

**Residents and Business Owners Against
The California High-Speed Rail
Authority's Proposed SR 14 Route
PETITION**



**Residentes y Comerciantes Encontra
De La Ruta SR14 Propuesta Por La
Autoridad Del Tren De Alta
Velocidad de California
PETICIÓN**

ACTION PETITIONED FOR

We, the undersigned, are opposed to the California High-Speed Rail Authority's proposed route along the SR 14 Corridor through the City of San Fernando. This poorly conceived proposal will split the San Fernando community in half, obliterate the City's historic downtown and civic center areas (including the Police Department, City Hall, Public Works Operations Facilities, the San Fernando Middle School Auditorium, and the Cesar Chávez Monument) and will result in enormous economic and environmental harm to the community. We demand that any SR 14 proposal or any alternative route that passes through the City of San Fernando be immediately removed from consideration in the Palmdale to Burbank Project Section.

PETICIÓN

Nosotros, los abajo firmantes, nos oponemos a la ruta a lo largo del Corredor SR 14 a través de la Ciudad de San Fernando que está haciendo propuesta por la Autoridad del tren de Alta Velocidad. Este plan pesimamente concebido dividirá a la comunidad de San Fernando a la mitad, destruirá el centro histórico y áreas del centro cívico (incluyendo el departamento de policía, el ayuntamiento, el centro de operaciones del departamento de Obras Públicas, el auditorio de la escuela San Fernando Middle School, y el monumento de Cesar Chávez) y ocasionara enormes daños económicos y ambientales a la comunidad. Exigimos que cualquier plan del SR 14 o cualquier otra ruta alternativa que pase a través de la Ciudad de San Fernando se inmediatamente retirada de cualquier consideración en la sección del proyecto de Palmdale a Burbank.

PRINTED NAME NOMBRE EN LETRA DE MOLDE	ADDRESS DIRECCIÓN	SIGNATURE FIRMA	DATE FECHA
1 Jeannette Sandoval	11658 Garrick Ave ⁹¹³⁴³ CVT	[Signature]	4/12/16
2 Maria Carriello	1333 Hewitt St SF	[Signature]	
3 MARIA CARRILLO			
4 MICHAEL REMENIH	635 HAGAR ST	[Signature]	4/12/16
5 Janet Gibson	13691 GARRO #499 91342	[Signature]	4/12/16
6 Sylvia Ballin	5260 N Huntington	[Signature]	4/12/16
7 Mary Mendoza	623 S. BRAND Blvd SF	[Signature]	4/12/16
8 IRVETTE SMITH	13211 DeGarmo Sycamore	[Signature]	4/12/16
9 Jerry Smith	" " "	[Signature]	4/12/16
10 Alejandra Ahumada	13107 corcoran St. SanFer	[Signature]	4/12/16
11 Jaime Herrera	401 N. Hagar St S.F.	[Signature]	4/12/16
12 Victor Sosa	513 S. Brand Blvd	[Signature]	4/12/16
13 JOEL FAJARDO	225 N MEJER ST	[Signature]	4/12/16
14 DAVID BERNAL	702 4TH ST	[Signature]	4/12/16
15 STEVEN BRAVO	659 N. LAZARD ST.	[Signature]	4-12-16
16 Nick Kimball	24135 Del Monte Dr.	[Signature]	4/12/16
17 ERIC GUEFEN	1101-1235 TRUMAN ST.	[Signature]	4/12/16
18 FRED RAMIREZ	5119 ROCKLAND AVE	[Signature]	4/12/16
19 ANTHONY VAIRIO	910 FRSI ST, SAN FERNANDO	[Signature]	4/12/16
20 Robert Gonzalez	117 Moreil St San Fernando	[Signature]	4/12/16

High Desert Multipurpose Corridor Project Area



STATE CAPITOL
P.O. BOX 942849
SACRAMENTO, CA 94249-0039
(916) 319-2039
FAX (916) 319-2139

DISTRICT OFFICE
302 SOUTH BRAND BOULEVARD, SUITE 212
SAN FERNANDO, CA 91340
(818) 365-2464
FAX (818) 365-8083

E-MAIL
Assemblymember.López@assembly.ca.gov

Assembly California Legislature



PATTY LÓPEZ
ASSEMBLYWOMAN, THIRTY-NINTH DISTRICT

COMMITTEES
AGING AND LONG-TERM CARE
HOUSING AND COMMUNITY
DEVELOPMENT
HUMAN SERVICES
PUBLIC SAFETY
RULES
WATER, PARKS AND WILDLIFE

SELECT COMMITTEE
FOSTER CARE

April 11, 2016

California High Speed Rail Authority
Anaheim Convention Center
Arena Room 1
800 West Katella Avenue
Anaheim, California 92802

Dear Dan Richards, Chair,

It is with a sense of reaffirmation, and duty to represent the needs of my constituents, that I unequivocally continue to oppose this project.

The High Speed Rail project has been, and continues to be, one of the most heated and contested projects our District 39 has ever witnessed. It has created, organized and galvanized many groups, communities and entities against it. It has produced such backlash, as I understand, for many reasons which continue to remain unresolved.

The communities who would have to acquiesce to the demands of what would be the biggest single transportation project currently in the United States of America, have not asked for it, will not utilize it, and will not see anything except rails and eyesores reminding them of what was imposed to them.

The project does not provide sufficient contractual returns for businesses to be seriously considered as an incentive or a welcomed catalyst for an economic boost to District 39. I am currently not aware of any serious plan, amount of funding, or number of contracts that will target the most impoverished areas and businesses of District 39, and still we continue to hear about how these communities will gain and improve because of the project.

Even as proposed routes between Palmdale to Burbank continue to be modified due to the high level of pressure from constituents, the communities from District 39 continue to be affected and people fear that their way of life will be forever affected against their will. I have to stand firm with my constituents and demand that their fears are heard.

The project needs to address the demands from these constituent groups and begin to exercise a different and more robust approach to stakeholder engagement. It is necessary that those most affected, those who traditionally have no voice, and those who are



clamoring for a commitment to transparency and communication finally have an opportunity to experience such obligation.

Even though I can authoritatively express the feelings from the communities in my District, as I have through this letter, I feel the need to speak in behalf of many Californians who are also in strong opposition to this project at a time when our state is facing many crises and could use these funds to meet these challenges head-on.

I am willing to put any effort necessary to work, in partnership the appropriate staff, on engaging our communities so that they feel satisfied and receive necessary resolution. Thank you for taking my input.

Sincerely,

A handwritten signature in black ink, appearing to read "Patty King". The signature is written in a cursive, flowing style with a large initial "P" and a long, sweeping underline.

Assemblywoman, District 39



Mr. Dan Richard
Chairperson, California High-Speed Rail Authority
770 L Street, Suite 800
Sacramento CA 95814

April 12, 2016

RE: California High Speed Rail (CHSRA) Draft 2016 Business Plan

The San Joaquin Valley Regional Planning Agencies' Directors' Committee, representing the eight counties of the San Joaquin Valley, is submitting this letter detailing our concerns with the proposed new routes in the CHSRA Draft 2016 Business plan, the lack of support for the blended service concept, and our continued dismay with the outreach and coordination efforts between the CHSRA and its public sector partners. We stand in support of the concerns outlined by the Central Valley Rail Working Group, who has been involved in the coordinated planning for passenger rail service between Sacramento and Merced since 2006.

