

Economic Impact from Transportation Investment in Southern California

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Senior Regional Planner

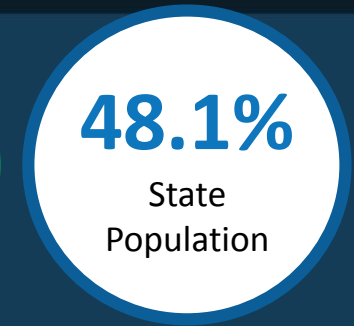
October 11, 2018



The SCAG Region



- Nation's Largest Metropolitan Planning Organization (MPO)
- 38,000 Square Miles
- Nation's Global Gateway for Trade
- Develops the Region's Long-Range Transportation Plan (RTP/SCS)



What is the Federal Transportation Improvement Program (FTIP)?



- The FTIP is a federally mandated list of transportation investment priorities in the SCAG region.
- Federal regulations require the FTIP be updated at least every four years, SCAG updates it every two years to be consistent with the State Transportation Improvement Program (STIP).
- The FTIP is prepared by SCAG in coordination and consultation with the County Transportation Commissions (CTCs) through a bottoms-up approach, it is a multimodal list of capital improvements programmed with various federal, state, and local fund sources proposed over a six-year period.
- The FTIP is prioritized to implement the region's overall strategy for providing mobility and improving both the efficiency and safety of the transportation system. It is the process by which the Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) policies and goals are implemented.

Continued ... What is the Federal Transportation Improvement Program (FTIP)?



- The FTIP is a dynamic document that is amended frequently to reflect updates to funding, schedules and program priority changes.
- The 2019 FTIP includes approximately 2,000 projects in the region, representing an investment of \$34.6 billion from 2018 to 2024.
- Funding programmed in the first two years are committed funds. Funds in years three and four are reasonably available. Funds in year five and six are for informational purposes.

Types of Project Modifications

- Project currently exists in the 2016 RTP/SCS Project List, but needs:
 - a revised description,
 - a revised schedule,
 - a change in total cost, or
 - a combination of the above changes.
- Project is new and is not currently included in the 2016 RTP/SCS Project List
- Project is being removed from the 2016 RTP/SCS Project List due to changing priorities



Summary of 2019 FTIP by Funding Source (000's)

