failure of the Yolo Bypass west levee south of the CCSB. These improvements would consist of strengthening the Yolo Bypass west levee between the CCSB and Interstate 5 and constructing a new levee as part of the Rail Realignment project, extending from the Yolo Bypass west levee at Interstate 5 to high ground near the Yolo County Central Landfill. These flood control improvements would protect the relocated rail infrastructure and allow for at-grade lines along the landside toe of the new levee in a dedicated right-of-way area. Planning and engineering efficiencies could be realized by incorporating the necessary right-of-way for the rail realignment alongside the levee in the design processes associated with the flood control improvements.

Yolo Rail Realignment Conceptual Cost Estimates

Based on the above-described project concept, CH2M HILL produced a conceptual cost estimate documenting the estimated costs of the Yolo Rail Realignment project by component. Distributed into these component pieces, the total estimated costs of the Yolo Rail Realignment project is anticipated to range from \$156.0 million to \$335.0 million (see **Table 1**). It is important to note that these costs estimates are preliminary and conceptual only, designed to provide an order-of-magnitude estimate of the costs of the Yolo Rail Realignment project for future project planning purposes.

Given the cost burden associated with the entire project, the Partnership proposes a phased implementation of the project, designed to achieve relocation of short-line rail alignments in Davis, West Sacramento, and Woodland in stages. Early stages are focused on leveraging state and federal funds and achieving substantial benefits in terms of redevelopment opportunities that will facilitate later stages of the realignment project. The next chapter describes the phasing strategy in further detail, with a description of the preliminary funding concept for each phase in the sections to follow.

Table 1
Yolo Rail Realignment
Assessment Area #3: Funding Concepts
Estimated Rail Realignment Costs (2015\$)

Item	Map 1 Items	Construction	Mobilization & Contingency		Total	Estimated Costs	
			[1]	-30%		Low	High
Percentage							50%
Rail Removal							
Davis to Woodland Removal [2]	7 and 9	\$2,247,850	\$966,576	\$3,214,426	\$2,250,098	\$4,821,638	
Woodland Storage Yard Removal	7	\$157,028	\$67,522	\$224,550	\$157,185	\$336,825	
Davis to Woodland Rails to Trail Project [3]	8	\$18,956,576	\$8,151,328	\$27,107,904	\$18,975,533	\$40,661,856	
West Sacramento Removal [4]	10 and 14	\$1,344,535	\$578,150	\$1,922,685	\$1,345,880	\$2,884,028	
Subtotal Rail Removal Costs		\$22,705,989	\$9,763,575	\$32,469,564	\$22,728,695	\$48,704,346	
Rail Relocation							
New Yolo County N-S Line (Swingle to Conaway) [5]	1 and 3	\$50,858,984	\$21,869,363	\$72,728,347	\$50,909,843	\$109,092,521	
Bridge Over Rail at County Road 32A in Davis	1	\$18,000,000	\$7,740,000	\$25,740,000	\$18,018,000	\$38,610,000	
Woodland Relocation (Conaway to End of Project) [6]	5	\$14,112,608	\$6,068,421	\$20,181,029	\$14,126,721	\$30,271,544	
West Sacramento I-80 Tunnel (Includes Flood Protection)	12	\$33,589,556	\$14,443,509	\$48,033,065	\$33,623,146	\$72,049,598	
West Sacramento Relocated Tracks	11	\$5,953,150	\$2,559,855	\$8,513,005	\$5,959,103	\$12,769,507	
Removal of Rail Wye and 2nd Street Connection in Davis	9	\$329,200	\$141,556	\$470,756	\$329,529	\$706,134	
Subtotal Rail Relocation Costs		\$122,843,498	\$32,822,704	\$175,666,202	\$122,966,341	\$263,499,303	
Rail Support							
Rail Interchange/Sorting, Transload East of Davis	2	\$4,425,000	\$1,902,750	\$6,327,750	\$4,429,425	\$9,491,625	
Rail Interchange/Sorting, Storage, Transload at West Sacramento	15	\$1,770,000	\$761,100	\$2,531,100	\$1,771,770	\$3,796,650	
Rail Interchange/Sorting, Transload at Sugarfield	6	\$885,000	\$380,550	\$1,265,550	\$885,885	\$1,898,325	
Subtotal Rail Support Costs		\$7,080,000	\$3,044,400	\$10,124,400	\$7,087,080	\$15,186,600	
Flood Improvements							
Fremont Trestle Removal	4	\$3,442,400	\$1,480,232	\$4,922,632	\$3,445,842	\$7,383,948	
Sacramento Weir Embankment/Track Removal	13	\$76,000	\$32,680	\$108,680	\$76,076	\$163,020	
Subtotal Flood Improvements		\$3,518,400	\$1,512,912	\$5,031,312	\$3,521,918	\$7,546,968	
Grand Total		\$156,147,887	\$67,143,591	\$223,291,478	\$156,304,035	\$334,937,218	

realign_costs

Source: CH2M HILL; EPS.

[1] Includes 10% mobilization and 30% contingency factors. See Exhibit 2.

[2] Includes removal of all track and equipment, 16 at-grade crossings, Woodland east spur track, and existing Davis wye.

[3] Assumes conversion to Class 1 bike path from Davis to Woodland.

[4] Includes removal of 4 miles of track and equipment, 2 yards, and 6 at-grade crossings.

[5] Levee construction costs for the new north-south alignment are included, as the realignment is contingent upon flood protection.

[6] Levee construction costs adjusted to exclude costs to protect SERA realignment in Woodland, as a flood control solution north of Woodland is needed absent rail relocation.

3. PROJECT PHASING APPROACH

The relocations of the north-south rail line through the Cities of Davis and Woodland and the rail realignment affecting portions of West Sacramento have the potential to create several benefits that generate economic value, including flood control, goods movement, public safety, recreation, property reuse, and economic development. Considering the cost burden associated with the project, and based on initial reviews of available funding sources, it is evident that a phased approach to project implementation, coordinated with flood control improvements, substantially will improve the likelihood of successful project implementation.

Working with the Partnership, Nossaman and EPS established a phasing strategy that focuses initial efforts on those rail relocation elements that will generate the greatest economic value in terms of unlocking redevelopment opportunities. In addition, this phasing strategy considers those project elements that could be partially funded by state and federal agencies as part of larger regional flood control projects, providing an early-stage infusion of capital to initiate the Yolo Rail Realignment project. Initial phases of the project will complement redevelopment activities, potentially catalyzing additional growth and redevelopment that will generate public revenues that could be used for future stages of rail relocation.

Distribution of Economic Benefits of the Yolo Rail Realignment Project

The Yolo Rail Realignment project will facilitate redevelopment of currently underutilized real estate in Davis, West Sacramento, and Woodland. The Assessment Area #2 report documented economic benefits occurring in the Yolo County economy as a result of the Yolo Rail Realignment project. New economic and redevelopment activity was measured in terms of the estimated value of new residential and nonresidential development, the aggregate income of new households located in the redeveloped areas, and new jobs generated by new commercial uses in the redeveloped areas.

Shown in **Table 2**, the proposed rail line modification benefits are concentrated in the City of West Sacramento, where rail realignment is expected to facilitate substantial residential and commercial redevelopment, representing at least \$2.4 billion in new assessed value, or roughly 77 percent of the total new value that may be created by the Yolo Rail Realignment project. West Sacramento redevelopment activity also is expected to generate roughly 80 percent of the total commercial employment resulting from the Yolo Rail Realignment project (between 22,000 and 28,000 jobs associated with redevelopment project uses).³

³ Implementation measures providing flood protection for northern Woodland could enable increased industrial development in an existing 873-acre industrial area with commensurate potential economic benefits.

Table 2
Yolo Rail Realignment
Assessment Area #3: Funding Concepts
Summary of Estimated Redevelopment Benefits (2015\$)

Item	Davis		West Sacramento		Woodland [1]		Total	
	Low Density	High Density	Low Density	High Density	Low Density	High Density	Low Density	High Density
Construction Costs (Residential and Nonresidential) Share of Total	\$510,911,480 16%	\$918,873,740 22%	\$2,410,229,641 77%	\$2,954,548,156 69%	\$207,762,938 7%	\$390,318,705 9%	\$3,128,904,059 100%	\$4,263,740,601 100%
Aggregate Household Income Share of Total	\$26,324,507 10%	\$39,356,091 11%	\$197,273,778 78%	\$251,380,823 72%	\$27,820,095 11%	\$56,880,030 16%	\$251,418,380 100%	\$347,616,944 100%
Industry Employment Share of Total	2,558 10%	6,051 16%	22,438 84%	27,826 75%	1,848 7%	3,150 9%	26,844 100%	37,026 100%

Source: EPS.

[11] Flood protection options under study in Woodland combined with rail realignment could result in additional future development and associated economic impacts.

Again, it should be noted that realization of these economic benefits will depend on the pace and timing of redevelopment activities. Full redevelopment of these areas is not anticipated for between 20 and 40 years following rail removal.

Proposed Project Phasing

Given the concentration of economic benefits in West Sacramento, Nossaman and EPS worked with the Partnership to establish a phased implementation strategy that initially focuses on facilitating the redevelopment activities in West Sacramento and leverages the potential to redirect state and federal funds for flood control projects to facilitate rail relocation activities. Later phases then could leverage funding from property tax increment streams or other sources of public monies generated by redevelopment in West Sacramento. The key to a successful phased implementation will be to demonstrate that the rail relocation concept is viable and the joint use of the new alignment by various rail operators is feasible and bears potential benefits for all parties:

- **Phase 1** of the Yolo Rail Realignment project would focus on removing and rerouting SERA traffic from Woodland out of West Sacramento to permit removal of the rail embankment directly north of the Sacramento Weir, facilitating West Sacramento redevelopment. Under the current configuration, SERA traffic travels from Woodland through West Sacramento and transfers to UPRR at the Westgate interchange in West Sacramento. With **Phase 1** improvements, SERA traffic from Woodland instead would use the proposed new alignment through Conaway Ranch and areas south to connect to the UPRR line at the Swingle Crossing, including a new grade-separated crossing at County Road 32A near Davis.

Removing a portion of the rail embankment directly north of the Sacramento Weir will provide the opportunity to redirect state and federal funding for planned flood control projects to accomplish both flood control and rail relocation objectives, providing a critical infusion of capital for the Rail Realignment project. In addition, rerouting SERA through-traffic out of West Sacramento via the new north-south alignment will reduce train activity in that portion of West Sacramento, improving redevelopment prospects for that area and potentially providing a funding base for future rail relocation projects. Specific elements of **Phase 1** are discussed in more detail in the chapter to follow and are identified in **Map 3**.