The draft business plan greatly delays closing the gap between Northern and Southern California. The 2012 Revised Business Plan stated the closing of this gap was "the state's highest priority for intercity rail". For many years the promise of the early HSR connection at Merced and improvements to conventional intercity rail, commonly called the "blended service concept" have been essential for support from the Northern San Joaquin Valley and Sacramento region. Not only does the current draft plan leave in doubt any real funding for connections between Merced and Sacramento, the draft plan also does not provide funding support for improved connections between Sacramento and San Jose or between Merced and San Jose.

The draft business plan includes a commitment to invest \$2.1 billion between Burbank and Anaheim. But previously, the CHSRA was also committed to providing funding support for investments in "conventional" services, which would connect to the Initial Operating Segment (IOS) of high speed rail. While staff recognizes there are investment needs in the Burbank to Anaheim corridor, the draft plan does not propose "blended service" investment priorities for Northern California that will benefit the Northern San Joaquin region for decades.

Three intercity rail corridors in Northern California offer significant promise to increase ridership for the initial operating segment of HSR. Specific investments along these three corridors would be developed through active rail corridor planning efforts the Central Valley Rail Working Group has been involved in over recent years:

San Joaquin
Council of
Governments
Andrew Chesley - Chair

Tulare County
Association of
Governments
Ted Smalley - Vice Chair

Fresno
Council of
Governments
Tony Boren

Kern
Council of
Governments
Ahron Hakimi

(209) 235-0600
(209) 235-0438 (Fax)



Kings County
Association of
Governments
Terri King

Madera County
Transportation
Commission
Patricia Taylor

Merced County
Association of
Governments
Marjie Kirn

Stanislaus
Council of
Governments
Rosa Park

<http://sjvcogs.org>



555 East Weber Ave.
Stockton, CA, 95202



- \$1.0 billion in connectivity improvements for San Joaquin Rail Service between Fresno and Sacramento
- \$1.0 billion in connectivity improvements, for the Altamont Corridor Express (ACE) Service between Merced and San Jose through the Altamont Pass
- \$1.0 billion in connectivity improvements along the Capital Corridor between San Jose and Sacramento
- Include funding from the Central Valley Wye connection to the Merced Station in order to improve Northern California high speed rail ridership prospects

The CHSRA 2016 Business Plan should include an enforceable commitment for investing in near-term conventional rail connectivity improvements between Sacramento, the Bay Area and Northern San Joaquin Valley. It is important for the CHSRA to specify where this funding will come from and that it will be a priority to have improved "conventional" intercity rail service. Intercity rail investments along the San Jose to Sacramento and Fresno to Sacramento corridors can become an important "feeder" service to the Phase 1 HSR system.

Finally, we request that the CHSRA fulfill the earlier commitment for funds to support rail planning coordination in Northern California. As such, the Authority should release the \$53.9 million of Proposition 1A Funding authorized by the Budget Act of 2012 for planning work along the Merced to Sacramento Corridor. These funds are needed to enable the planning/environmental/engineering work needed to provide improved passenger rail service between the future Phase 1 HSR service and Sacramento and to provide the foundation for full Phase 2 HSR implementation

In closing, we request that CHSRA fulfill the promise in the prior business plan to fund the blended service needs in Northern California and to extend HSR to Merced. We also request that the southern portion of the alignment extend into the City of Bakersfield rather than a terminus 20 miles north at an almond orchard. The lack of consistent and ongoing communication and outreach between HSR staff and critical public partners like the metropolitan planning organizations continue to stymie and hinder our ability to proactively plan and coordinate for this significant public infrastructure project. Should you have any questions or need additional information, I can be reached at (209) 235-0600. Thank you in advance for your consideration in addressing our concerns.

Sincerely,



ANDREW T. CHESLEY

Executive Director, San Joaquin Council of Governments
Chair, San Joaquin Valley Regional Planning Agencies' Directors' Committee

CC Jeff Morales, Ben Tripousis, Chad Edison, Members of the Legislature

CENTRAL VALLEY RAIL WORKING GROUP

County of Sacramento

City of Sacramento

City of Elk Grove

City of Galt

Sacramento Area
Council of Governments

Sacramento Regional
Transit District

County of San Joaquin

City of Lodi

City of Stockton

City of Manteca

San Joaquin
Council of Governments

San Joaquin Regional
Rail Commission

San Joaquin
Regional Transit District

County of Stanislaus

City of Modesto

City of Turlock

Stanislaus
Council of Governments

County of Merced

City of Merced

Merced County
Association of Governments

*Member Agencies
in a
Memorandum of
Understanding*

April 8, 2016

Mr. Dan Richard
Chairperson, California High-Speed Rail Authority
770 L Street, Suite 800
Sacramento CA 95814

RE: California High Speed Rail (CHSRA) Draft 2016 Business Plan

Dear Chairperson Richard and Board Members,

The Central Valley Rail Working Group (CVRWG) includes all the regional transportation planning agencies, regional rail operators, and major cities in the Sacramento to Merced Corridor. CVRWG has been a very good partner in the development of the high-speed rail project. Our 20-agency working group has been involved in the coordinated planning for passenger rail service between Sacramento and Merced since 2006.

CVRWG has a number of concerns with the CHSRA Draft 2016 Business Plan. Among the concerns is the fact that the draft business plan greatly delays closing the gap between Northern and Southern California. The 2012 Revised Business Plan stated the closing of this gap was "the state's highest priority for intercity rail". For many years the promise of the early HSR connection at Merced and improvements to conventional intercity rail, commonly called the "blended service concept" have been essential for support from the Northern San Joaquin Valley and Sacramento region. Not only does the draft plan leave in doubt any real funding for connections between Merced and Sacramento, the draft plan also does not provide funding support for improved connections between Sacramento and San Jose or between Merced and San Jose.

The draft business plan includes a commitment to invest \$2.1 billion between Burbank and Anaheim. But previously, the CHSRA was also committed to providing funding support for investments in "conventional" services which would connect to the Initial Operating Segment (IOS) of high speed rail. While staff recognizes there are investment needs in the Burbank to Anaheim corridor, the draft plan does not propose "blended service" investment priorities for Northern California that will benefit Sacramento or the Northern San Joaquin region for decades. In order to fulfill the commitment for "blended service" there is a strong case for significant intercity rail funding to connect Sacramento and the Northern San Joaquin Valley to both Fresno and San Jose.

CVRWG requests that CHSRA fulfill the promise in the prior business plan to fund the blended service needs in Northern California and to extend HSR to Merced. Three intercity rail corridors in Northern California offer significant promise to increase ridership for the IOS of HSR. Investing in these corridors also offer significant promise for better connections for the Northern California Megaregion.

Specific investments along these three corridors would be developed through active rail corridor planning efforts CVRWG has been involved in over recent years:

- \$1.0 billion in connectivity improvements for San Joaquin Rail Service between Fresno and Sacramento
- \$1.0 billion in connectivity improvements, for the Altamont Corridor Express (ACE) Service between Merced and San Jose through the Altamont Pass
- \$1.0 billion in connectivity improvements along the Capital Corridor between San Jose and Sacramento
- Include an amount to be determined for the Central Valley Wye connection to the Merced Station that will improve Northern California high speed rail ridership prospects.