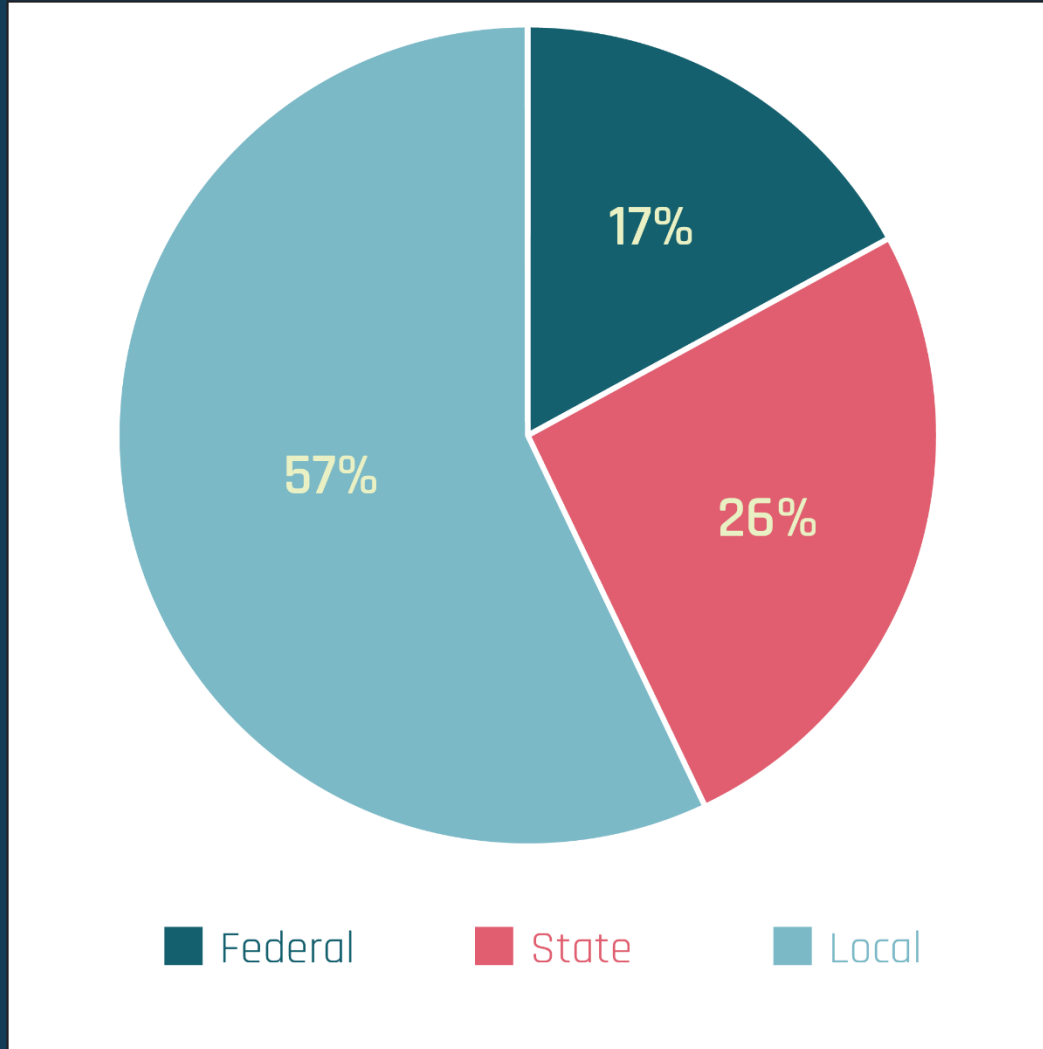


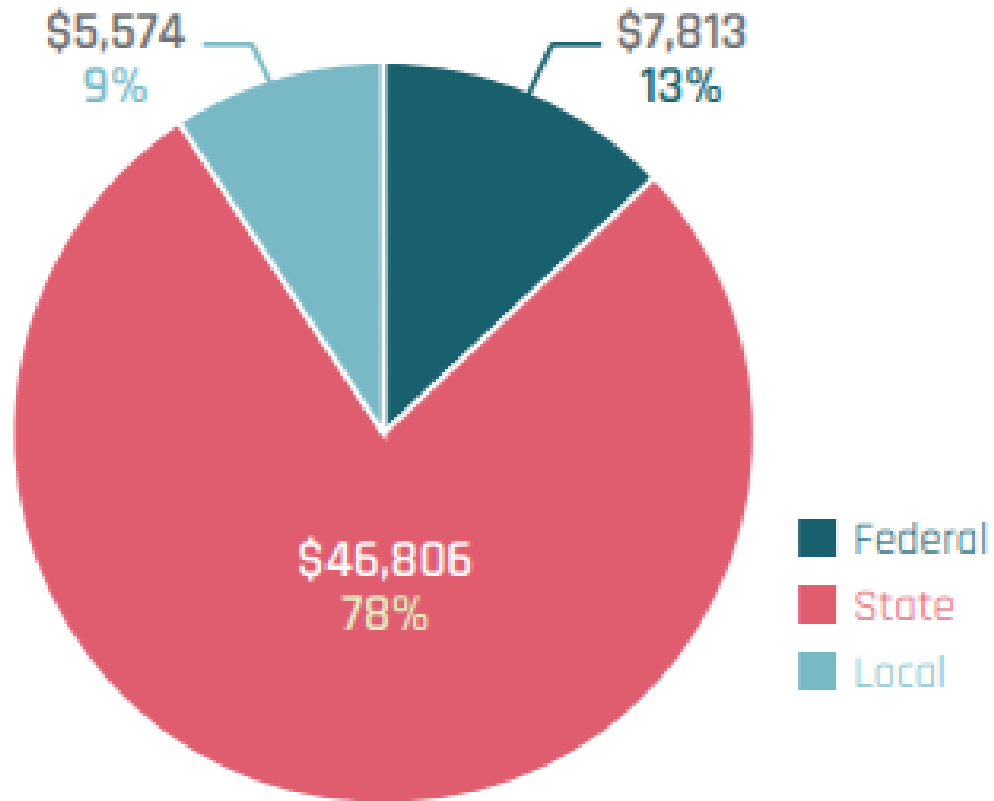
FIGURE 1 SUMMARY OF 2019 FTIP BY FUNDING SOURCE (in 000's)

	FEDERAL	STATE	LOCAL	TOTAL
2018/19	\$2,107,193	\$2,813,254	\$5,199,082	\$10,119,529
2019/20	\$1,148,032	\$2,453,315	\$4,289,819	\$7,891,166
2020/21	\$1,032,479	\$1,384,687	\$3,831,677	\$6,248,843
2021/22	\$878,569	\$982,370	\$3,461,486	\$5,322,425
2022/23	\$386,351	\$1,221,483	\$885,843	\$2,493,677
2023/24	\$327,033	\$79,231	\$2,086,210	\$2,492,474
TOTAL	\$5,879,657	\$8,934,340	\$19,754,117	\$34,568,114
% OF TOTAL	17%	26%	57%	100%