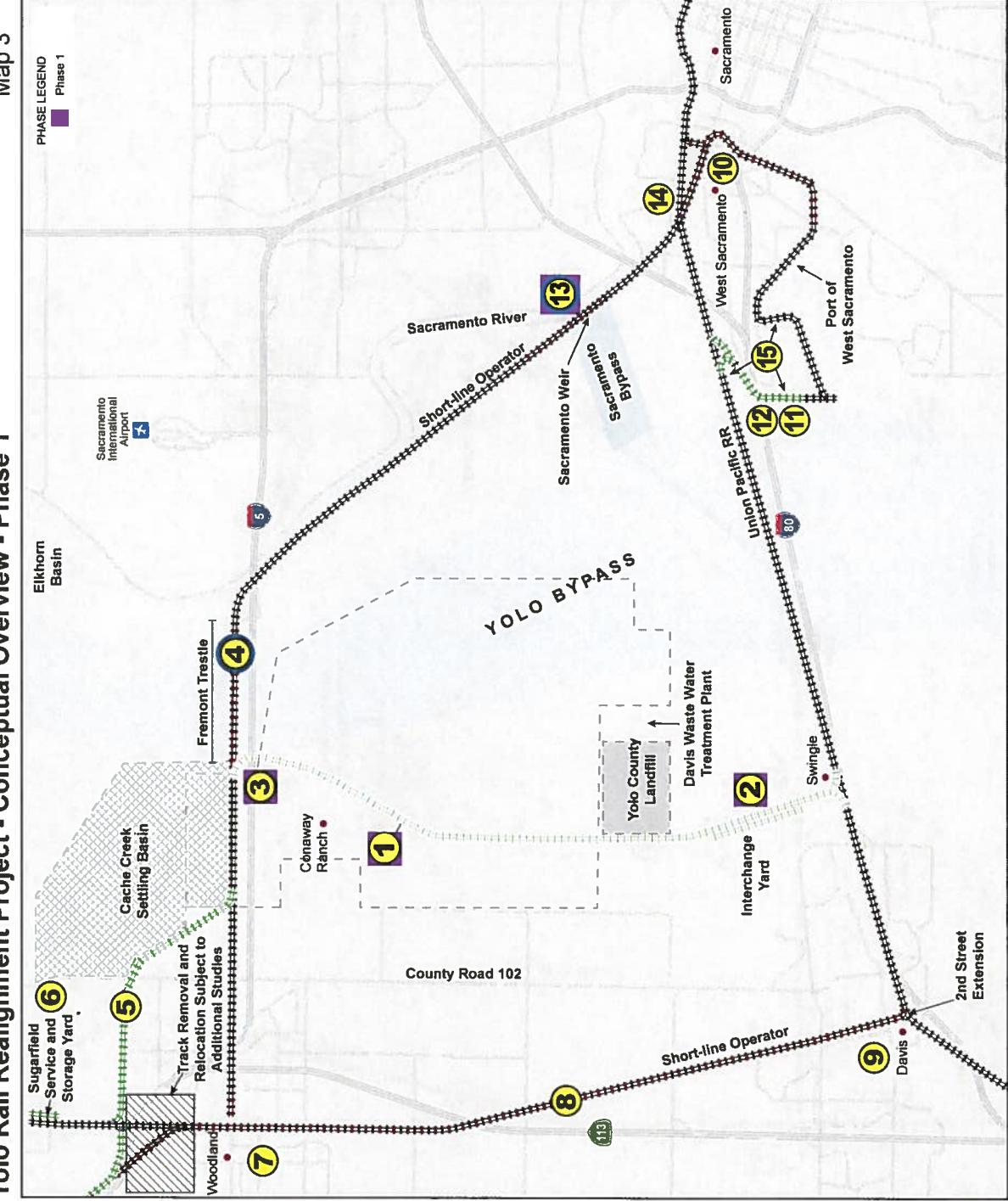
- The next phase, **Phase 2A**, (see **Map 4**) would continue to facilitate and complement redevelopment of the West Sacramento project areas by removing the Westgate Yard and rerouting West Sacramento freight traffic out of the eastern portions of West Sacramento. This traffic would access the Port of West Sacramento via the UPRR mainline east of Davis, using a new rail connection between the UPRR mainline and the Port of West Sacramento spur rail terminus, which would include construction of a new rail underpass at Interstate 80. This would permit the removal of six at-grade rail crossings and associated track in the eastern portion of the city, as well as the existing Canal and Westgate Interchange Yards.

Yolo Rail Realignment Project - Conceptual Overview - Phase 1

Conceptual Project Features

- ① New railroad conceptual connection to the short-line track east of Woodland
- ② New railcar interchange facility at intersection with UPRR mainline and short-line track
- ③ Railroad underpass beneath Interstate 5 utilizing western end span of the existing viaduct
- ④ Remove Fremont Trestle across the Yolo Bypass
- ⑤ Realign the short-line track, to connect to the line north of Woodland
- ⑥ Construct new service and storage yard near Sugarfield north of Woodland
- ⑦ Remove twelve (12) at-grade railroad crossings and associated track, spur line, and service and storage yard in Woodland and Yolo County
- ⑧ "Rail to Trails" opportunity to convert the short-line railroad to a Class 1 bike path
- ⑨ Remove four (4) at-grade railroad crossings, associated track, and existing weirs in Davis
- ⑩ In West Sacramento, remove six at grade rail crossings, associated track, and existing yard at Lake Washington
- ⑪ Add new rail connection between UPRR mainline and Port of West Sacramento spur rail terminus
- ⑫ Construct new rail underpass at Interstate 80
- ⑬ Remove track over the Sacramento Weir and remove track to 1,800 ft north of the Weir
- ⑭ Removal of Mycon track in West Sacramento
- ⑮ New railcar interchange/storage options in West Sacramento

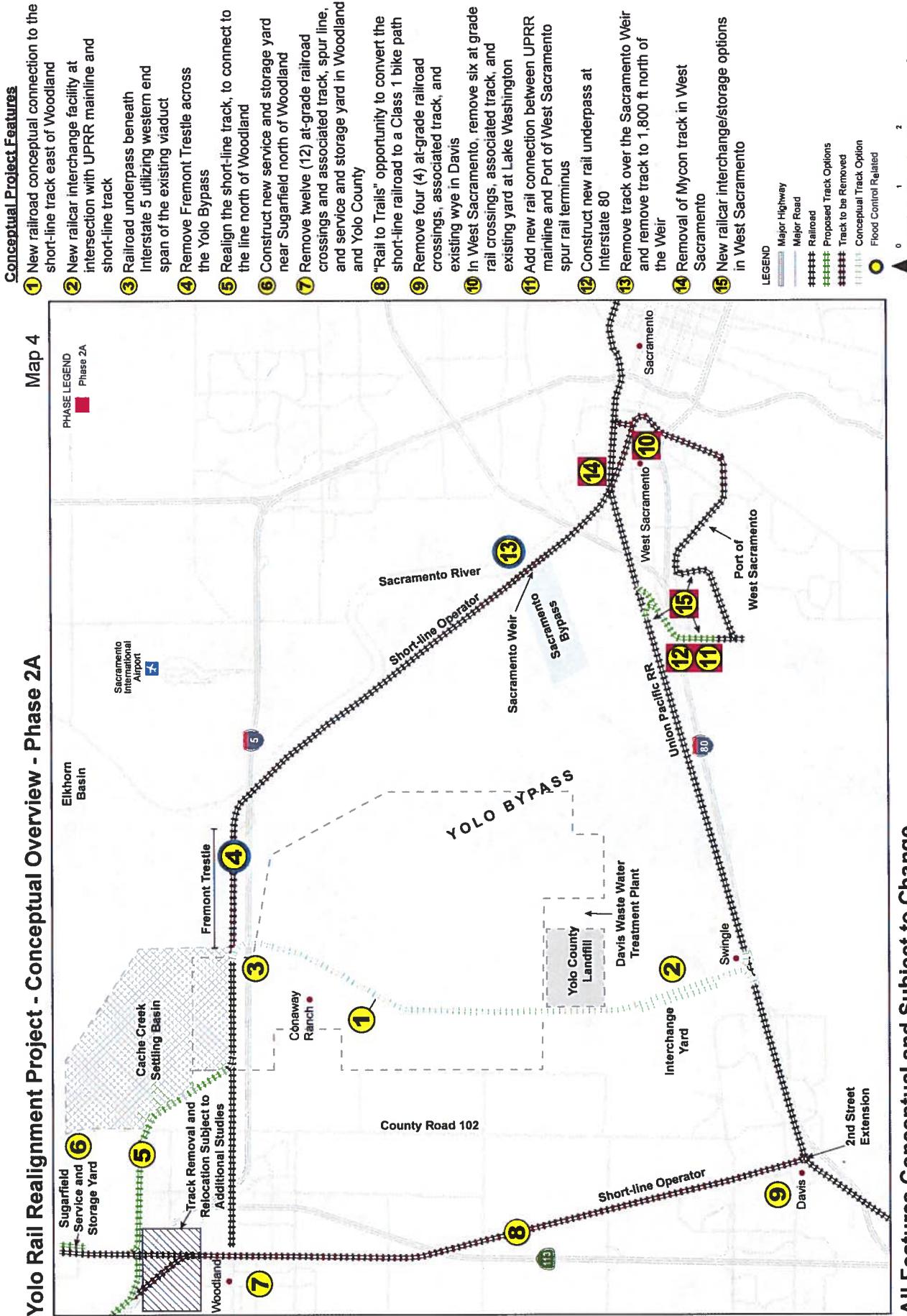
Map 3



All Features Conceptual and Subject to Change

Yolo Rail Realignment Project - Conceptual Overview - Phase 2A

Map 4



All Features Conceptual and Subject to Change

- Relocating Woodland and Davis rail traffic would be accomplished via **Phase 2B** improvements, which would comprise those elements needed to reroute SERA and CNFR traffic from the existing line to the new alignment through Conaway Ranch. This new line would connect to a reconfigured track that would run along the outskirts of Woodland's industrial zone to the north near the CCSB. The new configuration would permit removal of the existing rail infrastructure in the Cities of Davis and Woodland. It is important to note that because the new connection would be located in the Cache Creek floodplain, reconfiguration of this track will be contingent on completing flood control projects protecting the northern portions of Woodland. Funding for these flood control projects is not anticipated for a minimum of 7 to 10 years.

As an optional element, **Phase 2B** also includes the potential construction of a Class 1 bike path between the Cities of Davis and Woodland, should the two communities and local decision makers determine this is a desirable use of the former rail right-of-way. These costs instead may be included as part of a later project phase.

- **Phase 2C** comprises the remaining elements of the Yolo Rail Realignment project, namely the removal of the Fremont Trestle and associated track across the Yolo Bypass, which would reduce the water surface level at flood stage by increasing flow capacity of the bypass.

Map 5 identifies both the **Phase 2B** and **Phase 2C** elements, and **Map 6** shows the entire conceptual realignment with all phases depicted.

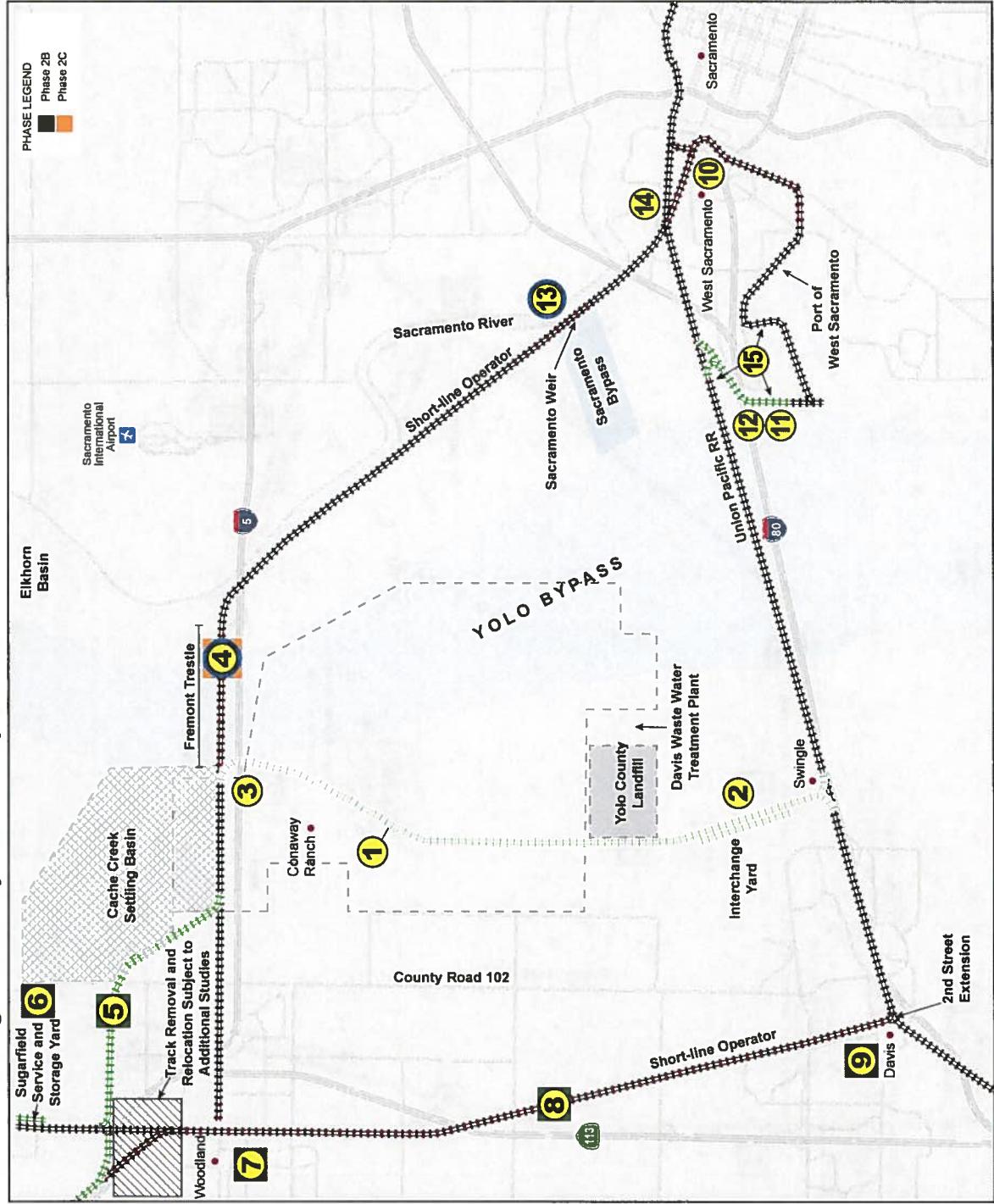
The funding strategy for **Phase 1**, described in further detail in the next chapter, will include accessing state and federal funds for planned flood control improvements. Given substantial competition for federal flood control monies, it is anticipated that the process to access these funds will take roughly 5 to 7 years, during which time redevelopment activity in the Bridge District is expected to commence (to the degree that such activity can take place, absent the removal of existing rail infrastructure). These redevelopment efforts will be bolstered by **Phase 1** of the Yolo Rail Realignment project, potentially catalyzing additional redevelopment activities that will provide foundational funding sources for future phases of rail relocation.