The CHSRA 2016 Business Plan should include an enforceable commitment for investing in near-term conventional rail connectivity improvements between Sacramento, the Bay Area and Northern San Joaquin Valley. It is important for the CHSRA to specify where this funding will come from and that it will be a priority to have improved “conventional” intercity rail service. Intercity rail investments along the San Jose to Sacramento and Fresno to Sacramento corridors can become an important “feeder” services to the Phase 1 HSR system.

A final CVRWG recommendation is that the CHSRA fulfill the earlier commitment for funds to support rail planning coordination in Northern California. As such, the Authority should release the \$53.9 million of Proposition 1A Funding authorized by the Budget Act of 2012 for planning work along the Merced to Sacramento Corridor. These funds are needed to enable the planning/environmental/engineering work needed to provide improved passenger rail service between the future Phase 1 HSR service and Sacramento and to provide the foundation for full Phase 2 HSR implementation. CVRWG believes the legislative intent behind the inclusion of the Merced to Sacramento planning funding in SB 1029 was to do the planning needed to support near-term passenger rail improvements. Despite the support and high level of interest from the region, there has been no progress in the planning for improved early investment for connecting rail service between Merced and Sacramento.

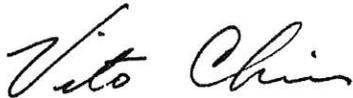
CHSRA has historically received support from CVRWG for many years, even though the Pacheco Pass route selected by CHSRA between the Bay Area and San Joaquin Valley does not serve the corridor between Merced and Sacramento as effectively as the Altamont Pass route would have. Support from Northern San Joaquin Valley and Sacramento helped pass Proposition 1A and members of the legislature from these regions provided key votes for CHSR in 2012 and 2014.

CVRWG and our rail coalition advocacy partners are hopeful that the final version of the CHSRA business plan can be one that benefits all of Northern California and can be supported by the CVRWG, our member agencies, and those that reside in our corridor.

Sincerely,



John Pedrozo
Merced County Board of Supervisors Merced
County Association of Governments



Vito Chiesa
Stanislaus County Board of Supervisors
Chair, Stanislaus Council of Governments



Bob Johnson
Lodi City Council
Chair, San Joaquin Regional Rail Commission



Patrick Hume
Elk Grove City Council
Sacramento Regional Transit District

On behalf of the Central Valley Rail Working Group

cc: Jeff Morales, Ben Tripousis, Chad Edison, Members of the Legislature

Kathleen Trinity
4343 Fairlane St.
Acton, CA 93510
April 12, 2016

California High Speed Rail Authority
770 L Street, Suite 1160
Sacramento, CA 95814

Good morning Chairman Richard and Board,

Now that you have narrowed down the possible routes through Acton, I think it's time to sit back and look at the price. I am not referring to the 64 to 68 billion dollar price tag, but to the price that will be paid by Acton, as well as by the other affected communities. I personally can forgive the debt of lost sleep, anxiety and lost time while dealing with the prospect of high speed rail through my community. What I cannot forgive, however, is the unnecessary blight and degradation of my community, not to mention a future of day long disruptive noise for the rest of our lives and the losses to equestrians, wildlife and habitat where the train will daylight. Most middle and lower income commuters will not be able to afford the daily ticket fare. There is no greater good here: this is a train that will be affordable by the well heeled, that will create massive amounts of CO2 during construction and in its initial years of operation on diesel. The affected communities will pay the price.

According to your most recent map showing huge viaducts over Red Rover Mine Canyon, Foreston to Kentucky Springs up to the homes near El Sastre, and in Aliso Canyon, it is apparent that there is little concern for my community. I am grateful for the effort to add more tunneling. I do not know the precise location of the other three viaducts, but I do know Red Rover. There are 112 homes, about thirty percent with horses. By placing the one mile viaduct at or near the parabolic focus of the canyon, you destroy it. Moving it up takes out more homes.

What I would like to know is why your engineers persist in this massive crossing with a huge noise generating four track tunnel in our east hill. There is clearly a pattern of tone deafness here; when we

ask for help, it just gets worse. This is not working with the community. Our elderly will be more prone to cardiovascular events; our infants will not sleep; and our equestrians will be driven out.

Please remove these horrible viaducts and at grade routes, especially with their booming tunnel entrances from Acton, and particularly at Red Rover.

Sincerely

Kathleen Trinity



April 11, 2016

California High Speed Rail Authority

Board Members

770 L Street, Suite 1160

Sacramento, CA 95814

Transmitted electronically to Zahida Mehirdel, Board Liaison: zahida.mehirdel@hsr.ca.gov

RE: High Speed Rail Authority Board Hearing, April 12, 2016 – Comments on Proposed Bakersfield to Palmdale Alignment

Dear Members of the Board:

The Large-scale Solar Association (“LSA”) appreciates the opportunity to comment on the proposed alignment of the High Speed Rail (“HSR”) from Bakersfield to Palmdale. LSA is a non-partisan, solar advocacy association that exists to support the development of utility-scale solar technologies through appropriate policy mechanisms. Member companies in the LSA represent leaders in the utility-scale solar industry who share a common understanding of and concern about development issues.

Phase 1 of the HSR project promises to connect two important regions of the state, bring economic development and jobs to the Central Valley and North Los Angeles County, upgrade the State’s transportation infrastructure, and reduce greenhouse gas (GHG) emissions. These benefits can and should be achieved in a manner that acknowledges and minimizes potential conflicts with other important state policy initiatives, including the State’s renewable energy and GHG reduction goals set forth in SB 350 and AB 32.

Kern County and North Los Angeles County are home to some of the state’s most attractive renewable energy sites, as evidenced by wind energy development in the Tehachapi area as well as solar energy projects in operation and development in the Palmdale/Lancaster area and in Kern County. Since 2009, Kern County alone has permitted over 11,000 MW of renewable energy installations, and it leads the state in installed renewable energy capacity.

As the solar industry responds to California’s recently enacted goal of 50% renewables by 2030, identifying low-conflict land that is technically suitable for solar development will become increasingly challenging. Historical and ongoing land use planning efforts are eliminating many siting opportunities due to environmental considerations and other factors, making preservation of suitable land stock for solar development in Kern County and, more generally, California’s Central Valley increasingly essential to the achievement of California’s renewable energy goals.

Like the HSR, solar energy brings significant benefits to this region, including significant capital investment, tax revenue, direct and secondary economic benefits, and job creation. Further, solar energy development in the area helps to meet the State's RPS and GHG reduction goals. Utility-scale photovoltaic facilities provide these benefits with little or no water consumption operations, a critical consideration not only during the current extended drought, but also under "normal" conditions as demands on California's limited water resources increase over time.

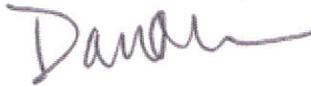
LSA urges the Authority to select a final alignment for the HSR that harmonizes the State's policy objectives of improving transportation infrastructure and reducing GHG emissions through the development of the State's renewable energy resources. At minimum, the HSR should "do no harm" meaning, specifically, that the final alignment for the HSR should:

1. Avoid impacts to existing renewable energy facilities; and
2. Minimize constraints on development of renewable energy facilities in Kern and Los Angeles Counties.