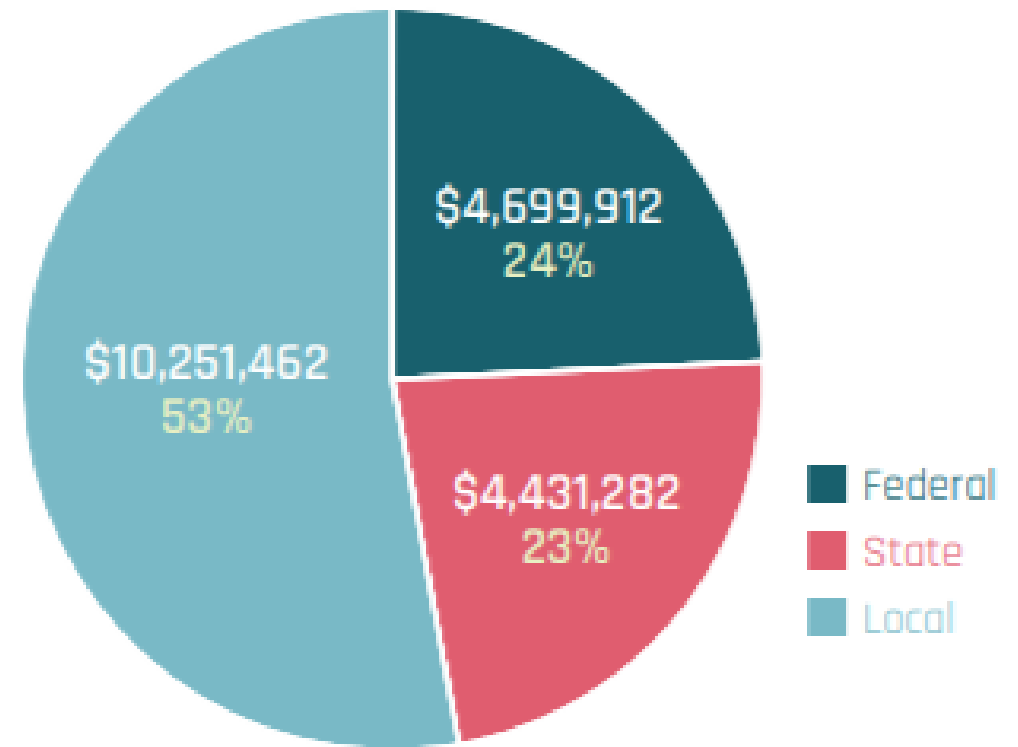
Summary of 2019 FTIP by Funding Source and County (000's)



IMPERIAL COUNTY: \$60,193 (in \$000's)