Yolo Rail Realignment Project - Conceptual Overview - Phases 2B/C

Conceptual Project Features

- ① New railroad conceptual connection to the short-line track east of Woodland
- ② New railcar interchange facility at intersection 5 utilizing western end span of the existing viaduct
- ③ Railroad underpass beneath Interstate 5 utilizing western end span of the existing viaduct
- ④ Remove Fremont Trestle across the Yolo Bypass
- ⑤ Realign the short-line track, to connect to the line north of Woodland
- ⑥ Construct new service and storage yard near Sugarfield north of Woodland
- ⑦ Remove twelve (12) at-grade railroad crossings and associated track, spur line, and service and storage yard in Woodland and Yolo County
- ⑧ "Rail to Trails" opportunity to convert the short-line railroad to a Class 1 bike path
- ⑨ Remove four (4) at-grade railroad crossings, associated track, and existing wye in Davis
- ⑩ In West Sacramento, remove six at grade rail crossings, associated track, and existing yard at Lake Washington
- ⑪ Add new rail connection between UPRR mainline and Port of West Sacramento spur rail terminus
- ⑫ Construct new rail underpass at Interstate 80
- ⑬ Remove track over the Sacramento Weir and remove track to 1,800 ft north of the Weir
- ⑭ Removal of Mycon track in West Sacramento
- ⑮ New railcar interchange/storage options in West Sacramento

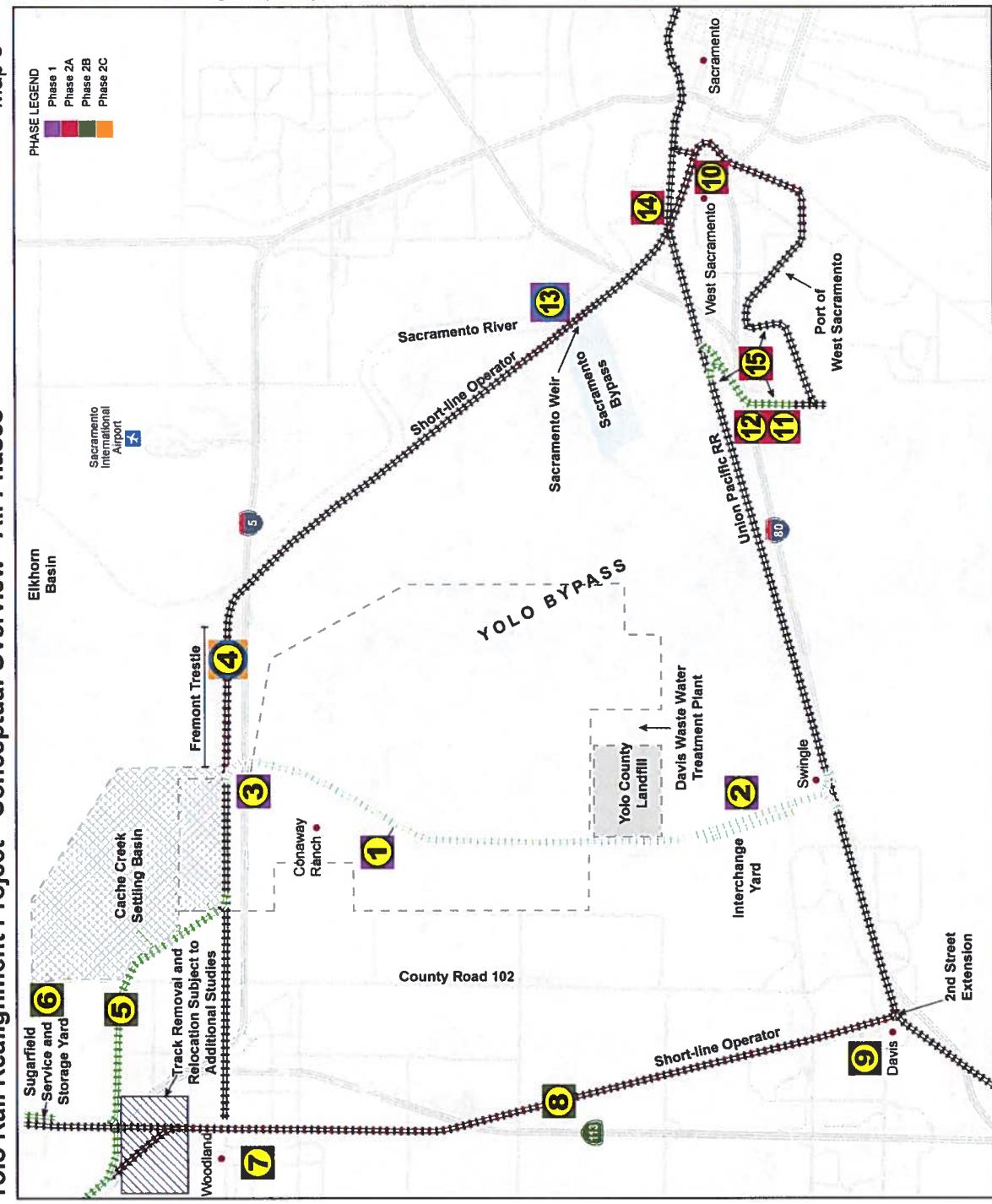
Map 5



All Features Conceptual and Subject to Change

ch2m.
Approximate scale in miles
0 1 2
North

Yolo Rail Realignment Project - Conceptual Overview - All Phases



Conceptual Project Features

- New railroad conceptual connection to the short-line track east of Woodland
- New railcar interchange facility at intersection with UPRR mainline and short-line track
- Railroad underpass beneath Interstate 5 utilizing western end span of the existing viaduct
- Remove Fremont Trestle across the Yolo Bypass
- Realign the short-line track, to connect to the line north of Woodland
- Construct new service and storage yard near Sugarfield north of Woodland
- Remove twelve (12) at-grade railroad crossings and associated track, spur line, and service and storage yard in Woodland and Yolo County
- "Rail to Trails" opportunity to convert the short-line railroad to a Class 1 bike path
- Remove four (4) at-grade railroad crossings, associated track, and existing vye in Davis
- In West Sacramento, remove six at grade rail crossings, associated track, and existing yard at Lake Washington
- Add new rail connection between UPRR mainline and Port of West Sacramento spur rail terminus
- Construct new rail underpass at Interstate 80
- Remove track over the Sacramento Weir and remove track to 1,800 ft north of the Weir
- Removal of Mycon track in West Sacramento
- New railcar interchange/storage options in West Sacramento

All Features Conceptual and Subject to Change

4. PHASE 1 DETAIL AND FUNDING CONCEPT

As described in the previous chapter, the **Phase 1** project elements are intended to reroute SERA traffic traveling from Woodland to West Sacramento on a proposed new alignment through Conaway Ranch and a portion of Yolo County south of Conaway Ranch. This will reduce the amount of train traffic in West Sacramento, limiting remaining activity to West Sacramento freight, and facilitating early stages of redevelopment in the West Sacramento Bridge District, Pioneer Bluff, and Snow Cone areas.

Instead of traveling over the Fremont Trestle, along the current short line over the Sacramento Weir and into West Sacramento, connecting to the UPRR mainline at Westgate, SERA trains would travel from Woodland along a new north-south alignment through Conaway Ranch and the area west of the Yolo Bypass. The new line would connect with the UPRR mainline via new interchange facilities constructed at the intersection of the UPRR mainline and the new short-line track at Swingle.

As discussed further in the following section, rerouting SERA traffic along the new north-south alignment also will simplify current U.S. Army Corps of Engineers (USACE) plans to widen the Sacramento Weir and Bypass to increase the flood conveyance capacity of the Sacramento Bypass. Without the rerouting, USACE would have to construct a new trestle to elevate the SERA line above the widened portion of the bypass.⁴ Construction of the realigned track through Conaway Ranch also may facilitate State Department of Water Resources flood control improvements related to the CCSB.⁵ These flood control alternatives play an integral role in the funding strategy for **Phase 1**, discussed in further detail below.

The following **Map 1** elements comprise the proposed first phase of the Yolo Rail Realignment project:

- Construct new short-line railroad through Conaway Ranch and area to the south, connecting short-line track east of Woodland to UPRR mainline east of Davis (Map ID #1).
- Construct new railcar interchange facilities at intersection of UPRR mainline and new short-line track (Map ID #2).
- Improve existing railroad underpass beneath Interstate 5 (Map ID #3).
- Remove portion of rail embankment and track north of the Sacramento Weir (Map ID #13).

As shown in **Table 3**, the conceptual cost estimates for **Phase 1** rail relocation improvements range from \$73.4 million to \$157.4 million. Note that this cost includes approximately \$24.4 million (base costs) in flood protection improvements that could be part of a larger flood control project to protect the Interstate-5 corridor and portions of the City of Woodland exposed

⁴ Based on information provided by SAFCA.

⁵ Ibid.

Table 3
Yolo Rail Realignment
Assessment Area #3: Funding Concepts
Phase 1 Conceptual Project Costs

Item	Construction	Mobilization & Contingency		Total	Estimated Costs		% of Total
		[1]	-30%		Low	High	
<i>Percentage</i>							
Phase 1 - Reroute SERA Traffic							
Sacramento Weir Embankment/Track Removal	\$76,000	\$32,680	\$108,680		\$76,076	\$163,020	
New Yolo County N-S Line (Swing) to Conaway [2]	\$50,869,984	\$21,869,363	\$72,728,347	\$50,909,843	\$109,092,521		
Grade-Separated Crossing at County Road 32A in Davis	\$18,000,000	\$7,740,000	\$25,740,000	\$18,018,000	\$38,610,000		
Rail Interchange/Sorting, Transload East of Davis	\$4,425,000	\$1,902,750	\$6,327,750	\$4,429,425	\$9,491,625		
Subtotal Phase 1	\$73,359,984	\$31,544,793	\$104,904,777	\$73,433,344	\$157,357,166	47%	
Levee Construction to Protect Rail	\$0	\$0	\$0	\$0	\$0	0%	
Total Phase 1	\$73,359,984	\$31,544,793	\$104,904,777	\$73,433,344	\$157,357,166	47%	
<i>.....</i>							
Phase 2A - West Sacramento Rail Relocation							
West Sacramento I-80 Tunnel (Includes Flood Protection)	\$33,589,556	\$14,443,509	\$48,033,065	\$33,623,146	\$72,049,598		
West Sacramento Removal	\$1,344,535	\$578,150	\$1,922,685	\$1,345,880	\$2,884,028		
West Sacramento Relocated Tracks	\$5,953,150	\$2,559,855	\$8,513,005	\$5,959,103	\$12,759,507		
Rail Interchange/Sorting, Storage, Transload at West Sacramento	\$1,770,000	\$761,100	\$2,531,100	\$1,771,770	\$3,756,650		
Total Phase 2A	\$42,657,241	\$18,342,614	\$60,999,855	\$42,659,898	\$91,499,782	27%	
<i>.....</i>							
Phase 2B - Woodland/Davis Rail Relocation							
Rail Interchange/Sorting, Transload at Sugarfield	\$885,000	\$380,550	\$1,265,550	\$885,885	\$1,898,325		
Woodland Storage Yard Removal	\$157,028	\$67,522	\$224,550	\$157,185	\$336,825		
Woodland Relocation (Conaway to End of Project)	\$14,112,608	\$6,068,421	\$20,181,029	\$14,126,721	\$30,271,544		
Davis to Woodland Removal	\$2,247,850	\$966,576	\$3,214,426	\$2,250,098	\$4,821,638		
Removal of Rail Wye and 2nd Street Connection in Davis	\$329,200	\$141,556	\$470,756	\$329,529	\$706,134		
Subtotal Phase 2B	\$17,731,686	\$7,624,625	\$25,356,311	\$17,749,418	\$38,034,466	11%	
Woodland/Davis Rails to Trail Project (Optional)	\$18,956,576	\$8,151,328	\$27,107,904	\$18,975,533	\$40,661,856	12%	
Total Phase 2B	\$36,688,262	\$15,775,953	\$52,464,215	\$36,724,950	\$78,656,322	23%	
<i>.....</i>							
Phase 2C							
Fremont Trestle Removal	\$3,442,400	\$1,480,232	\$4,922,632	\$3,445,842	\$7,383,948		
Total Phase 2C	\$3,442,400	\$1,480,232	\$4,922,632	\$3,445,842	\$7,383,948	2%	
Grand Total	\$156,147,887	\$67,143,591	\$223,291,478	\$156,304,035	\$334,937,218	100%	

Source: CH2M HILL, EPS.