LSA also recognizes that the State's objective of powering the HSR with 100% renewable energy presents unique opportunities for renewable resource development adjacent to and in the region of the HSR right of way. LSA encourages HSR staff to work closely with County planners to identify opportunities for collaboration, co-location, and other strategies to optimize solar energy development to serve the needs of the HSR.

Thank you for this opportunity to comment.

Sincerely,



Danielle Osborn Mills
Senior Policy Director, Large-scale Solar Association

cc: Lorelei Oviatt

Subject: SOME TALKING Points - High Speed Rail Board Meeting

From: adrcontinentalgp@aol.com (adrcontinentalgp@aol.com)

To: marvindeanllc@sbcglobal.net;

Date: Monday, April 11, 2016 11:31 PM

Dear President Dan Richard, and Honorable Commissioners to the High Speed Rail Authority. Thank you all for your services to the State of California.

My name is Marvin Dean, President of the Kern County. Minority Contractors Association, AND A LEADER OF THE ENVIRONMENTAL JUSTICE COMMUNITIESI've appeared before this Commission on numerous occasions. I wanted to let you know that I am on record in support the CA High Speed Project , its mission and overall economic benefits to the people and State of California,

HOWEVER, I am here today to alert this Commission to the serious omission of Environmental Justice Programs as required by Federal laws, and I wanted to bring to your attention the possible litigation down the road for failure to establish concrete measures to addressing this matter.

We are very family with previous litigation attempts, we believe then and now there are viable solutions and we implore the Authority to do something now before it's too late.

I represent a coalition of Environment Justice advocates in the Central Valley, Northern and Southern California.

We have identified numerous areas of concerns including the lack of participation, oversight, and the business as usual environments and attitudes that have so far led to the awards of many projects and not a single one has any provisions for Environmental Justice.

I would like for all of you to bear in mind that **CEQA - The California Environmental and Quality Act** and **CERCLA - the Comprehensive Environmental Response, Compensation and Liability Act** are inadequate, and in fact **THOSE LAWS** have been found **IN COURT** to be inadequate to address Environmental Justice . That's why the U.S Congress led and paved the way to enact the Environmental Justice Act which the Sate of California is mandated to be in Compliance of..

Commissioners, "Before the trains get off the stations, let's make sure the High Speed Rail Authority is in Compliance, exploring all ways to INCLUDE E.J in all facets of the California High Speed Rail Project.

Thank you again for your time.

MARVIN DEAN

**KMCA - 9th Annual San Joaquin Valley
Public Contracting Procurement & Transportation**

Date: May 10-13, 2016

"Your Connecting Point For Contracts & Jobs"
SBE/DBE/DVBE/MBE/WBE/SEC-3/HUB ZONE



> San Joaquin Valley High Speed Rail Association

CHSRA "Meet & Greet" Welcome Reception

Time: 5:30 - 8:30 PM * Ballroom A

Date: May 10, 2016 - Tuesday

> KMCA Networking Breakfast

Attendee Networking Opportunity

Time: 7:30 - 10:30 AM * Ballroom B

> KMCA Business Resource & Training Center

Open House Tour (12:30- 2:30 PM) @ 1330 E. Truxtun Ave

Date: May 11, 2016:- Wednesday

> Bakersfield High Speed Rail Station

Local Stakeholder Meeting

Propose Downtown HSR Station Area Plan

Time: 1:30 - 2:30 PM * Hammond Room

> KMCA Mixer / No Host Bar / Music

Time: 5:30 - 8:30PM * Pool Side

Date: May 12, 2016 - Thursday

> KMCA 9th Annual Conference

May 13, 2016 / 7:30AM -5PM) * Ballroom A-D

General Session & Vendor Marketplace

Workshops / Luncheon

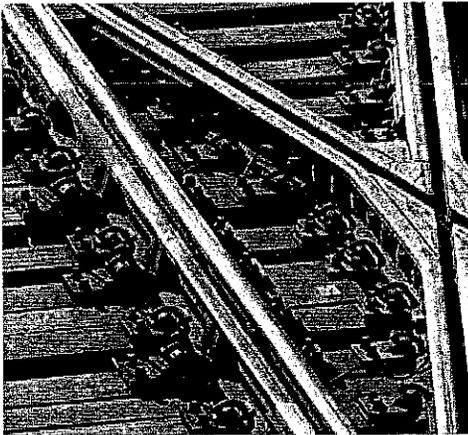
Kern Minority Contractors & San Joaquin Valley High Speed Rail Association

PH #661-324-7535 / Email: kmca@att.net

Register: www.sjvannualpce.info

HIGH-SPEED RAIL HEAVY MAINTENANCE FACILITY IN KERN COUNTY

AN ECONOMIC IMPACT ANALYSIS



HIGH-SPEED RAIL HEAVY MAINTENANCE FACILITY IN KERN COUNTY

AN ECONOMIC IMPACT ANALYSIS

Christine Cooper, Ph.D.
Shannon M Sedgwick

APRIL 2016



Institute for Applied Economics
Los Angeles County Economic Development Corporation
444 S. Flower Street, 37th Floor • Los Angeles, CA 90071

This research was commissioned by Kern Economic Development Foundation.

The LAEDC Institute for Applied Economics specializes in objective and unbiased economic and public policy research in order to foster informed decision-making and guide strategic planning. In addition to commissioned research and analysis, the Institute conducts foundational research to ensure LAEDC's many programs for economic development are on target. The Institute focuses on economic impact studies, regional industry and cluster analysis and issue studies, particularly in workforce development and labor market analysis.

Every reasonable effort has been made to ensure that the data contained herein reflect the most accurate and timely information possible and they are believed to be reliable. The report is provided solely for informational purposes and is not to be construed as providing advice, recommendations, endorsements, representations or warranties of any kind whatsoever.

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Executive Summary

The California High-Speed Rail Authority is evaluating several sites for a heavy maintenance facility, including two sites in Kern County. The establishment of such a facility in Kern County would generate employment opportunities and economic activity, during the initial construction and during its ongoing operations. The Los Angeles County Economic Development Corporation (LAEDC) has quantified the total economic impact in Kern County of the development and operations of the proposed heavy maintenance facility. The findings are as follows:

One-Time Project Development Impacts

In 2010, the Kern County Construction Services Division estimated total development costs would range from \$265.5 to \$349.3 million. Adjusted for inflation to 2016, costs would range from \$309.0 to \$406.5 million. The total economic impact of the investment in Kern County, including direct, indirect and induced impacts, is shown in Exhibit ES-1.

- ▶ 2,980 jobs under the low range of the investment (3,920 under the high range);
- ▶ \$160.4 million (\$211.0 million) in local labor income;
- ▶ \$459.8 million (\$603.6 million) in total output; and
- ▶ \$55.1 million (\$72.4 million) in tax revenues, of which \$18.8 million (\$24.7 million) will be collected by state and local governments and \$36.3 million (\$47.7 million) will be collected by federal agencies.

Annual Impact of Ongoing Activity

The heavy maintenance facility is expected to employ approximately 1,500 workers when operating at full capacity. The total annual economic impact in Kern County of all ongoing activity occurring at the facility, including direct, indirect and induced impacts, is shown in Exhibit ES-2.