LOS ANGELES COUNTY: \$19,382,656 (in \$000's)

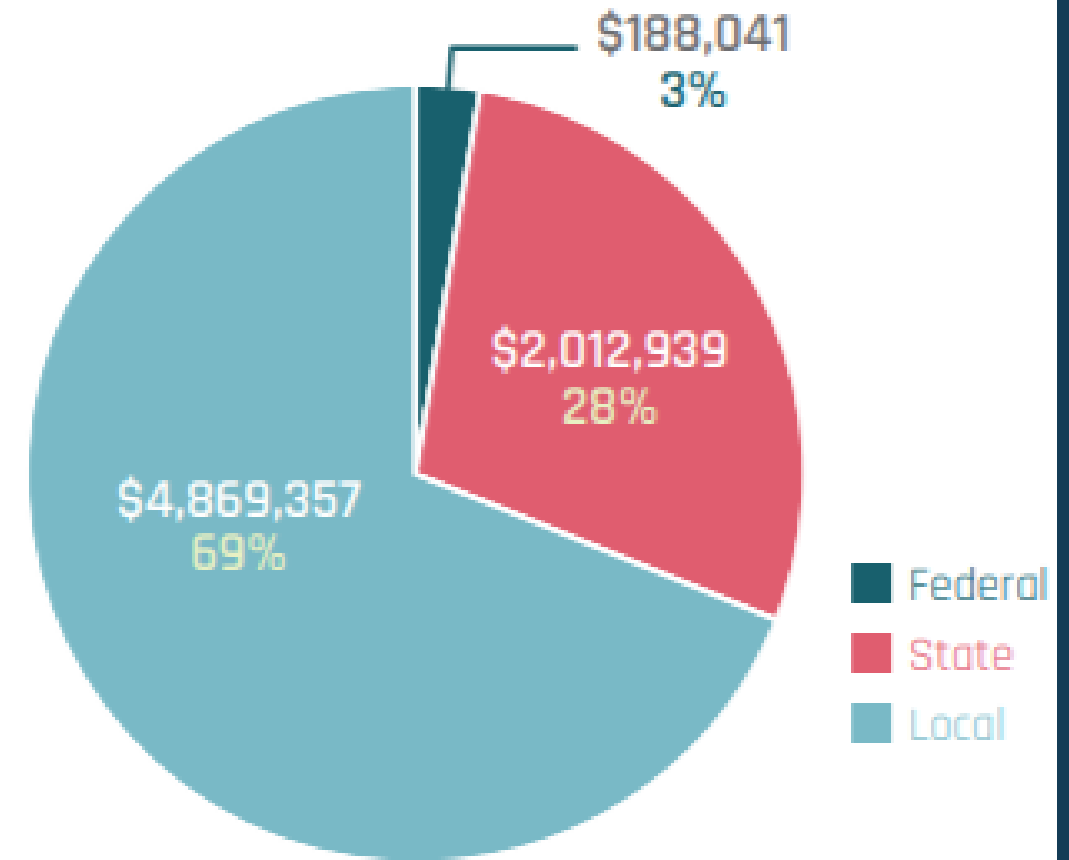
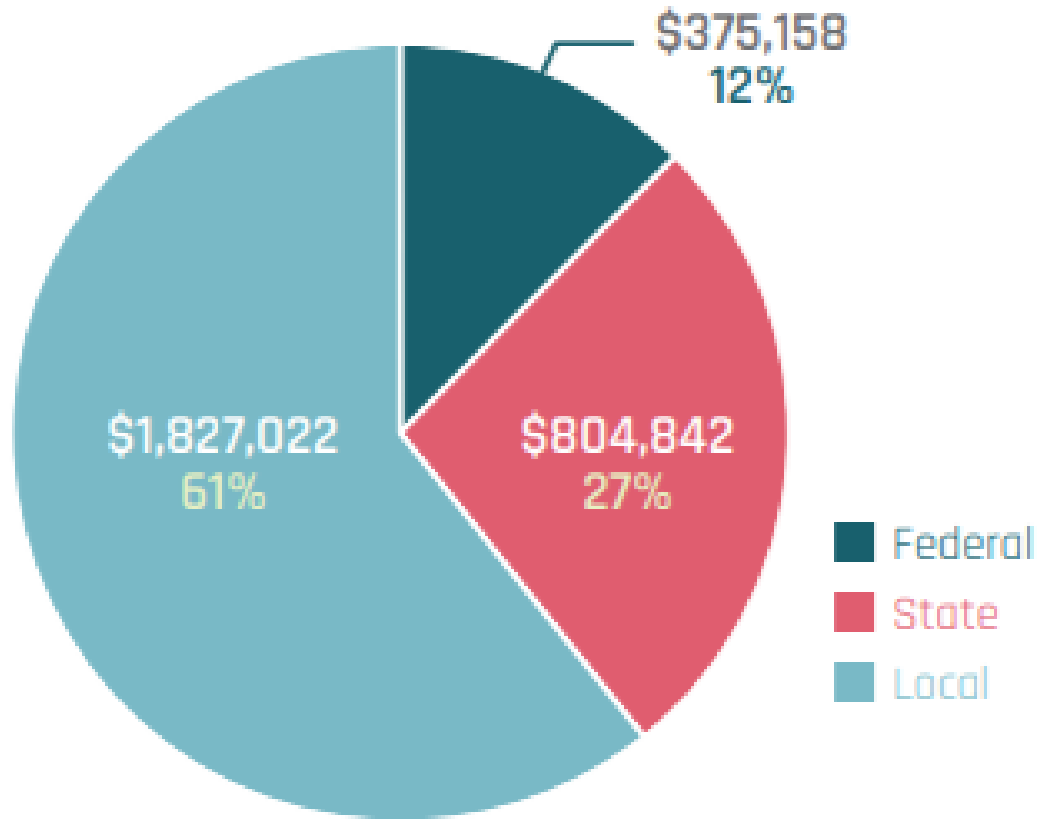