[1] Includes 10% mobilization and 30% contingency factors. See Exhibit 2.

[2] Includes flood protection.

removal_costs

to flooding from a failure of the Yolo Bypass west levee. Protection for other portions of the City of Woodland exposed to flooding from Cache Creek could be a longer term prospect. However, increased protection along the Yolo Bypass could be advanced in concert with the first phase of rail relocation and therefore is included as a **Phase 1** cost estimate.

Phase 1 Funding Concept

The **Phase 1** funding concept primarily focuses on identifying opportunities for mutually beneficial flood control and rail relocation outcomes and securing associated state and federal funding participation. Other private- and public-sector financing mechanisms also may be identified and deployed to fund certain elements of **Phase 1** (see **Appendix A**).

Link to Flood Control Projects and Needs

Protection from flooding in the region is provided by a comprehensive system of levees, overflow weirs, and flood bypass systems managed by the USACE in partnership with the California Department of Water Resources (DWR) and the Central Valley Flood Protection Board (CVFPB). This flood control system extends throughout the Sacramento Valley and protects hundreds of thousands of acres of highly productive agricultural land and numerous small rural communities, as well as the metropolitan areas in the region.

As discussed above, there are features of the Yolo Rail Realignment project that could contribute to flood control solutions planned by DWR or USACE. With the existing rail alignments through Woodland and the Elkhorn Basin, these flood control solutions may be more complex and costly, while project alternatives to derive mutually beneficial outcomes from rail realignment and flood control exist. To the extent the Partnership can execute a coordinated approach to flood control and rail realignment, the Partnership may be able to secure funding participation from the state and federal government.

The discussion to follow identifies several planned flood control improvements that may be compatible with Yolo Rail Realignment project elements and describes cost-avoidance opportunities that may provide funding sources to effect completion of **Phase 1**.

Sacramento Weir and Bypass

During flood events in the lower Sacramento and American Rivers, the Sacramento Weir and Bypass are designed to carry American River flows into the Yolo Bypass, leaving the flows in the Sacramento River channel upstream and downstream of the American River essentially unchanged. The SERA line currently crosses the Sacramento Weir north of West Sacramento and transitions to an embankment at the northerly end of the weir. As documented in the USACE's General Reevaluation Report for the American River Common Features Project (USACE GRR), the recommended plan for reducing flood damages along the lower Sacramento River anticipates the Sacramento Weir will be extended for up to 1,800 feet to the north along the Sacramento River, while the Sacramento Bypass is widened an equal amount to increase conveyance of flood waters through the weir and bypass.

To accomplish this widening, the SERA line would need to be elevated through construction of a new trestle structure that would allow flood waters to be conveyed under the rail line once the weir and bypass are extended.

Yolo Rail Relocation-Compatible Alternative: The suggested alternative to this approach would be to remove the SERA line from the Sacramento Weir and nearby levee and relocate the line, consistent with the Yolo Rail Realignment project plans and the **Phase 1** improvements described herein.

Cost-Avoidance Opportunity: The USACE GRR estimates that elevating and rebuilding the SERA line that runs across the Sacramento Weir would cost between \$25 million and \$30 million. As part of the Yolo Rail Realignment project, the Partnership could work with the USACE to use those funds to relocate the rail line instead. USACE regulations may allow the owner of the rail line to perform the necessary relocation and be reimbursed by USACE for an amount not to exceed USACE's estimated cost to widen the bypass and construct the elevated trestle instead.

Process and Timing Considerations: The USACE GRR, which includes the Sacramento Weir and Bypass project, will be transmitted to Congress in 2016.

Substantial demand for federal flood control funding exists, however, and authorization of the improvements recommended in the USACE GRR, including the Sacramento Weir and Bypass widening, is contingent on inclusion of the USACE GRR in a package of recommended USACE projects authorized by Congress through the Water Resources Development Act (WRDA). This is expected to occur as early as 2017 or as late as 2021, given competition for funds and Congress' recent pattern of WRDA authorizations (since 2000, there have been only two WRDA authorizations—in 2007 and 2014).

Once Congressional authorization of the project is secured, additional negotiations between the USACE and SERA, to substitute rail relocation for the Sacramento Weir and Bypass widening and to establish procedures for reimbursement to SERA, likely would occur over a 2- to 3-year timeframe.

Cache Creek Settling Basin

The CCSB originally was built as a sediment catchment basin to preserve the conveyance capacity of the Yolo Bypass. It was expanded 20 years ago and is now reaching capacity. The sediment entering and retained in the basin contains mercury. In October 2011, the Regional Water Quality Control Board adopted a mercury Total Maximum Discharge Load (TMDL) requirement for the CCSB. Under this requirement, the state is directed to increase the catchment efficiency of the CCSB by 50 percent (from a current baseline of 50-percent efficiency to a new level of 75-percent efficiency commencing in 2020).

Currently, the state plans to meet this requirement by acquiring land adjacent to the CCSB and removing sediment from the basin for stockpiling on the acquired land.

Yolo Rail Realignment-Compatible Alternative: The Yolo County Central Landfill, located just east of the proposed new alignment through Conaway Ranch, needs approximately 13 million cubic yards of sediment to meet its long-term landfill cover needs (250,000 cubic yards per year at current annual waste volumes). To accommodate this need, sediment could be excavated from the CCSB and moved via the relocated rail line to the Yolo County Central Landfill to be used as landfill cover. This operation would replace the current plan to meet its landfill needs by excavating material from a 320-acre parcel directly west of the facility that was recently acquired for this purpose.

Cost-Avoidance Opportunity: The state could address the TMDL requirement by covering a portion of the capital cost of the flood/rail project (roughly \$30.0 million to \$40.0 million), which would include the cost of the infrastructure to allow sediment to be excavated from the CCSB and transported to the Yolo County Central Landfill for use as landfill cover. The state's capital investment would be made in exchange for the Partnership and the Solid Waste facilities, assuming all or partial responsibility for the annual transfer of materials, estimated to cost between \$2.0 million and \$2.5 million annually.

Working in concert with the Solid Waste Facility, the Partnership will need to identify a funding source for the annual costs of excavating and transporting this material to the facility. It is anticipated that the Yolo County Central Landfill could fund a portion of the costs (roughly equivalent to the projected annual costs of Yolo County Central Landfill's alternative plans for excavation and transport of material for landfill cover). The Partnership would need to work with the state to identify viable alternatives for the remaining annual cost.

Process and Timing Considerations: The Partnership should coordinate with the DWR to evaluate the viability of state participation in the Yolo Rail Realignment project and to identify mechanisms by which the state's participation can be secured. It is anticipated the DWR will be willing to participate in capital costs in exchange for the Partnership assuming annual costs, as these costs are difficult for the state to fund, given the state appropriation process. Future planning and financing strategy efforts need to identify these annual costs and viable annual funding sources.

Other Phase 1 Funding Sources

Developer Funding

The new rail line and associated flood improvements will provide partial flood protection within the City of Woodland's urban limit line, east of County Road 102. Currently this land, like other areas of Woodland, is exposed to flooding from levee failures along the lower Cache Creek and the Yolo Bypass. Providing flood protection to this area could generate increased land values that may be leveraged for rail realignment purposes.

Process and Timing Considerations: Potential revenue sources generated by the increased development value of this area would have to be secured through development agreement negotiations between the City of Woodland and interested land developers, contingent on current flood protection plans and land use entitlement requirements.

Development-Related Revenue Sources

Redevelopment activity in the Cities of Davis, West Sacramento, and Woodland will generate public revenues in the form of sales, property, and other tax revenues that may be leveraged to accomplish elements of the Rail Realignment project. **Phase 1** improvements will reduce rail traffic in West Sacramento by eliminating the Woodland freight interchange in the Westgate Yard and will improve redevelopment prospects in West Sacramento by improving property owner and developer confidence that rail relocation will be realized. To the extent that **Phase 1** improvements catalyze additional development, related revenues could be leveraged to accomplish future phases.

Public revenue sources related to redevelopment activity include the following mechanisms, detailed in **Appendix A**:

- Infrastructure Financing District/Enhanced Infrastructure Financing District (IFD/EIFD)
- Community Revitalization Investment Authority (CRIA)
- Mello-Roos Community Facilities District (CFD)
- Increased sales and use taxes generated by new development
- Development Impact Fees
- Other Fees and Exactions
- Flood Benefit Assessment District

The primary candidate to secure funding resources resulting from redevelopment activity is the property tax increment streams generated via implementation of an IFD or EIFD. IFDs and EIFDs may be formed over noncontiguous geographies and can capture incremental increases in property tax revenue from future development that would otherwise accrue to the local jurisdiction's General Fund. These tax increment revenues can be used to finance public capital facilities or other specified projects of communitywide significance but cannot be used for operations or maintenance of those facilities. IFD/EIFD revenues may be pledged to support the issuance of municipal bonds.

West Sacramento already has formed IFD No. 1 in the east area of the city, bounded on the south by US Highway 50, on the north and west by West Capitol Avenue, and on the east by the Sacramento River. West Sacramento also is considering implementation of additional citywide EIFDs.

Realizing substantial tax increment revenues relies on achieving substantial levels of redevelopment to increase property values and realize new property tax revenues. Revenue streams sufficient to support the issuance of debt materialize commensurately with redevelopment in the EIFD geography, likely 5 to 7 years after project initiation. Use of other public financing mechanisms, such as a Mello-Roos CFD, as a bridge or gap financing mechanism, may accelerate the ability to issue debt.

Process, Timing, and Other Considerations for Future Analysis: Future phases of the Yolo Rail Realignment project should further evaluate the available redevelopment-related public financing mechanisms. Considerations would include identifying how much redevelopment could occur in West Sacramento (1) without the Yolo Rail Realignment project and (2) with all or certain elements of the Yolo Rail Realignment to ascertain estimates of tax increment revenues. The Partnership should work with the City of West Sacramento to identify the capacity to use IFD/EIFD revenues for Yolo Rail Realignment purposes, considering the numerous competing demands for those funds. The degree to which other sources of public revenues (e.g., sales and use taxes) might be available for rail relocation purposes also should be evaluated as part of future, more detailed financing strategy work.

Note that should the Partnership consider formation of an EIFD over all of the redevelopment opportunity areas identified as a part of this process, timing considerations will be of utmost importance. EIFD formation should occur early enough in the redevelopment process that value increases associated with redevelopment activity can be captured but also must consider the limited timeframe over which debt may be issued (30 years).

Other Public Revenues

Other public revenues could be deployed to accomplish **Phase 1** but may be limited by political, fiscal, or other considerations. Other public revenue sources that could be used theoretically include General Fund contributions, revenue bonds, municipal lease financing mechanisms, and voter-approved tax measures. These public revenue sources are not anticipated to play a major role in accomplishing **Phase 1** of the Yolo Rail Realignment project.