- ▶ 2,810 annual jobs;
- ▶ \$160.7 million in local labor income;
- ▶ \$421.3 million in total output; and
- ▶ \$51.8 million in tax revenues, of which \$16.5 million will be collected by state and local governments annually and \$35.3 million are collected by federal agencies. ❖

Exhibit ES-1 HSR HMF Construction Total Economic and Fiscal Impact in Kern County

	Low Range	High Range
Project Expenditures:		
Initial estimates (\$2010 millions)	\$ 265.5	\$ 349.3
Inflation-adjusted (\$2016 millions)	309.0	406.5
Total Economic Impact:		
Employment	2,980	3,920
Direct	1,910	2,520
Indirect and Induced	1,070	1,400
Labor income (\$ millions)	\$ 160.4	\$ 211.0
Direct	112.0	147.3
Indirect and Induced	48.4	63.7
Output (\$ millions)	\$ 459.8	\$ 603.6
Direct	309.0	406.5
Indirect and Induced	149.8	197.1
Total Fiscal Impact:		
State / local taxes (\$ millions)	\$ 18.8	\$ 24.7
Federal taxes (\$ millions)	36.3	47.7

Source: Estimates by LAEDC

Exhibit ES-2 HSR HMF - Ongoing Operations Annual Economic and Fiscal Impact in Kern County

Direct employment (jobs)		1,500
Total Economic Impact:		
Employment		2,810
Direct	1,500	
Indirect and Induced	1,310	
Labor income (\$ millions)		\$ 160.7
Direct	99.6	
Indirect and Induced	61.1	
Output (\$ millions)		\$ 421.3
Direct	249.4	
Indirect and Induced	171.9	
Total Fiscal Impact:		
State / local taxes (\$ millions)		\$ 16.5
Federal taxes (\$ millions)		35.3

Source: Estimates by LAEDC

1 Introduction

The California High-Speed Rail Authority is evaluating several sites for a heavy maintenance facility, two of which are in Kern County. One is a 640-acre site in Shafter; the second is a 421-acre site in Wasco. The establishment of such a facility would generate employment opportunities and economic activity, first during the initial construction and then during its ongoing operations.

In this report, the Los Angeles County Economic Development Corporation (LAEDC) Institute for Applied Economics presents an analysis of the economic impact of a high-speed rail heavy maintenance facility (HSR HMF) in Kern County in two parts. Part I estimates the expected economic impact of the initial construction of the maintenance facility, including direct, indirect and induced employment and business revenues. Part II estimates the expected annual economic impact of ongoing operations at the maintenance facility, including direct, indirect and induced employment and business revenues. ❖

Methodology

Economic impact analysis is used to estimate the overall economic activity, including spill-over and multiplier impacts, which occurs as a result of a particular business, event or geography. The primary economic activity of the maintenance facility is its initial construction and, once completed, its annual ongoing operations.

The extent to which initial expenditures multiply is estimated using economic models that depict the relationships between industries (such as petroleum refineries and its suppliers) and among different economic agents (such as industries and their employees). These models are built upon actual data of expenditure patterns that are reported to the U.S. Bureau of Labor Statistics, the U.S. Census Bureau and the Bureau of Economic Analysis of the U.S. Department of Commerce. Data is regionalized so that it reflects and incorporates local conditions such as wages rates, expenditure patterns, and resource availability and costs.

The magnitude of the multiplying effect differs from one region to another depending on the extent to which the

local region can fill the demand for all rounds of supplying needs. For example, the automobile manufacturing industry has high multipliers in Detroit and Indiana since these regions have deep and wide supplier networks, while the same industry multiplier in Phoenix is quite small. In another example, the jobs multiplier for the construction industry is higher in, say, Arkansas, than in California because the same amount of spending will purchase fewer workers in Los Angeles than in Little Rock.

The metrics used to determine the value of the economic impacts are employment, labor income, value-added and the value of output. *Employment* includes full-time, part-time, permanent and seasonal employees and the self-employed, and is measured on a job-count basis regardless of the number of hours worked. *Labor income* includes all income received by both payroll employees and the self-employed, including wages and benefits such as health insurance and pension plan contributions. *Value-added* is the measure of the contribution to GDP made by the industry, and consists of compensation of employees, taxes on production and gross operating surplus. *Output* is the value of the goods and services produced. For most industries, this is simply the revenues generated through sales; for others, in particular retail industries, output is the value of the services supplied.

Estimates are developed through multi-regional analysis (MRI) using software and data from IMPLAN Group, LLC which traces inter-industry transactions resulting from an increase in demand in a given region. The total estimated economic contribution includes *direct*, *indirect* and *induced* effects.

Direct activity includes materials purchased and employees hired by the company itself. *Indirect effects* are those which stem from the employment and business revenues generated by the purchases made by the company and any of its suppliers. *Induced effects* are those generated by the household spending of direct, indirect and induced employees.

Fiscal benefits include all taxes paid by business and households supported by the direct, indirect and induced activity, including: sales taxes, property taxes, personal income taxes, corporate profits taxes, social insurance taxes, and other payments to governments. ❖

2 HSR Heavy Maintenance Facility Construction

The HSR heavy maintenance facility will include support and storage tracks needed to perform inspection and maintenance activities, required parking areas, utilities (including an on-site electrical sub-station), and shop facilities. Support buildings will range in size from 631,000 square feet to 840,000 square feet.

The expenditures related to the project will generate additional economic activity in the regional economy. This includes the recirculation of funds spent on construction workers, construction materials, engineering contractors and so on, supporting workers, local businesses and government revenues.

Direct Project Spending

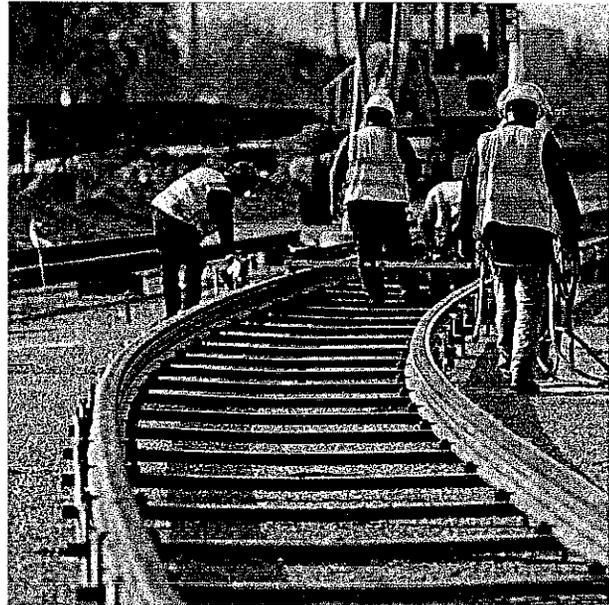
In 2010, the Kern County Construction Services Division provided estimates of project development costs that would range from \$242.5 million to \$317.0 million, with an additional 5.5 percent for architectural and engineering costs. Extension of utilities to the site in Wasco would add \$2.2 million. In addition, full service construction management, if used, would entail additional costs ranging from \$9.7 million to \$12.7 million.

Updates to the estimated development costs have not been fully released. This analysis uses the original estimates, assuming the costs are escalated to 2016 values. The original estimates of project development costs are summarized in Exhibit 2-1, along with the escalated values to 2016.