Summary of 2019 FTIP by Funding Source and County (000's)



ORANGE COUNTY: \$3,007,022 (in \$000's)

RIVERSIDE COUNTY: \$7,070,337 (in \$000's)

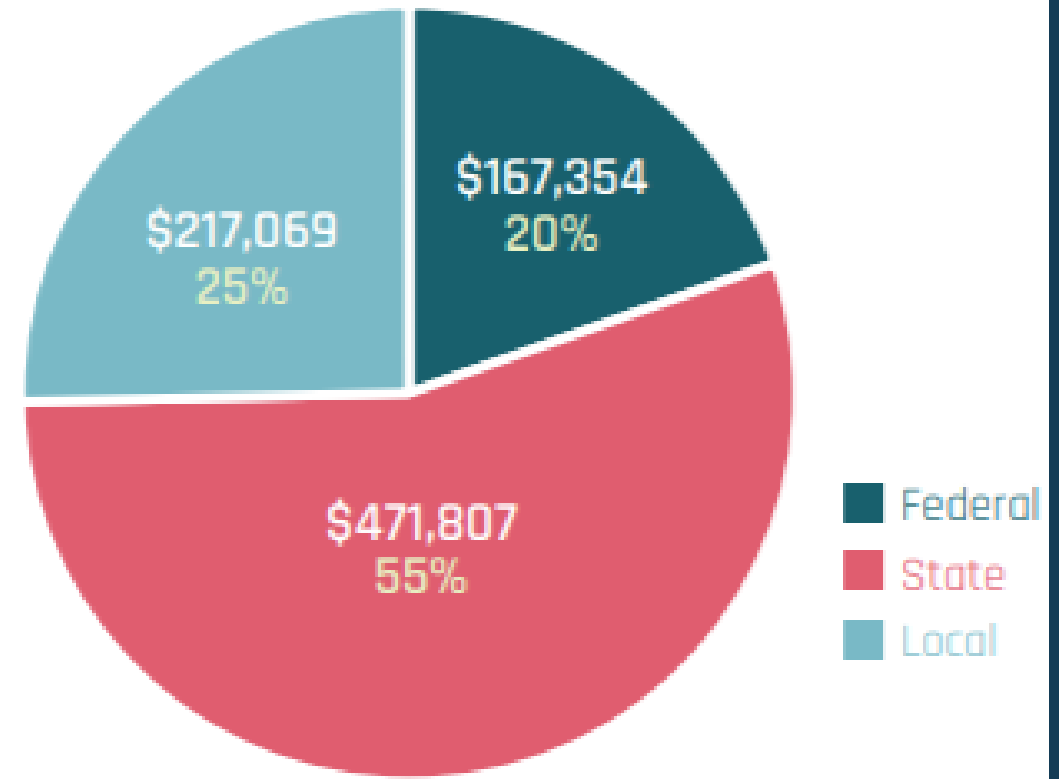
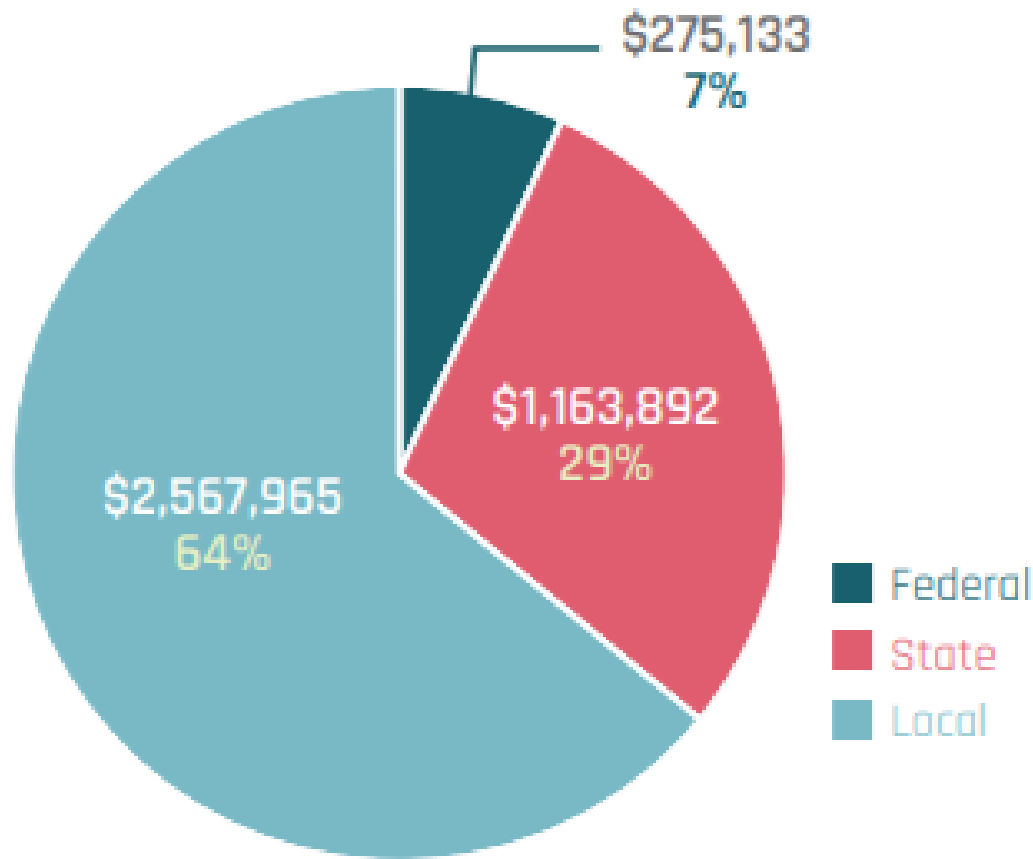


Summary of 2019 FTIP by Funding Source and County (000's)



SAN BERNARDINO COUNTY: \$4,006,990 (in \$000's)

VENTURA COUNTY: \$856,230 (in \$000's)



Funding sources by local sales taxes



The SCAG region relies heavily on local sales tax measures for the timely delivery of transportation projects. While most counties impose a 0.5 percent sales tax to fund transportation projects, Los Angeles County levies a 2.0 percent tax—a combination of four permanent half of 1% sales taxes. Riverside County's Measure A expires in 2039. Measure I in San Bernardino County expires in 2040, followed by Orange County's Measure M in 2041. Measure D in Imperial County expires in 2050. Ventura County is currently the only county in the region without a dedicated sales tax for transportation.