Grant Funding Opportunities

Various local, state, and federal grant programs could provide funding for infrastructure projects such as the proposed Yolo Rail Realignment project. Grant funds are available both for planning (e.g., design, engineering, and feasibility studies), as well as capital construction costs. Key opportunities are summarized below, with additional detail attached as **Appendix A**:

- Key local grant funding opportunities include corporate philanthropy (e.g., Wells Fargo Community Development Grant Program and Pacific Gas & Electric [PG&E] Economic Vitality Grant Program), targeting projects and programs that improve economic vitality and strengthen local communities. The Sacramento Area Council of Governments (SACOG) provides regional funding for bicycle and pedestrian improvements and other active transportation projects that improve the region's active transportation system, air quality, and overall quality of life. The Yolo-Solano Air Quality Management District Clean Air Funds Program funds projects designed to reduce emissions, including bicycle and pedestrian improvements.
- Likely sources of state grant funds include the Recreational Trails Program, Land and Water Conservation Fund, River Parkways Program, Environmental Enhancement and Mitigation Program, Affordable Housing and Sustainable Communities Program, Active Transportation Program, Wildlife Conservation Board Public Access Program, and Caltrans Transportation Planning Grant.
- Key federal grant funding opportunities include Safe Routes to School; Community Development Block Grants; Rivers, Trails, and Conservation Assistance Program; Outdoor Legacy Recreation Partnership Program; and Economic Development Administration.

Note that a key grant funding source for transportation-related projects is the Transportation Investment Generating Economic Recovery (TIGER) grant program administered by the federal Department of Transportation. Requisite findings regarding the ratio of project benefits to costs may be difficult to make for **Phase 1** of the Yolo Rail Realignment project; therefore, this mechanism is discussed in more detail in the next chapter as a funding mechanism for **Phase 2**.

Table 4
Yolo Rail Realignment
Assessment Area #3: Funding Concepts
Summary of Phase 1 Funding Opportunity - Conceptual Estimates

Capital Funding Opportunity	Conceptual Amount	Notes/Other Considerations
Sacramento Weir and Bypass	\$25,000,000	
Cache Creek Settling Basin	\$30,000,000	Funding source for estimated annual cost of roughly \$2.5 M to excavate and transport material to solid waste facility not yet identified.
Developer Funding	\$20,000,000	Placeholder Estimate
Total	\$75,000,000	<i>cost avoid</i>

Source: EPS and Nossaman LLP.

5. PHASE 2 DETAIL AND FUNDING CONCEPT

Phase 2 of the Yolo Rail Realignment project will build on the prior phase, using public financing mechanisms made available by early stages of redevelopment, as well as available grant funds to further the realignment project. **Phase 2** is split into several subphases, defining discrete components that could be completed at different intervals as funding is available and agreement from all affected parties (i.e., rail operators, property owners) is secured.

Phase 2A would complete the West Sacramento rail realignment, shifting rail access to the west side of the City of West Sacramento. Specific elements would include the following components as depicted on **Map 1**:

1. Remove six at-grade rail crossings, associated track, and existing yard at Lake Washington (Map ID #10).
2. Add new rail connection between UPRR mainline and Port of West Sacramento spur rail terminus (Map ID #11).
3. Construct new rail underpass at Interstate 80 (Map ID #12).
4. Remove Mycon track in West Sacramento (Map ID #14).
5. Construct new railcar interchange facility at West Sacramento (Map ID #15).

As shown in **Table 3**, conceptual costs for **Phase 2A** are anticipated to range from roughly \$43.0 million to \$91.0 million.

Phase 2B would complete the rail relocation elements in the Cities of Davis and Woodland, including removing UPRR track between the two cities, rerouting CNFR traffic through Conaway Ranch, and realigning the SERA track to the northern section of Woodland. Specific elements would include the following components:

1. Realign the short-line track to connect with the line north of Woodland (Map ID #5).
2. Construct new service and storage yard near Sugarfield, north of Woodland (Map ID #6).
3. Remove nine at-grade railroad crossings and associated track, spur line, and service and storage yard in Woodland and remove three at-grade railroad crossings and associated track in Yolo County (Map ID #7).
4. Optional Rails-to-Trails opportunity between Davis and Woodland (Map ID #8).
5. Remove four at-grade railroad crossings, associated track, and existing wye in Davis (Map ID #9).⁶

⁶ Davis portion also could include a potential Second Street connection.

Excluding the optional Rails-to-Trails element, which could be completed at a later stage, **Phase 2B** conceptual costs are estimated to total between \$18.0 million and \$38.0 million. The Rails-to-Trails component conceptually is estimated to cost from \$19.0 million to \$41.0 million.

The final element of Yolo Rail Realignment project is represented by **Phase 2C** and would include removal of the Fremont Trestle across the Yolo Bypass at an estimated cost of \$3.4 million to \$7.4 million (Map ID #4). This element is not crucial for rail relocation purposes but would be made possible by the Rail Realignment project and would have salutary flood protection effects.

Accomplishing the initial stages of rail relocation will complement early stages of development of the West Sacramento parcels, potentially unlocking funding sources (i.e., property tax increment revenues) that could accommodate **Phase 2** of the Yolo Rail Realignment project. Use of public revenues generated by redevelopment would be subject to substantial additional analysis, as well as interagency discussions and agreement. These are the primary sources of funding that may be available to accomplish **Phase 2** of the Yolo Rail Realignment project. Additional funds also may be obtained from various grant funding programs. A key element to accomplishing **Phase 2** also will include coordination with the rail operators and property owners, as rerouting of train traffic will require their cooperation and consent.

Funding Concept

Because of the highly conceptual nature of the Yolo Rail Realignment project phasing strategy, estimated costs, and additional coordination that needs to occur between all parties involved, establishing more than a conceptual funding strategy is premature. This section offers a brief, high-level overview as an outline of elements and concepts to explore as part of future planning and financing strategy efforts. Additional analysis will be necessary to establish specific elements of a funding strategy and should be addressed as part of subsequent phases of Yolo Rail Realignment project planning efforts.

Development-Related Revenues

As West Sacramento redevelopment proceeds, the tax-increment revenues generated by the existing IFD No. 1 and the future citywide EIFDs may be available to fund **Phase 2A**. Accessing tax increment funds for **Phase 2B** will be more difficult, unless an interagency agreement between the Cities of Davis, West Sacramento, and Woodland can be established to leverage tax increment monies generated from West Sacramento to fund the **Phase 2B** elements. Once **Phase 2B** is accomplished, redevelopment occurring in Davis and Woodland also will generate tax-increment revenues that could be used to "reimburse" West Sacramento or to fund the proposed Rails-to-Trails project between Woodland and Davis.

Grant Funding

The local, state, and federal grant funding opportunities outlined in the previous chapter also would be applicable for planning and capital construction costs related to **Phase 2**. As discussed, a key **Phase 2** grant funding opportunity with implications for future planning efforts is the federally administered TIGER program. Key elements of that program are detailed below.

TIGER Grant Funding Detail

National Infrastructure Investments, or TIGER Discretionary Grants, originally were funded through the American Recovery and Reinvestment Act of 2009. More recently, they have been funded annually through the appropriations process. Funds for the Fiscal Year (FY) 2015 TIGER Program, the most recent year for which funds were available, will be awarded on a competitive basis for road, rail, transit, bicycle/pedestrian, port, and multi-modal projects that will have a significant impact on the nation, a metropolitan area, or a region. FY 2015 applications were due June 5, 2015.

Eligible project sponsors include any public entity, including municipalities, counties, port authorities, tribal governments, Metropolitan Planning Organizations, or others. Projects may be multijurisdictional. Priority is given to projects that "demonstrate strong collaboration among a broad range of participants, integration of transportation with other public service efforts, or projects that are the product of a robust planning process."

These were the FY 2014 rail projects funded, for which both planning and construction grants were awarded:

- New England Central Railroad Freight Rail Project in Connecticut—\$8,183,563 for construction.
- Providence Streetcar in Rhode Island—\$13 million for construction.
- M-1 Fixed Rail Streetcar Project in Michigan—\$12.2 million for construction.
- St. Paul Rail to Multimodal Corridor Plan in Minnesota—\$100,000 in planning.
- MRC Railroad Reconstruction in South Dakota—\$12.6 million in construction.
- Willowbrook/Rosa Parks Station Master Plan Implementation Project in California—\$10.25 million for construction.

TIGER grant applications are highly competitive, but it is anticipated the Yolo Rail Realignment project would be a candidate for funding. One key to a successful application for TIGER construction funds is documenting that the proposed project generates a benefit-cost ratio exceeding 1.0, in accordance with benefit categories identified by the Federal Department of Transportation. Eligible, quantifiable benefits associated with the proposed Yolo Rail Realignment project may include these:

- Increased property value, net of developer investment, which can be linked directly to the proposed project and supported by peer-reviewed literature.
- Safety benefits associated with removing at-grade crossings.
- Reduced long-term maintenance costs associated with replacing old infrastructure.
- Saving travel time.
- Reduced noise.

- Environmental sustainability—reduced greenhouse gas emissions.
- Saving operating costs, potentially related to road maintenance and CCSB sediment removal.

Grant Application Process and Considerations: Upon the appropriation of funds, the federal government will issue a Notice of Funding Availability (NOFA). Preapplications typically are due within 3 to 4 weeks, with full applications for funding due roughly 8 weeks after NOFA issuance. The benefit-cost analysis element can be a time-consuming and costly element of applications for construction funds. To be prepared for potential grant opportunities, engaging economic and transportation consultants to evaluate viability of the project in meeting benefit-cost analysis ratio requirements should be considered as part of project next steps.

Other Funding Sources

The Fremont Trestle across the Yolo Bypass parallel to Interstate 5 is a flood flow impediment and could be removed to enhance conveyance capacity. If the new rail line is constructed, the track and trestle would no longer be needed to provide access to West Sacramento from Woodland. Removal of the Fremont Trestle is not, however, a critical element of the Yolo Rail Realignment project, in that it does not generate substantial redevelopment opportunities. Therefore, this element likely will be funded by a combination of DWR and USACE monies as part of implementing larger flood control projects.

Other Phase 2 Considerations

It is important to note that successful implementation of **Phase 2** will require demonstrating to UPRR and CNFR that rerouting CNFR traffic out of Davis and Woodland on a line shared with SERA traffic is a viable and cost-effective alternative. Key incentives for UPRR and CNFR will have to be identified and may include opportunities to serve additional industrial users in Woodland, as well as potential partnerships with the Yolo County Central Landfill for waste-by-rail or waste-to-energy opportunities.

Future phases of Yolo Rail Realignment project efforts will need to examine these elements further to determine if these opportunities present sufficient incentives for cooperation between the various rail operators.

6. IMPLEMENTATION MEASURES AND NEXT STEPS

The preceding chapters outlined a conceptual phasing and funding concept for the Yolo Rail Realignment project; a more formal additional planning and feasibility analysis is needed as an immediate next step. Each phase and element of the proposed Rail Realignment project hinges on several related items, as summarized by **Table 5**. Key short-term (i.e., over the next 1 to 5 years) and ongoing implementation elements on which the Partnership should focus include the following action items:

- 1. Seek to secure additional grant funding to conduct additional planning, feasibility, and funding studies.** Additional planning and feasibility analysis will be necessary to further the efforts of the Partnership. The Partnership should seek additional planning grant funds to continue the work conducted to date, focusing on additional Economic Development Administration and other grant programs to secure additional rounds of funding for planning purposes.
- 2. Work with the USACE to establish terms and processes to use funds programmed for the Sacramento Weir and Trestle widening for SERA Rail Relocation.** The Partnership, with SAFCA acting in the lead, should establish contact with USACE staff to determine the process to shift funds from the proposed Sacramento Weir and Trestle widening project to the rail relocation-compatible alternative.
- 3. Work with DWR and the Yolo County Central Landfill to establish terms for transfer of CCSB sediment to the landfill.** The Partnership should initiate contact with DWR staff to determine if there is potential for the state to participate in the capital costs associated with rail relocation in exchange for the Partnership providing an annual funding source to transfer CCSB sediment. Yolo County staff should work with the Yolo County Central Landfill to determine if this approach is viable from their perspective and ascertain what level of cost participation could be secured from the Yolo County Central Landfill. Finally, a funding strategy for the remaining annual costs needs to be established and may be established as part of the additional financing analysis discussed below.
- 4. Coordinate with Railroad Operators to determine terms needed for their support of the proposed Yolo Rail Realignment project.** The Partnership should continue to meet with SERA, UPRR, and CNFR representatives to ascertain key terms needed to secure their cooperation and participation in the Yolo Rail Realignment project. Commencement of **Phase 1** will require SERA and UPRR buy-in, while later stages will be contingent on incentives to secure UPRR and CNFR agreement.
- 5. Prepare a detailed financing strategy to program funds both for capital improvements and annual costs of CCSB material transfer.** Evaluate viability of financial partnership between local jurisdictions, likely considering economic benefits each jurisdiction receives from relocation. Interagency partnerships will be critical to securing the necessary funds for Yolo Rail Realignment project elements. The Partnership should evaluate the viability of a cross-jurisdictional funding strategy, likely hinging on implementation of an