Exhibit 2-1
HSR HMF Project Development Costs

	Low Range	High Range
Extension of utilities (Wasco site)	\$ 0.0	\$ 2.2
Construction	242.5	317.0
Architectural and engineering	13.3	17.4
Construction management	0.0	12.7
Total Project Expenditures (\$2010 millions)	\$ 255.8	\$ 349.3
Inflation Adjusted Costs (\$2016 millions)	309.0	406.5

Source: Kern County Administrative Office; Estimates by LAEDC



The low end of the range includes the smallest possible building layout and related construction and architectural/ engineering fees, but no utilities extension or construction management. The high end of the range assumes the larger buildings are built at the Wasco site (requiring the utilities extension) using a construction management firm. The actual costs will likely fall somewhere in this range depending on which site is selected, the size of the project and whether professional construction management is used.

It is possible that some of the expenditures will occur directly out of Kern County. However, the largest component of the investment involves construction and construction management, spending for which typically occurs close to the project itself.

In the absence of specific data regarding the geographic distribution of development spending, it is assumed that all spending will occur in Kern County. ❖

Economic Impact in Kern County

The total economic impact quantifies the change in regional economic activity which results from the project's direct activity. In this instance, expenditures made on labor, goods and other services in the course of the project investment will circulate through the supply chain and household spending, generating spillover and multiplier impacts in addition to the initial expenditures.

The total economic impact of both the low range and the high range of construction spending is shown in the Exhibit 2-2.

**Exhibit 2-2
HSR HMF Construction
Total Economic and Fiscal Impact in Kern County**

	Low Range	High Range
Project Expenditures:		
Initial estimates (\$2010 millions)	\$ 265.5	\$ 349.3
Inflation-adjusted (\$2016 millions)	309.0	406.5
Total Economic Impact:		
Employment	2,980	3,920
Direct	1,910	2,520
Indirect and Induced	1,070	1,400
Labor income (\$ millions)	\$ 160.4	\$ 211.0
Direct	112.0	147.3
Indirect and Induced	48.4	63.7
Output (\$ millions)	\$ 459.8	\$ 603.6
Direct	309.0	406.5
Indirect and Induced	149.8	197.1
Total Fiscal Impact:	\$ 55.1	\$ 72.4
State / local taxes (\$ millions)	18.8	24.7
Federal taxes (\$ millions)	36.3	47.7

Source: Estimates by LAEDC

It is estimated that the initial construction spending of \$309.0 million for the development of the facility will generate 2,980 jobs in Kern County with labor income of \$160.4 million, and \$459.8 million in output. This activity will generate tax revenues for state and local government of \$18.8 million and \$36.3 million for agencies of the federal government.

Should the development costs reach the high end of the range (spending \$406.5 million), the estimated one-time increase development of the facility will generate 3,920 jobs in Kern County with labor income of \$211.0 million, and \$603.6 million in output. This activity will generate tax revenues for state and local government of \$24.7 million and \$47.7 million for agencies of the federal government. ❖

Detailed Fiscal Impact

Disaggregation of taxes by type of both the low range and the high range is shown in Exhibit 2-3.

**Exhibit 2-3
HSR HMF Construction
Detailed Fiscal Impact in Kern County**

	Low Range	High Range
By Type of Tax (\$ millions):		
Personal income taxes	\$ 18.7	\$ 24.5
Social insurance	16.7	22.0
Sales and excise taxes	6.8	9.0
Property taxes	4.8	6.3
Corporate income taxes	5.1	6.8
Other	2.9	3.8
Total	\$ 55.1	\$ 72.4
By Type of Government (\$ millions):		
Federal	\$ 36.3	\$ 47.8
State	11.6	16.1
County	5.0	6.6
Property taxes	3.9	5.1
Sales taxes	1.1	1.4
Cities	2.2	2.9
Property taxes	0.9	1.1
Sales taxes	0.4	0.6
Other taxes and fees	0.9	1.1
Total	\$ 55.1	\$ 72.4

Source: Estimates by LAEDC

At the low cost estimate, personal income taxes paid by all employees of direct, indirect and induced activity will be \$18.7 million across Kern County. Social insurance payments are made to both state and federal governments and will be \$16.7 million. Other sources of tax revenues include sales and excise taxes (including transient occupancy taxes), taxes on corporate income and other taxes and fees paid by businesses and households, including utility taxes.

The federal government will collect 66 percent of all tax revenues in Kern County attributed to the project, consisting mainly of social insurance taxes, personal income taxes and corporate income taxes. The state of California will collect 21 percent of all tax revenues, which include sales tax revenues, personal income taxes, corporate income taxes, and other fees and royalties. Kern County will collect \$5.0 million under the low cost estimate and \$6.6 million under the high costs estimate, while cities in Kern County will receive \$2.2 million or \$2.9 million from a share of sales taxes, property taxes and licenses and fees.

Industry Sector Impacts

The total economic impact is distributed across a wide range of industry sectors via indirect and induced effects. The distribution of the total employment, labor income and output contribution among industry sectors for both low range and high range project spending is presented in Exhibit 2-4 and Exhibit 2-5 respectively.

Much of the impacts will occur in the construction sector and the professional, scientific and technical services industry, but other sectors affected include health care and social assistance, retail trade and accommodation and food services.

Of all the jobs generated in Kern County, 62 percent will be in the construction industry, six percent in professional, scientific and technical services and ten percent in retail trade. However, virtually all industry sectors will receive a positive economic boost from the HSR HMF project, including real estate, administrative services, health and social services and accommodation and food services.

It should be noted that all impacts are estimated as if the investment were to take place within a single year. For longer-term projects, the reader is cautioned to note that employment is represented as job-years.

The values in Exhibits 2-4 and 2-5 should be interpreted as illustrative of the industry effects rather than precise given model and data limitations.

A description of these industries is provided in the Appendix. ❖

**Exhibit 2-4
HSR HMF Construction - Low Range Cost Estimates
Total Economic Impact by Industry Sector in Kern County**

	Jobs	Labor Income (\$ millions)	Output (\$ millions)
Mining	3	\$ 0.8	\$ 4.3
Utilities	1	0.2	0.8
Construction	1,833	104.0	296.1
Manufacturing	4	0.5	13.3
Wholesale trade	47	4.4	12.4
Retail trade	296	8.7	24.0
Transportation and warehousing	54	3.4	8.4
Information	9	0.7	2.8
Finance and insurance	41	1.9	8.7
Real estate and rental	74	2.7	24.4
Professional, scientific technical	192	15.8	27.7
Management of companies	12	0.9	2.2
Administrative and waste services	96	2.9	5.7
Educational services	9	0.2	0.5
Health and social services	139	7.0	12.9
Arts, entertainment and recreation	14	0.3	0.9
Accommodation and food services	87	1.9	5.4
Other services	59	3.4	6.0
Government	11	1.0	2.7
Total	2,980	\$ 160.4	\$ 458.8