Summary of 2019 FTIP by Program (000's)



SUMMARY OF 2019 FTIP BY PROGRAM

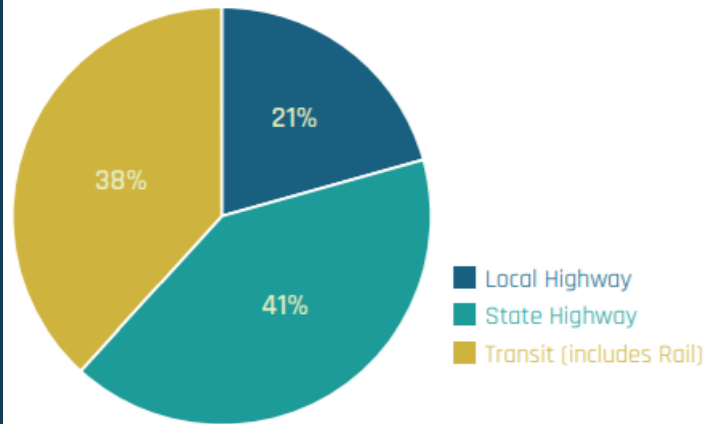


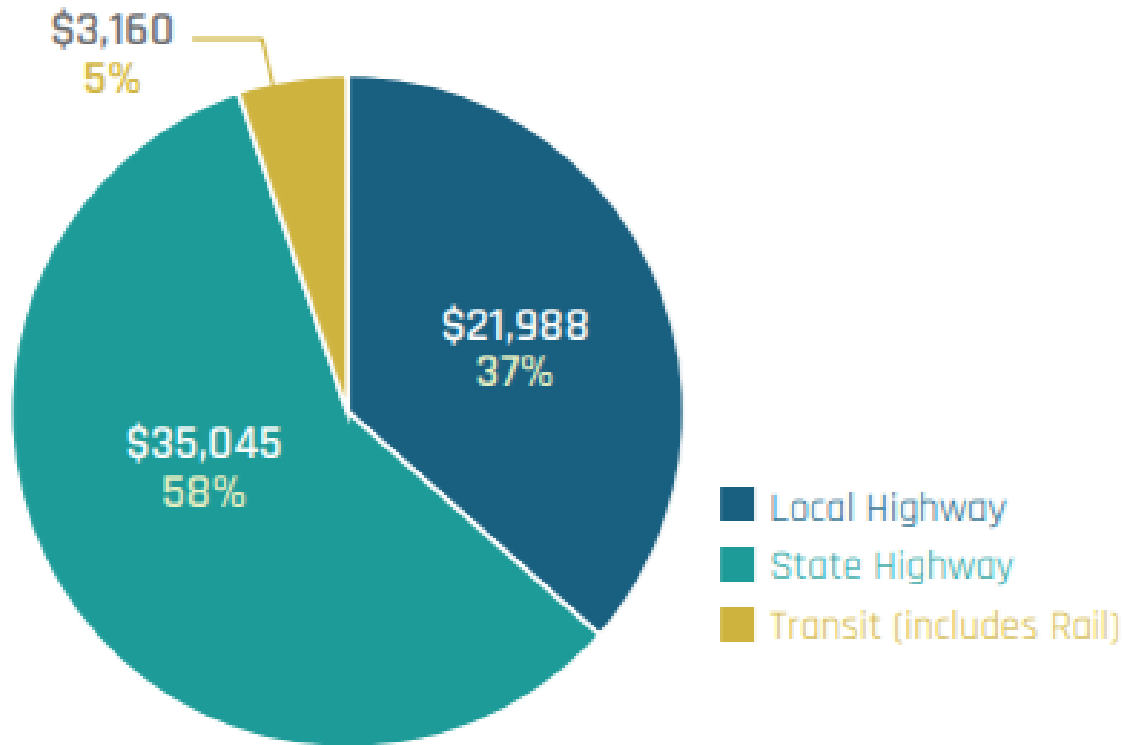
FIGURE 2 SUMMARY OF 2019 FTIP BY PROGRAM (in 000's)

	LOCAL HIGHWAY	STATE HIGHWAY	TRANSIT (INCLUDES RAIL)	TOTAL
2018/19	\$2,165,273	\$3,956,631	\$3,997,625	\$10,119,529
2019/20	\$1,658,397	\$3,123,350	\$3,109,419	\$7,891,166
2020/21	\$1,098,574	\$3,050,009	\$2,100,260	\$6,248,843
2021/22	\$523,945	\$3,027,164	\$1,771,316	\$5,322,425
2022/23	\$1,100,119	\$346,176	\$1,047,382	\$2,493,677
2023/24	\$573,083	\$761,638	\$1,157,753	\$2,492,474
TOTAL	\$7,119,391	\$14,264,968	\$13,183,755	\$34,568,114
% OF TOTAL	21%	41%	38%	100%