Table 5
Yolo Rail Realignment
Assessment Area #3: Funding Concepts
Summary of Phasing and Funding Concept

Item	Phase 1	Phase 2A	Phase 2B	Phase 2C
ELEMENTS	<p>Reroute SERA traffic out of West Sacramento</p> <p>1. Remove and reroute SERA traffic from Woodland out of West Sacramento via new alignment through Conaway Ranch and area west of Yolo Bypass.</p> <p>2. Remove rail line and embankment north of Sacramento Weir.</p>	<p>Complete Rail Realignment in West Sacramento</p> <p>1. Construct new rail line between UPRR mainline and Port of West Sacramento spur rail terminus, shifting rail access to west side of the Port.</p> <p>2. Remove 6 at-grade crossing and associated track as well as yard at Lake Washington.</p>	<p>Rail Realignment in Woodland and Davis</p> <p>1. Remove at-grade crossings, associated track, and support facilities in Woodland and Davis. Relocate rail traffic through new north-south alignment.</p> <p>2. Realign SERA track through outskirts of Woodlands north industrial zone to the CCSB to connect to new north-south alignment.</p> <p>3. Optional rails to trails conversion of former rail ROW between Davis and Woodland.</p>	<p>Fremont Trestle</p> <p>1. Remove Fremont Trestle.</p>
COST RANGE	\$73.0 M - \$157.0 M	\$43.0 M - \$91.0 M	\$37.0 M - \$79.0 M	\$3.0 M - \$7.0 M
FUNDING SOURCES	<p>Flood Control Connection</p> <p>USACE Cost Avoidance - Sacramento Weir and Trestle</p> <p>State DWR Cost Avoidance - CCSB</p> <p>Sediment Transfer</p>	<p>West Sacramento tax increment revenues.</p> <p>Other development-related revenues.</p>	<p>Tax increment revenues from Davis, Woodland, and West Sacramento.</p> <p>Other development-related revenues.</p>	<p>USACE/State DWR Flood Control Funds</p>
CONTINGENCIES	<p>Private Developer Participation</p> <p>Property Tax Increment - West Sacramento</p> <p>Grant Funding</p>	<p>WRDA Authorization.</p> <p>USACE agreement to substitute rail relocation compatible alternative for construction of new rail trestle over widened Sacramento Weir.</p> <p>STATE DWR agreement to substitute rail relocation compatible alternative for current plans to address CCSB TMDL requirements.</p> <p>Development negotiations to secure Developer contributions.</p>	<p>Sufficient scale of redevelopment activity in W. Sacramento.</p>	<p>Woodland flood protection solution.</p> <p>Interagency agreement to utilize revenues generated by West Sacramento</p> <p>UPRR and SERA agreement to share new north-south line.</p>

Grauman: EDs and Neumann 119

Prepared by EPS 3/1/2016

EIFD over the affected redevelopment opportunity areas. The capacity for EIFD tax increment and associated bonding capacity should be evaluated in more detail, with consideration given to likely phasing and absorption of new development and the associated timing of anticipated revenues.

- 6. *Conduct preliminary benefit-cost analysis as part of the planning process to complement future TIGER grant applications for project construction.*** The Partnership may consider conducting preliminary benefit-cost analysis to ascertain the viability of securing future TIGER grant revenues. The TIGER benefit-cost analysis can be a time-consuming and intensive undertaking. Because the grant application timeframe is relatively narrow, and because grant funding is contingent on demonstrating that project benefits outweigh costs, it would be ideal to conduct preliminary analysis in concert with the project planning process to ensure the project meets TIGER eligibility criteria.
- 7. *Ensure ongoing coordination with City of Woodland flood protection plans.*** Realignment of the SERA line in the northern section of the City of Woodland is contingent on a flood control solution for the city. The Partnership should remain engaged in these discussions to ensure that plans for flood protection consider and accommodate Yolo Rail Realignment project objectives.



APPENDIX A:

Other Financing Mechanisms and Grant Funding Opportunities

Table A-1	Summary of Potential Local, State, Federal Government, and Private-Sector Funding Mechanisms by Expenditure Category	A-1
Table A-2	Local, State, Federal Government, and Private-Sector Funding Options Detail—Project Planning (6 pages).....	A-2
Table A-3	Local, State, Federal Government, and Private-Sector Funding Finance Options Detail—Capital Improvements (7 pages)	A-8
Table A-4	Local Government and Private-Sector Funding Finance Options Detail—Operations and Maintenance	A-15

Table A-1
Yolo Rail Realignment
Assessment Area #3: Funding Concepts
Summary of Potential Local, State, Federal Government and Private-Sector Funding Mechanisms by Expenditure Category

Expenditure Category	LOCAL, STATE, FEDERAL GOVERNMENT AND PRIVATE SECTOR FUNDING/FINANCING SOURCES										
	EIFD	Business			Municipal			Disposition of Assets			
		Mello-Roos CFD	Revenue Bonds	Improvement Contributions/ Dedications	General Fund District	Lease District	Voter Approved Financing	Public Tax Measures	Development Land/Assets	Other Fees Impact Fees	Private and Exactions
PROJECT PLANNING COSTS											
Redevelopment Areas											
Rail Removal [1]											
Rail Relocation [2]											
Rail Support [3]											
CAPITAL IMPROVEMENT COSTS											
Redevelopment Areas											
Rail Removal [1]											
Rail Relocation [2]											
Rail Support [3]											
OPERATIONS & MAINTENANCE/PUBLIC SERVICES											
Redevelopment Areas (Public ROW)											
Rail Removal [1]											
Rail Relocation [2]											
Rail Support [3]											

LEGEND

- = Primary funding source.
- = Potential, but secondary and/or limited funding source.

[1] Rail removal includes removal of all track, equipment and ancillary facilities and the conversion of the existing ROW between Davis and Woodland to a Class 1 bike path.

[2] Rail relocation includes the Yolo County North-South Line, Woodland Realignment, and West Sacramento Realignment.

[3] Rail support includes the new interchange and transload facility, and new service and storage facility.

Project Planning

Table A-2
Yolo Rail Realignment
Assessment Area #3: Funding Concepts
Local, State, Federal Government and Private-Sector Funding Options Detail - Project Planning

Mechanism	Description	Implementation
General Fund Contributions/Dedications	A dedication of General Fund property or sales tax revenue, low interest loans, one-time contributions, and other discretionary financial contributions.	General Fund contributions are part of local agency annual budget appropriations process and must be approved by the governing body. (does not require voter approval).
Development Impact Fees	One-time fees charged to new development to cover "fair share" infrastructure or planning cost needed to accommodate growth. Often a source of local "matching" funds.	Approved by the governing body vote (does not require property owner approval).
Other Fees & Exactions (including "in-lieu" fees)	There are a number of other mechanisms such as project-specific fees and exactions that could be used as funding mechanisms.	These can be negotiated on a case-by-case basis (e.g., Development Agreement) or approved generally for areas within the local jurisdiction, subject to a number of requirements.
Private Capital/Developer Equity	Developers may fund portion of infrastructure and facilities with private capital and/or commercial lending. A portion of such investment may be subject to reimbursement.	Developers raise and organize private financing. Development Agreement(s) will specify terms of credits or reimbursement for such investments.
Local Grant Program: Wells Fargo Community Development Grant Program	Wells Fargo offers grants in three primary areas: Community Development, Education, and Human Services.	The applicant must be a nonprofit organization. This funding could be used for community development planning. Applications will be accepted January 3 through September 30. Only one grant or sponsorship per calendar year per agency will be considered. It is important to work with the local community affairs representative while applying for this funding.

Project Planning

Table A-2
Yolo Rail Realignment
Assessment Area #3: Funding Concepts
Local, State, Federal Government and Private-Sector Funding Options Detail - Project Planning

Mechanism	Description	Implementation
Local Grant Program: PG&E Economic Vitality Grant Program	<p>PG&E's Economic Vitality Grant Program invests in programs designed to boost local job creation and promote economic opportunity throughout their service area.</p> <p>Grants of up to \$20,000 will be awarded for programs in the following four general categories:</p> <ul style="list-style-type: none"> Business development, incubation, or acceleration Workforce training Other innovative programs supporting job creation <p>The Economic Vitality Grant Program is funded entirely by PG&E's shareholders.</p> <p>The competitive grant program determines funding based upon the extent to which an applicant's project or program demonstrates the ability to generate jobs and other economic impacts. The community need for job creation and economic opportunity will be a strong factor when considering grant applications.</p>	<p>Organizations located within PG&E's service area that are eligible to apply include:</p> <ul style="list-style-type: none"> 501(c)3 nonprofit organizations Educational institutions Local government organizations <p>This funding could be used for economic development planning related to business attraction.</p>

Table A-2
Yolo Rail Realignment
Assessment Area #3: Funding Concepts
Local, State, Federal Government and Private-Sector Funding Options Detail - Project Planning

Mechanism	Description	Implementation
Local Grant Program: Sacramento Area Council of Governments (SACOG) Funding	SACOG has several regional funding programs for planning, including: Regional Active Transportation Program, Bicycle & Pedestrian Funding Program, and the Community Design Funding Program.	Yolo County is an eligible geography to apply for these funds, including all cities within the County. The deadlines vary year-to-year. It is important to work with SACOG staff during the application process. There is an 11.47% match required for all funding programs.

The Regional Active Transportation Program and the Bicycle & Pedestrian Funding Program targets projects that increase walking/biking, improve safety, and benefit disadvantaged communities. Together, the programs strive to improve the region's active transportation system, air quality, and overall quality of life. The maximum non-infrastructure award is \$50,000 per application.

The Community Design Funding Program funds physical implementation of Blueprint principles. There are three award categories:

- 1) Conventional: \$300,000 to \$4 million; Pre-construction \$150,000-\$500,000.
- 2) Complete Streets focus: \$1.5 million-\$4 million.
- 3) Non-Competitive: max \$100,000.

Table A-2
Yolo Rail Realignment
Assessment Area #3: Funding Concepts
Local, State, Federal Government and Private-Sector Funding Options Detail - Project Planning

Mechanism	Description	Implementation
State Grant Funding Program: Active Transportation Program	The ATP consolidates various transportation programs, including the federal Transportation Alternatives Program, state Bicycle Transportation Account, and federal and state Safe Routes to School programs into a single program to:	Eligible applicants include local, regional , or state agencies, Caltrans, transit agencies, schools, tribal governments, and nonprofits. There are no matching funds required. The minimum request for Active Transportation Program funds that will be considered is \$250,000. This minimum does not apply to non-infrastructure projects. Safe Routes to Schools projects, Recreational Trails projects, and plans. There is no maximum grant award request.
	Increase the proportion of biking and walking trips, Increase safety for non-motorized users, Increase mobility for non-motorized users, Advance the efforts of regional agencies to achieve greenhouse gas reduction goals, Enhance public health, including the reduction of childhood obesity through the use of projects eligible for Safe Routes to Schools Program funding. Ensure disadvantaged communities fully share in program benefits (25% of program), and Provide a broad spectrum of projects to benefit many types of active transportation users.	This funding can be used to create an Active Transportation Plan in disadvantaged communities, including bike, pedestrian, safe routes to schools, or comprehensive active transportation plans.
State Grant Funding Program: Caltrans Sustainable Transportation Planning Grant Program	California Department of Transportation (Caltrans) Sustainable Transportation Planning Grants are intended to strengthen the economy, promote equity, and protect the environment. The results of these grants should improve mobility and lead to the programming and implementation of transportation improvement projects. Along with a strong focus on transportation, these projects should also emphasize safety, jobs , housing, sustainable communities, and public participation.	Grants are awarded for strategic partnerships and sustainable communities. The funding available fluctuates each year. Projects range from \$100,000 - \$500,000. There is a match required of 11.47%.

Project Planning

Table A-2
Yolo Rail Realignment
Assessment Area #3: Funding Concepts
Local, State, Federal Government and Private-Sector Funding Options Detail - Project Planning

Mechanism	Description	Implementation
Federal Grant Funding Program: Economic Development Administration Planning Program	EDA assists eligible recipients in developing economic development plans and studies designed to build capacity and guide the economic prosperity and resiliency of an area or region. The Planning program helps support organizations, including District Organizations, Indian Tribes, and other eligible recipients, with Short Term and State Planning investments designed to guide the eventual creation and retention of high-quality jobs, particularly for the unemployed and underemployed in the Nation's most economically distressed regions. As part of this program, EDA supports Partnership Planning investments to facilitate the development, implementation, revision, or replacement of Comprehensive Economic Development Strategies (CEDS), which articulate and prioritize the strategic economic goals of recipients' respective regions.	Applications are accepted on a continuous basis. The maximum grant award is \$300,000. Local agencies need to work with their Regional EDA representative in advance of applying for funding.