Source: Estimates by LAEDC

**Exhibit 2-5
HSR HMF Construction - High Range Cost Estimates
Total Economic Impact by Industry Sector in Kern County**

	Jobs	Labor Income (\$ millions)	Output (\$ millions)
Mining	7	\$ 1.0	\$ 5.7
Utilities	2	0.3	1.0
Construction	2,413	136.8	389.6
Manufacturing	5	0.6	17.5
Wholesale trade	62	5.7	16.4
Retail trade	389	11.5	31.5
Transportation and warehousing	71	4.4	11.1
Information	12	0.9	3.7
Finance and insurance	54	2.5	11.5
Real estate and rental	97	3.5	32.1
Professional, scientific technical	252	20.7	36.3
Management of companies	15	1.2	2.8
Administrative and waste services	126	3.8	7.5
Educational services	12	0.3	0.6
Health and social services	182	9.1	16.9
Arts, entertainment and recreation	19	0.3	1.2
Accommodation and food services	114	2.5	7.0
Other services	78	4.5	7.9
Government	15	1.3	3.0
Total	3,920	\$ 211.0	\$ 603.6

Source: Estimates by LAEDC

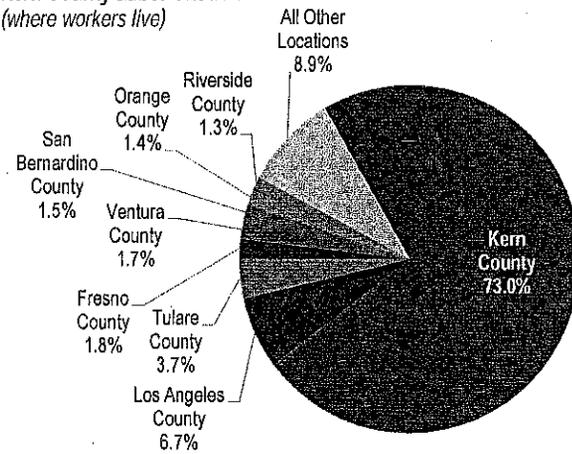
Regional Employment Impact

Construction of the HSR heavy maintenance facility will have additional employment impacts beyond those estimated for Kern County. Many purchases of goods and services will come from neighboring counties, and we can see in Exhibit 2-6 that workers may commute from as far away as San Diego County (or beyond).

The region for this analysis includes the bordering and neighbor counties of Los Angeles, Ventura, Tulare, Kings, Fresno, San Bernardino and Riverside.

In addition to the employment generated in Kern County, the estimated employment impact of the HSR HMF on other counties are presented in Exhibit 2-7.

Exhibit 2-6
Kern County Labor Shed 2014
(where workers live)



Source: US Census Bureau, LEHD

Exhibit 2-7
HSR HMF Construction
Regional Employment Impact (Jobs)

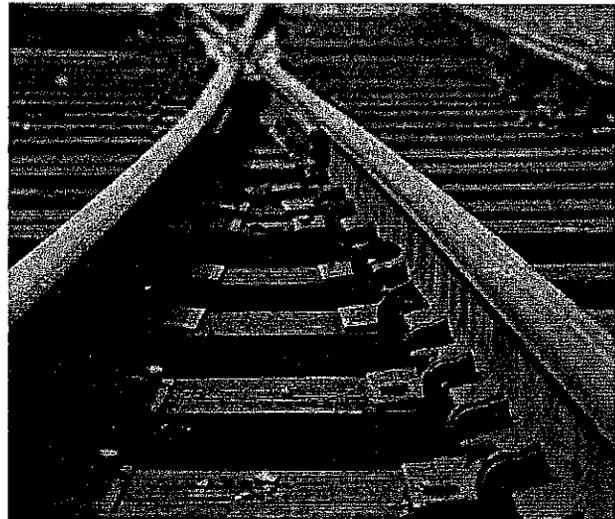
	Low Range	High Range
Kern County	2,980	3,930
Los Angeles County	320	420
Tulare County	20	20
Fresno County	30	40
Inland Empire	70	90
Ventura County	10	20
Kings County	-	-
Total Regional Employment Impact	3,430	4,520

Source: Estimates by LAEDC

The employment impact of the construction of the HSR HMF in Kern County is estimated to be between 2,980 and 3,930 jobs, depending on the total construction spending. An additional 320 to 420 jobs would be generated in Los Angeles County, and between 130 and 170 jobs in the remaining six counties. ❖

3 High-Speed Rail Heavy Maintenance Facility Operations

The HSR heavy maintenance facility will offer a wide variety of capabilities involved in the repair and overhaul of high-speed trains, including: exterior washing and inspection; interior renovation; interior and exterior paint; steel body structure modifications; selected electrical component overhaul; repairs to train sets that have extensive damage caused by accident or act of nature; and other repairs common to conventional rolling stock. The facility will need layup and storage tracks to support the removal of trains from service, and a number of separate support shops, such as a truck shop, a component cleaning area, brake shop, air room (to clean, inspect and rebuild brake system components), an HVAC repair shop, a wheel shop, and an electronics shop for electronic components such as panels relays, circuit cards and control units. The facility would also need space for an inventory of parts, including a loading dock and all equipment necessary for storage and distribution (forklift, cranes, pallet shelving etc.). ❖



Economic Impact in Kern County

The facility is expected to employ 1,500 workers when operating at full capacity (Exhibit 3-1), which will not happen until years after the facility opens during initial testing of the system.

During the initial operations, the employment will be far less than the 1,500 expected once the entire state-wide HSR system is complete and operational. The economic impact will be proportionally lower until then.

Exhibit 3-1 presents our estimates of the annual ongoing operations impact of the heavy maintenance facility at full operating capacity.

At full operating capacity, the heavy maintenance facility will generate annual economic output in Kern County in the amount of \$421.3 million. Annual operations at the HMF will support 2,810 direct, indirect and induced jobs with total annual earnings of \$160.7 million in Kern County.

Exhibit 3-1
HSR HMF - Ongoing Operations
Annual Economic and Fiscal Impact in Kern County

Direct employment (jobs)		1,500
Total Economic Impact:		
Employment		2,810
<i>Direct</i>	1,500	
<i>Indirect and Induced</i>	1,310	
Labor Income (\$ millions)		\$ 160.7
<i>Direct</i>	99.6	
<i>Indirect and Induced</i>	61.1	
Output (\$ millions)		\$ 421.3
<i>Direct</i>	249.4	
<i>Indirect and Induced</i>	171.9	
Total Fiscal Impact:		\$ 51.8
State / local taxes (\$ millions)		16.5
Federal taxes (\$ millions)		35.3

Source: Estimates by LAEDC

This additional economic activity in Kern County is expected to generate state and local tax revenues of \$16.5 million and federal tax revenues of \$35.3 million. ❖

Detailed Fiscal Impact

Disaggregation of taxes by type of both the low range and the high range is shown in Exhibit 3-2.

Exhibit 3-2
HSR HMF - Ongoing Operations
Annual Detailed Fiscal Impact in Kern County

By Type of Tax (\$ millions):	
Personal income taxes	\$ 18.7
Social insurance	16.7
Sales and excise taxes	5.5
Property taxes	3.9
Corporate income taxes	4.4
Other	2.6
Total	\$ 51.8
By Type of Government (\$ millions):	
Federal	\$ 35.3
State	11.2
County	4.1
Cities	1.2
Total	\$ 51.8

Source: Estimates by LAEDC

Personal income taxes paid by all employees of direct, indirect and induced activity will account for \$18.7 million across Kern County. Social insurance payments are made to both state and federal governments and will be \$16.7 million. Other sources of tax revenues include sales and excise taxes (including transient occupancy taxes), taxes on corporate income and other taxes and fees paid by businesses and households, including utility taxes.