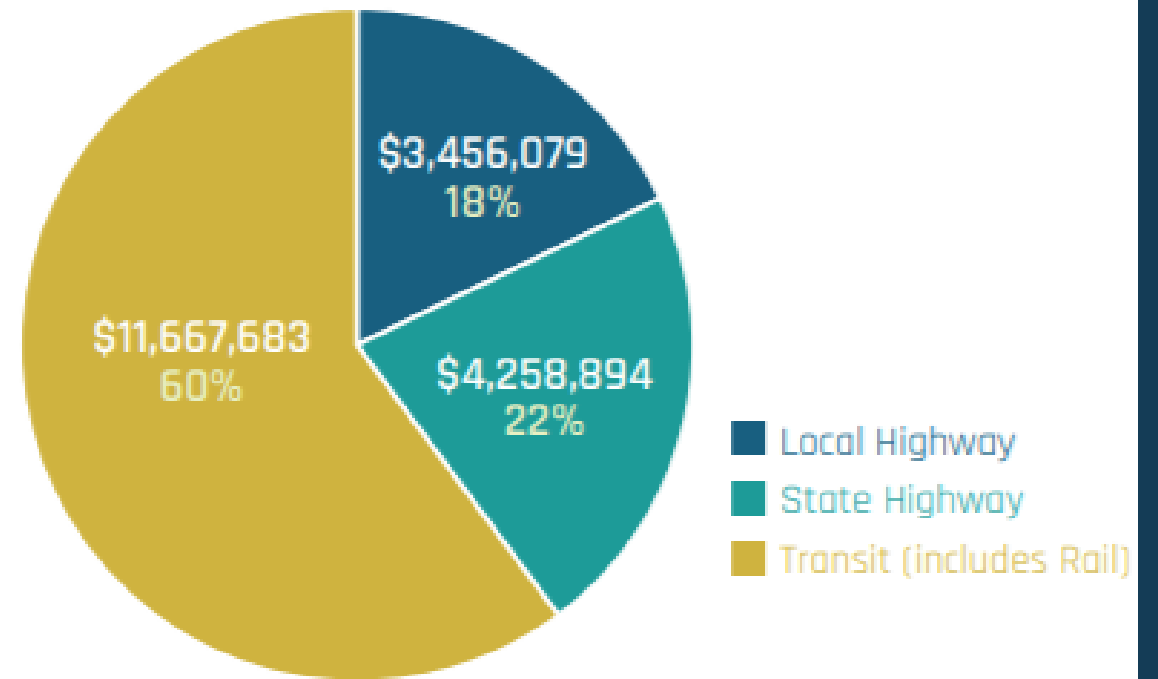
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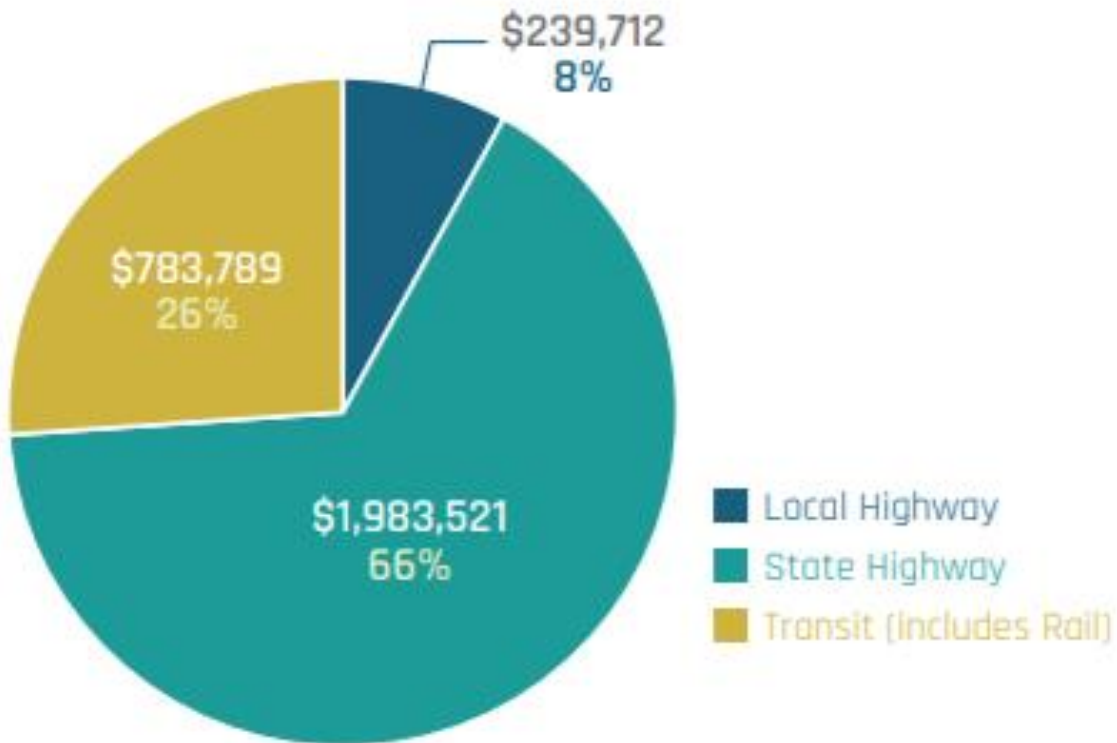
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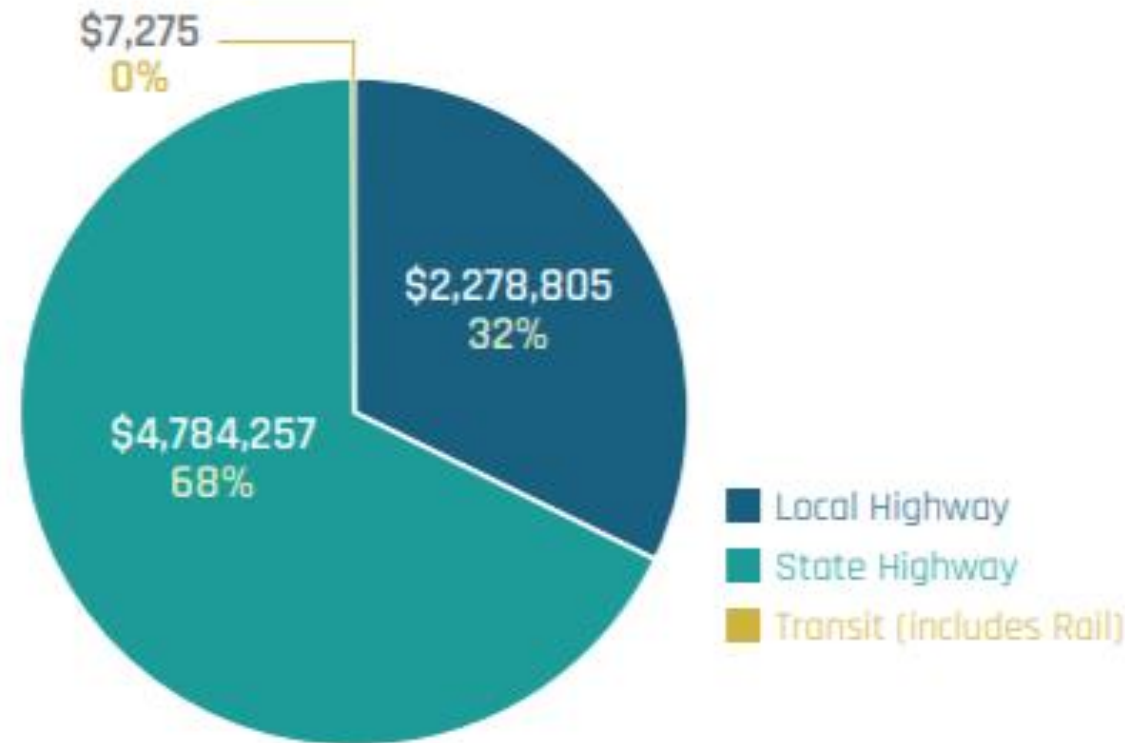
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ORANGE COUNTY: \$3,007,022 (in \$000's)