Project Planning

Table A-2
Yolo Rail Realignment
Assessment Area #3: Funding Concepts
Local, State, Federal Government and Private-Sector Funding Options Detail - Project Planning

Mechanism	Description	Implementation
Federal Grant Funding Program: Safe Routes to School	Originally a five year program, extensions through continuing resolution have been enacted by Congress allowing the program to remain funded for the purpose of: 1) enabling and encouraging students in kindergarten through eighth grade (K-8), including students with disabilities, to safely walk and bicycle to school, 2) making walking and bicycling to school a more appealing mode choice, and 3) facilitating the planning, design, and implementation of projects that will improve safety, environment, and overall quality of life. Consistent with other federal-aid programs, each State Department of Transportation is held responsible for developing and implementing the program. Some expected outcomes of the program include: <ul style="list-style-type: none"> • Increased pedestrian and bicycle traffic safety around schools • More children walking and bicycling to and from schools • Decreased vehicular traffic congestion around schools • Reduced childhood obesity • Improved air quality, community safety and security, and community involvement • Improved partnerships among schools, local agencies, parents, and other stakeholders 	Any local or regional agency is eligible to apply for SRTS funds. Projects are defined as either infrastructure or non-infrastructure. After successful applicants are notified that their project has been selected for funding, that project must first be programmed into a Federal Transportation Improvement Program (FTIP). The FTIP is managed by the Metropolitan Planning Organization (MPO) or Regional Transportation Planning Agency (RTPA) in their region. Funding needs to be allocated by Congress each year, and fluctuates. Funding can be used for planning.

פיננסים

Source: EPS and Nossaman LLP

Table A-3
Yolo Rail Realignment Assessment Area #3: Funding Concepts
Local, State, Federal Government and Private-Sector Funding Options Detail - Capital Improvements

Mechanism	Description	Implementation	Other Considerations
Enhanced Infrastructure Financing District (EIFD)	<p>Local agencies can establish an Enhanced Infrastructure Financing District (IFD) for a given project or geographic area of the jurisdiction. The EIFD captures incremental increases in property tax revenue from future development otherwise accruing to the county's General Fund that can be used for to finance public capital facilities or other specified projects of communitywide significance, including, but not limited to, brownfield restoration and other environmental mitigation; the development of projects on former military bases; the repayment of the transfer of funds to military base reuse authority; the acquisition, construction, or rehabilitation of housing for persons of low and moderate income for rent or purchase; the acquisition, construction, or repair of industrial structures for private use; transit priority projects; and projects to implement a sustainable communities strategy.</p>	<p>Requires approval by every local taxing entity that will contribute its property tax increment and also requires 55 percent voter approval to issue bonds (landowner vote if less than 12 registered voters in jurisdiction).</p> <p>Under current statute, debt issuance is limited to short term debt, and constrained by the timing of property tax increment growth. Local jurisdictions considering dual implementation of Mello-Roos CFD (below) to accelerate and expand debt issuance capability.</p> <p>Additionally, a city or county that created a Redevelopment Agency (RDA) is prohibited from creating an EIFD unless:</p> <ul style="list-style-type: none"> I. The Successor Agency of the former RDA (SARA) has received a finding of completion. II. The city or county certifies to the Department of Finance that no RDA assets subject to litigation have been or will be used to benefit an EIFD. III. The State Controller has completed a review of RDA asset transfers and the SARA and the city or county have complied with any review requirements. 	<p>Initial debt capacity may not match need for required upfront capital costs.</p> <p>EIFD boundaries should carefully consider and balance objectives of maximizing capture of value increases and limited timeframes for allowable debt issuance (30 years from EIFD formation).</p>
Community Revitalization and Investment Authorities (CRIA)	<p>Allows a city, county, or a special district - or any combination of these via entering into joint powers agreement - to establish a CRIA to revitalize disadvantaged communities through planning and financing infrastructure improvements and upgrades, economic development activities; and affordable housing via tax increment financing based, in part, on the former community redevelopment law.</p>	<p>The entities forming a CRIA must produce and adopt a CRIA Plan (Plan) that guides its revitalization programs and authorizes receipt and expenditure property tax increment revenues. The Plan must include:</p> <ul style="list-style-type: none"> - Statement of principal goals and objectives - Description of the deteriorated or inadequate infrastructure and program for repair and upgrade - Housing program - A program to remedy or remove the release of hazardous substances - A program to provide funding for or otherwise facilitate the economic revitalization of the area - A fiscal analysis setting forth projected receipt of revenues and expenses over five-year planning horizon - Time limits to establishing loans, advances and indebtedness and fulfilling all the authority's housing obligations. 	<p>25 percent of property tax increment revenues must be used to increase, improve, and preserve the community's supply of low and moderate income families.</p> <p>Additionally, A CRIA can be created in the following two locations:</p> <ol style="list-style-type: none"> 1. Areas where not less than 80 percent of the land contains census tracts or census block groups meet both of these conditions: (i) an annual median household income that is less than 80% of the statewide annual median income; and (ii) three of four following conditions: <ul style="list-style-type: none"> a. non-seasonal unemployment at least 3 percent higher than statewide average; b. crime rates at least 5 percent higher than statewide median; c. deteriorated or inadequate infrastructure, and d. deteriorated commercial or residential structures. 2. A former military base that is principally characterized by deteriorated or inadequate infrastructure or structures. <p>The Plan must be adopted over a series of three public hearings. Proceedings to adopt the Plan must terminate if there is a majority protest (50 percent or higher) from the combined number of property owners and residents in the area. An election on whether to adopt the Plan must be called if between 25 to 50 percent of the combined number of property owners and residents file a protest.</p>

Table A-3
Yolo Rail Realignment
Assessment Area #3; Funding Concepts
Local, State, Federal Government and Private-Sector Funding Options Detail - Capital Improvements

Mechanism	Description	Implementation	Other Considerations
Mello-Roos Community Facilities District (CFD)	Allows local agencies to create assessment districts and raise funds through special property taxes. Provides financing for public capital investment and operating improvements within the district through tax-exempt bonds sponsored by a public agency.	Requires a 2/3 rd approval in a resident (or land owner) vote to allow FFD special taxes to be collected. EJFD property tax increment may also be used as repayment source for debt service on municipal bonds.	Initial debt capacity may not match need for required upfront capital costs.
Benefit Assessment District	Benefit Assessment Districts allow cities, counties, or special districts to finance the costs of needed services by assessing area property owners, based on benefit received by funded improvements or facilities.	The governing body must generate a detailed professional engineer's report outlining the proposed assessment area proposed project costs, annual cost to each property, and the benefit formula used to determine each property's share of the cost.	Benefit assessments cannot be based on property value. Each assessment district includes a benefit formula and each parcel in the service area is assessed according to the specific benefit it receives from the services and improvements.
Disposition of Public Land/Assets	Most common types of benefit assessments include: <ul style="list-style-type: none"> - Fire suppression assessments - Flood control assessments - Storm drain assessments - Water assessments - Sewer assessments - Sanitation assessments 	Requires a greater than 50 percent ballot approval that is weighted based on the financial obligation of each property owner.	Requires local government asset appropriate for disposition and governing body approval, subject to a number of requirements.
General Fund Contributions/Dedications	Local jurisdiction may dispose of its property assets (through sale or ground lease)	Requires local government asset appropriate for disposition and governing body approval, subject to a number of requirements.	General Fund contributions are part of local agency annual budget appropriations process and must be approved by the governing body. (does not require voter approval).
Voter Approved Tax Measures	A dedication of General Fund property or sales tax revenue, low interest loans, one-time contributions, and other discretionary financial contributions.	Voters can approve parcel or sales tax increases for a specific purpose or general revenue purposes.	Requires 2/3 rd voter approval for special tax and majority approval for general tax.
Development Impact Fees	Annual revenue stream may be used as repayment source for issuance of municipal bonds (Special Tax or Tax Allocation Bonds).	One-time fees charged to new development to cover "fair share" infrastructure cost needed to accommodate growth. Often a source of local "matching" funds.	Approved by the governing body vote (does not require property owner approval).
Other Fees & Exactions (including "in-lieu" fees)	There are a number of other mechanisms such as project-specific fees and exactions that could be used as funding mechanisms.	These can be negotiated on a case-by-case basis (e.g., Development Agreement) or approved generally for areas within the local jurisdiction, subject to a number of requirements.	Developers raise and organize private financing. Development Agreements will specify terms of credits or reimbursement for such investments.
Private Capital/Developer Equity	Developers may fund portion of infrastructure and facilities with private capital and/or commercial lending. A portion of such investment may be subject to reimbursement.		

Table A-3
Yole Rail Realignment:
Assessment Area 33's Funding Concepts
Local, State, Federal Government and Private-Sector Funding Options Detail - Capital Improvements

Mechanism	Description	Implementation	Other Considerations
Revenue Bond	Allows local agencies to issue bonds supported by enterprise revenues (fees charged to customers for enterprise utilities or services). Generally limited to enterprise infrastructure (e.g. water, sewer, parking); could be a source of area-specific financing using a local rate surcharge.	Articulation of enterprise improvements and precise cost estimates and related rate-setting decisions; Local agency adopts resolution to form district, conducts financing plan, and develops rate and method of apportionment.	Proposition 218 limits use of ratepayer funds to fund infrastructure and facilities benefiting new development. If based on an area surcharge, revenue will be available proportional to development.
Municipal Lease Financing	An agreement to lease a public facility with shares in the flow of lease revenue sold as a means of generating upfront revenue for the facility.	Lease payments would come from the local agency annual budget and must be approved by the local agency (does not require voter approval).	Requires identification of public asset to be pledged.
Local Grant Funding Program: Yolo-Solano Air Quality Management District Clean Air Funds	Yolo-Solano AQMD's Clean Air Funds Program has allowed private business, non-profit organizations and public agencies to apply for grants for projects designed to reduce emissions from motor vehicles. Projects awarded Clean Air Funds include repainting or retrofitting diesel trucks and off-road equipment that do not qualify for other regional programs, new electric vehicles, construction of pedestrian and bicycle facilities, transit projects and public information and education programs.	Proposals can be made in one of three categories: clean transportation and low-emission vehicles; alternative staff evaluates project proposals based on a board of criteria and makes recommendations to two Board committees: the Yolo Clean Air Funds Committee and the Solano Transportation Authority (STA) Clean Air Funds Committee. The two committees are required due to the differing fund sources and levels.	Those committees then make recommendations to the full Board, with a final vote typically taking place in June. Funds are then allocated for the following fiscal year.
State Grant Funding Program: Recreational Trails Program	The Recreational Trails Program (RTP) provides funds to the States to develop and maintain Recreational Trails and trail-related facilities for both non-motorized and motorized Recreational Trail uses.	Applicants awarded Clean Air Funds are required to submit a final report to the District one year after project completion.	There is no maximum or minimum award limit. Cities, counties, districts, state agencies, federal agencies, and nonprofit organizations with management responsibilities over public lands are eligible. There is a 12% match required. Applications are usually due late Summer each year.
State Grant Funding Program: Land and Water Conservation Fund	On February 14, 1963, President Kennedy's Administration proposed legislation to establish a "Land and Water Conservation Fund" to assist States in planning, ACQUISITION, and DEVELOPMENT of recreation lands. Examples of projects include: development of a new park, expand existing parks, renovate existing or create new outdoor facilities, provide community space for healthy lifestyles, engage community residents during the project concept and design process, and increase the inventory of California Wetlands under federal protection that also meet public outdoor recreation needs.	Cities, Counties, JPA's, park districts, and special districts are eligible applicants. The maximum award amount is \$2 million, however the State Parks Department typically only receives \$3-4 million annually for the whole State. There is a 50% match requirement, and the land must be held in perpetuity.	