The federal government will collect approximately 68 percent of all tax revenues in Kern County attributed to the project, or \$35.3 million, consisting mainly of social insurance taxes, personal income taxes and corporate income taxes. The state of California will collect \$11.2 million, which includes sales tax revenues, personal income taxes, corporate income taxes, and other fees and royalties. Kern County will collect \$4.1 million and cities in Kern County will receive \$1.2 million from a share of sales taxes, property taxes and licenses and fees.

Industry Sector Impacts

The total economic impact is distributed across a wide range of industry sectors via indirect and induced effects. The distribution of the total employment, labor income and output contribution among industry sectors is presented in Exhibit 3-3.

Exhibit 3-3
HSR HMF - Ongoing Operations
Annual Economic Impact by Industry Sector in Kern County

	Jobs	Labor Income (\$ millions)	Output (\$ millions)
Mining	32	\$ 3.2	\$ 18.5
Utilities	3	0.5	1.9
Construction	41	2.3	7.4
Manufacturing	2	0.2	7.9
Wholesale trade	19	1.8	5.0
Retail trade	112	3.9	9.4
Transportation and warehousing	1,837	114.1	289.5
Information	8	0.6	2.6
Finance and insurance	48	2.3	10.4
Real estate and rental	65	1.7	21.3
Professional, scientific technical	51	2.9	5.3
Management of companies	18	1.4	3.5
Administrative and waste services	170	5.0	10.7
Educational services	9	0.2	0.5
Health and social services	139	7.0	12.9
Arts, entertainment and recreation	14	0.3	1.0
Accommodation and food services	84	1.8	5.2
Other services	66	3.7	6.3
Government	91	7.8	11.9
Total	2,810	\$ 160.7	\$ 421.3

Source: Estimates by LAEDC

Much of the impacts will occur in the transportation sector, which includes support activities for rail transportation such as this maintenance facility will be engaged in. However, many other sectors will be affected, including administrative services, health care and social assistance, retail trade and accommodation and food services.

The values in Exhibits 2-5 should be interpreted as illustrative of the industry effects rather than precise given model and data limitations.

A description of these industries is provided in the Appendix. ❖

Regional Employment Impact

Just as with the construction impacts, the ongoing operations of the maintenance facility will have additional employment impacts in those counties from which workers commute. The regional employment impacts are presented in Exhibit 3-4.

Exhibit 3-4
HSR HMF Ongoing Operations
Annual Regional Employment Impact (Jobs)

Kern County	2,810
Los Angeles County	290
Tulare County	-
Fresno County	-
Inland Empire	50
Ventura County	10
Kings County	-
Total Regional Employment Impact	3,160

Source: Estimates by LAEDC

While the employment impact of the annual operations of the HSR HMF in Kern County is estimated to be between 2,810 jobs, an additional 290 would be generated annually in Los Angeles County, and 60 jobs in the remaining six counties. ❖

APPENDIX

Description of Industry Sectors

The industry sectors used in this report are established by the North American Industry Classification System (NAICS). NAICS divides the economy into twenty sectors, and groups industries within these sectors according to production criteria. Listed below is a short description of each sector as taken from the sourcebook, *North American Industry Classification System*, published by the U.S. Office of Management and Budget (2012).

Agriculture, Forestry, Fishing and Hunting: Activities of this sector are growing crops, raising animals, harvesting timber, and harvesting fish and other animals from farms, ranches, or the animals' natural habitats.

Mining: Activities of this sector are extracting naturally-occurring mineral solids, such as coal and ore; liquid minerals, such as crude petroleum; and gases, such as natural gas; and beneficiating (e.g., crushing, screening, washing and flotation) and other preparation at the mine site, or as part of mining activity.

Utilities: Activities of this sector are generating, transmitting, and/or distributing electricity, gas, steam, and water and removing sewage through a permanent infrastructure of lines, mains, and pipes.

Construction: Activities of this sector are erecting buildings and other structures (including additions); heavy construction other than buildings; and alterations, reconstruction, installation, and maintenance and repairs.

Manufacturing: Activities of this sector are the mechanical, physical, or chemical transformation of material, substances, or components into new products.

Wholesale Trade: Activities of this sector are selling or arranging for the purchase or sale of goods for resale; capital or durable non-consumer goods; and raw and intermediate materials and supplies used in production, and providing services incidental to the sale of the merchandise.



Retail Trade: Activities of this sector are retailing merchandise generally in small quantities to the general public and providing services incidental to the sale of the merchandise.

Transportation and Warehousing: Activities of this sector are providing transportation of passengers and cargo, warehousing and storing goods, scenic and sightseeing transportation, and supporting these activities.

Information: Activities of this sector are distributing information and cultural products, providing the means to transmit or distribute these products as data or communications, and processing data.

Finance and Insurance: Activities of this sector involve the creation, liquidation, or change of ownership of financial assets (financial transactions) and/or facilitating financial transactions.

Real Estate and Rental and Leasing: Activities of this sector are renting, leasing, or otherwise allowing the use of tangible or intangible assets (except copyrighted works), and providing related services.

Professional, Scientific, and Technical Services: Activities of this sector are performing professional, scientific, and technical services for the operations of other organizations.

Management of Companies and Enterprises: Activities of this sector are the holding of securities of companies and enterprises, for the purpose of owning controlling interest or influencing their management decision, or administering, overseeing, and managing other establishments of the same company or enterprise and normally undertaking the strategic or organizational planning and decision-making of the company or enterprise.

Administrative and Support and Waste Management and Remediation Services: Activities of this sector are performing routine support activities for the day-to-day operations of other organizations, such as: office administration, hiring and placing of personnel, document preparation and similar clerical services, solicitation, collection, security and surveillance services, cleaning, and waste disposal services.

Educational Services: Activities of this sector are providing instruction and training in a wide variety of subjects. Educational services are usually delivered by teachers or instructors that explain, tell, demonstrate, supervise, and direct learning. Instruction is imparted in diverse settings, such as educational institutions, the workplace, or the home through correspondence, television, or other means.

Health Care and Social Assistance: Activities of this sector are operating or providing health care and social assistance for individuals.

Arts, Entertainment and Recreation: Activities of this sector are operating facilities or providing services to meet varied cultural, entertainment, and recreational interests of their patrons, such as: (1) producing, promoting, or participating in live performances, events, or exhibits intended for public viewing; (2) preserving and exhibiting objects and sites of historical, cultural, or educational interest; and (3) operating facilities or providing services that enable patrons to participate in recreational activities or pursue amusement, hobby, and leisure-time interests.

Accommodation and Food Services: Activities of this sector are providing customers with lodging and/or preparing meals, snacks, and beverages for immediate consumption.

Other Services (except Public Administration): Activities of this sector are providing services not specifically provided for elsewhere in the classification system. Establishments in this sector are primarily engaged in activities, such as equipment and machinery repairing, promoting or administering religious activities, grant-making, advocacy, and providing dry-cleaning and laundry services, personal care services, death care services, pet care services, photofinishing services, temporary parking services, and dating services. ❖



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