Table A-3
Yolo Rail Realignment
Assessment Area #4: Funding Concepts
Local, State, Federal Government and Private-Sector Funding Options Detail - Capital Improvements

Mechanism	Description	Implementation	Other Considerations
State Grant Funding Program: Active Transportation Program	The ATP consolidates various transportation programs, including the Federal Transportation Alternatives Program; state Bicycle Transportation Account, and federal and state Safe Routes to School programs into a single program to:	Eligible applicants include local, regional, or state agencies, Caltrans, transit agencies, schools, tribal governments, and nonprofits. There are no matching funds required. The minimum request for Active Transportation Program funds that will be considered is \$250,000. This minimum does not apply to non-infrastructure projects, Safe Routes to Schools projects, Recreational Trails projects, and plans. There is no maximum grant award request.	
State Grant Funding Program: Wildlife Conservation Board Public Access Program	<p>Increase the proportion of biking and walking trips.</p> <p>Increase safety for non-motorized users.</p> <p>Increase mobility for non-motorized users.</p> <p>Advance the efforts of regional agencies to achieve greenhouse gas reduction goals.</p> <p>Enhance public health, including the reduction of childhood obesity through the use of projects eligible for Safe Routes to Schools Program funding.</p> <p>Ensure disadvantaged communities fully share in program benefits (25% of program), and</p> <p>Provide a broad spectrum of projects to benefit many types of active transportation users.</p>	<p>Grant funding applications for public access are accepted on a year-round basis. The WCB meets four times each year, normally in February, May, August, and November to consider approval of funding for projects.</p> <p>While applications may be submitted throughout the year, WCB may need up to six months to review, prepare, and present proposals to the Board for funding consideration. Upon receipt of a project application, WCB staff will review the application for completeness and qualifications based on program criteria. The WCB will also assess the project in terms of funding sources, to determine if there are sufficient and appropriate fund available for the project. The WCB will communicate its determination back to the contact listed on the application, as to, if and when the project will be scheduled for Board consideration.</p>	<p>Project Criteria</p> <ul style="list-style-type: none"> • Projects must be supported by an existing or demonstrated wildlife oriented public access need in the area. • Project improvements must be opened to the public during normal operation hours, in most cases daylight hours, sunrise to sunset. • Projects must be ADA accessible, when applicable. • Project Proposants must demonstrate an ability to maintain and operate the improvements over the management term (25 years). • Projects must be reviewed and supported by the California Department of Fish and Wildlife. • Project improvements should be designed to ensure long-term life, with minimal repairs, maintenance and upkeep. <p>Desirable Features</p> <ul style="list-style-type: none"> • Projects that accommodate multiple wildlife-oriented public access uses. • Projects with matching funds, with 50% being the preferred amount. • Projects where all CEQA, design and permitting are, or will be, completed prior to WCB funding the project, in these cases the cost to complete these tasks can be accounted for as project proponent match.

Table A-3
Yolo Rail Realignment
Assessment Area #3: Funding Concepts
Local, State, Federal Government and Private-Sector Funding Options Detail - Capital Improvements

Capital Improvements			
Mechanism	Description	Implementation	Other Considerations
State Grant Funding Program: River Parkways Program	<p>Projects must involve natural creeks, streams and/or rivers, even if they flow only during the rainy season, or channelized or culverted creeks, streams and/or rivers.</p> <p>Projects must meet at least two of the following five statutory conditions:</p> <ul style="list-style-type: none"> • Recreation - Provide compatible recreational opportunities, including trails for strolling, hiking, bicycling and equestrian uses along rivers and streams. • Habitat - Protect, improve, or restore riparian or riparian habitat, including benefits to wildlife habitat and water quality. • Flood Management - Maintain or restore the open space character of lands along rivers and streams so that they are compatible with periodic flooding as part of a flood management plan or project. • Conversion to River Parkways - Convert existing developed riverfront land into uses consistent with river parkways. • Conservation and Interpretive Enhancement - Provide facilities to support or interpret river or stream restoration or other conservation activities. 	<p>There is no funding left for this Program, however the annual State Budget and the State Legislature may allocate funding in the future for this Program, as was done in the 2015/16 Budget. In previous rounds, the grant award was capped at \$500,000 per application. Only one application was allowed per entity.</p>	
State Grant Funding Program: Environmental Enhancement and Mitigation Program	<p>The EEM Program was established by the Legislature in 1980 and amended on September 26, 2013. It offers \$7 million each fiscal year for grants to state, local, federal and nonprofit organizations. Eligible projects must be directly or indirectly related to the environmental impact of the modification of an existing transportation facility or construction of a new transportation facility.</p> <p>The EEM Program encourages projects that produce multiple benefits which reduce greenhouse gas emissions, increase water use efficiency, reduce risks from climate change impacts, and demonstrate collaboration with local, state and community entities.</p> <p>Grants are awarded in the following categories:</p> <ul style="list-style-type: none"> • Urban Forestry Projects are designed to offset vehicular emissions of carbon dioxide through the planting of trees and other suitable plants. • Resource Lands Projects are for the acquisition, restoration, or enhancement of resource lands (wetlands, wildlife habitat, wetlands, forests, or other significant natural areas) to mitigate the loss of or detriment to such lands within or near the right of way for transportation improvements. 	<p>Public Agencies are eligible to apply. Applications are due each summer, typically in July. Only one development application can be submitted per entity. Environmental review must be complete in order to submit an application. Grants are generally limited to a \$500,000 award amount.</p>	<p>Mitigation Projects Beyond the Scope of the Lead Agency responsible for assessing the environmental impact of the proposed transportation improvement.</p>

Table A-3
Yolo Rail Realignment
Assessment Area #3: Funding Concepts
Local, State, Federal Government and Private-Sector Funding Options Detail - Capital Improvements

Mechanism	Description	Implementation	Other Considerations
State Grant Funding Program: Affordable Housing and Sustainable Communities Program	The AHSC Program will provide grants and/or loans to projects that will achieve GHG reductions and benefit Disadvantaged Communities through increasing accessibility of affordable housing, employment centers and key destinations via low-carbon transportation resulting in fewer vehicle miles traveled (VMT) through shortened or reduced vehicle trip length or mode shift to transit, bicycling or walking. Three project prototypes have been identified to implement this strategy: 1) Transit Oriented Development (TOD) Project Areas; or 2) Integrated Connectivity Project (ICP) Project Areas; or 3) Rural Innovation Project Areas (RIPA).	Local governments are eligible applicants. Eligible uses include: Affordable Housing Developments, Housing Related Infrastructure, Sustainable Transportation Infrastructure, Transportation-Related Amenities, and Programs. The maximum award is \$20 million and the minimum award is \$1 million for TOD projects, and \$500,000 for ICP and RIPA Project Areas.	Project applications are due annually on August 1st. It is important to work closely with the National Park Service prior to submitting an application. Rivers, Trails and Conservation Assistance program does not award monetary grants or loans. Instead, our staff with extensive experience in community-based outdoor recreation and conservation will work with an applicant to get the project on the ground. If funding is necessary to achieve project goals, the National Park Service can often assist partners in identifying and securing sources of financial assistance.
Federal Grant Funding Program: River, Trails, and Conservation Assistance Program	The Rivers, Trails and Conservation Assistance program extends and expands the benefits of the National Park Service throughout the nation to connect all Americans to their parks, trails, rivers, and other special places. Staff helps community groups, National Parks, nonprofits, state and local governments, tribes plan parks and trails, conserve and improve access to parks and natural areas, and create recreation opportunities through locally led partnerships. The program provides a National Park Service employee to help organize, strategize, build public participation, and help implement a conservation and/or recreation project that is important to the community.	Local governments are eligible applicants. The maximum award is \$5 million and the minimum award is \$100,000. It is important to work with the Regional EDA Representative on the development of the application.	The US Department of Transportation is still working on the implementation of the Act and more information will be available about the programs and funding areas later in 2016.
Federal Grant Funding Program: Economic Development Administration	Specifically, under the Economic Development Assistance programs (EDAP) Federal Funding Opportunity (FFO) announcement, EDA will make construction, non-construction, and revolving loan fund investments under the Public Works and Economic Adjustment Assistance (EAA) Programs. Grants made under these programs will leverage regional assets to support the implementation of regional economic development strategies designed to create jobs, leverage private capital, encourage economic development, and strengthen America's ability to compete in the global marketplace. Through the EDAP FFO, EDA solicits applications from rural and urban communities to develop initiatives that advance new ideas and creative approaches to address rapidly evolving economic conditions.	On December 4, 2015, President Obama signed into law the Fixing America's Surface Transportation Act, or "FAST Act." It is the first surface transportation bill that provides long-term funding certainty for move forward with critical transportation projects, like new highways and transit lines, with the confidence that they will have a Federal partner over the long term. See more at: https://www.transportation.gov/fastact#stash10QSVcl.dptf	

Table A-3
Yolo Rail Realignment
Assessment Area A3: Funding Concepts
Local, State, Federal Government and Private-Sector Funding Options Detail - Capital Improvements

Mechanism	Description	Implementation	Other Considerations
Federal Grant Funding Program: TIGER	National Infrastructure Investments, or TIGER Discretionary Grants, originally were funded through the American Recovery and Reinvestment Act of 2009. More recently, they have been funded annually through the appropriations process. Funds for the FY 2015 TIGER Program, the most recent year for which funds were available, will be awarded on a competitive basis for road, rail, transit, bicycle/pedestrian, port, and multi-modal projects that will have a significant impact on the nation, a metropolitan area, or a region.	Eligible project sponsors include any public entity, including municipalities, counties, port authorities, tribal governments, MPOs, or others. Projects may be multi-jurisdictional. Priority is given to projects that demonstrate strong collaboration among a broad range of participants, integration of transportation with other public service efforts, or projects that are the product of a robust planning process." Upon the appropriation of funds, the Federal Government will issue a Notice of Funding Availability (NOFA). Pre-applications typically are due within 3-4 weeks, with full applications for funding due roughly 8 weeks subsequent to NOFA issuance. The benefit-cost analysis element can be a time consuming and costly element of applications for construction funds.	
Federal Grant Funding Program: Outdoor Legacy Recreation Partnership Program	This is a new grant program funding through the Land and Water Conservation Fund. These funds will help acquire and/or develop land for public parks and other outdoor recreation spaces in disadvantaged neighborhoods. The first and last round was funded in 2014; however this program could be funded in the future.	Local governments are eligible applicants. This is a highly competitive program, as there was only \$3 million available nation wide last round. Matching 1:1 grants will be awarded in amounts between \$250,000 and \$500,000 federal share.	

capital

Table A-4
Yolo Rail Realignment
Assessment Area #3: Funding Concepts
Local Government and Private-Sector Funding Options Detail - Operations and Maintenance

Mechanism	Description	Implementation
Mello-Roos Community Facilities District (CFD)	Allows local agencies to create assessment districts and raise funds through special property taxes. Provides financing for public capital investment and operating improvements within the district through tax-exempt bonds sponsored by a public agency.	Requires a 2/3 rd s approval in a resident (or land owner) vote to allow CFD special taxes to be collected.
Benefit Assessment District	Benefit Assessment Districts allow cities, counties, or special districts to finance the costs of needed services by assessing area property owners.	The governing body must generate a detailed professional engineer's report outlining the proposed assessment area, proposed project costs, annual cost to each property, and the benefit formula used to determine each property's share of the cost.
Other Fees & Exactions (including "in-lieu" fees)	A dedication of General Fund property or sales tax revenue, low interest loans, one-time contributions, and other discretionary financial contributions. There are a number of other mechanisms, such as project-specific fees and exactions, that could be used as funding mechanisms.	Requires a greater than 50 percent ballot approval that is weighted based on the financial obligation of each property owner.
Private Capital (Track Maintenance)	Rail operators would fund operations and maintenance of relocated rail line.	Benefit assessments cannot be based on property value. Each assessment district includes a benefit formula and each parcel in the service area is assessed according to the specific benefit it receives from the services and improvements.
Voter Approved Tax Measures	Voters can approve parcel or sales tax increases for a specific purpose or general revenue purposes.	General Fund contributions are part of local agency annual budget appropriations process and must be approved by the governing body (does not require voter approval). These can be negotiated on a case-by-case basis (e.g., Development Agreement) or approved generally for areas within the local jurisdiction, subject to a number of requirements.

Source: EPS.

Voter Approved Tax Measures

Voters can approve parcel or sales tax increases for a specific purpose or general revenue purposes.

General Fund Contributions/Dedications

Other Fees & Exactions (including "in-lieu" fees)

A dedication of General Fund property or sales tax revenue, low interest loans, one-time contributions, and other discretionary

There are a number of other mechanisms, such as project-specific fees and exactions, that could be used as funding mechanisms.

Rail operators would fund operations and maintenance of relocated rail line

Requires 2/3rds voter approval for special tax and majority approval for general tax.

08 m detail