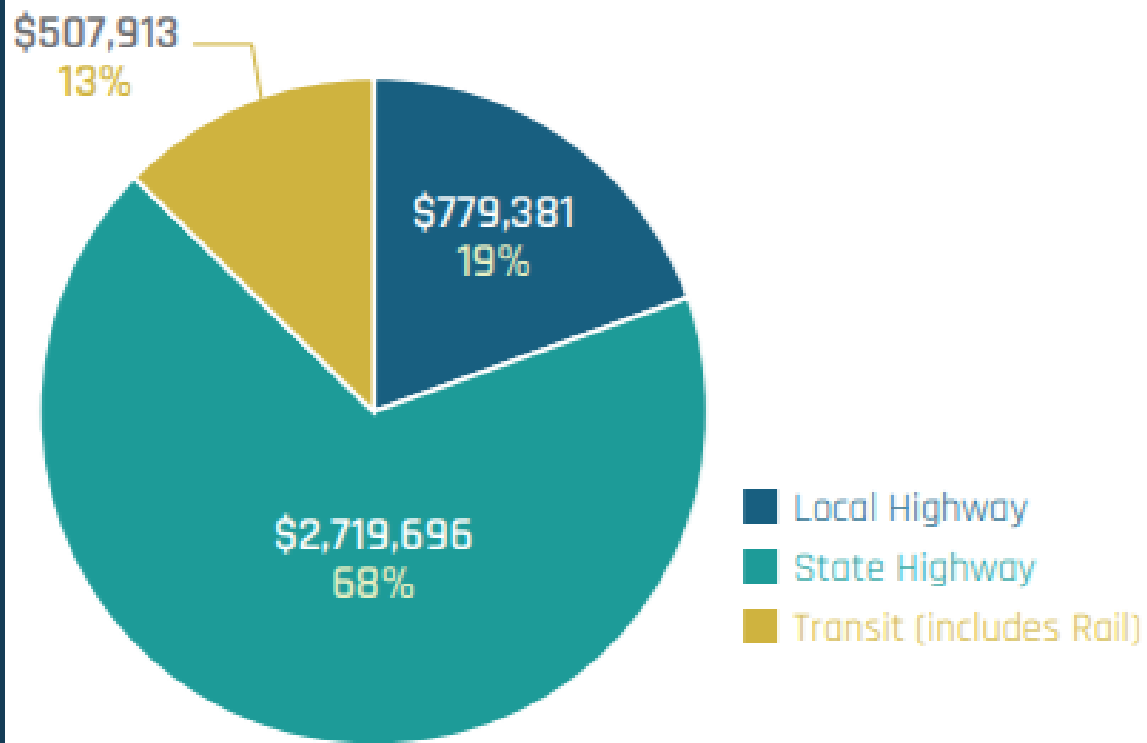
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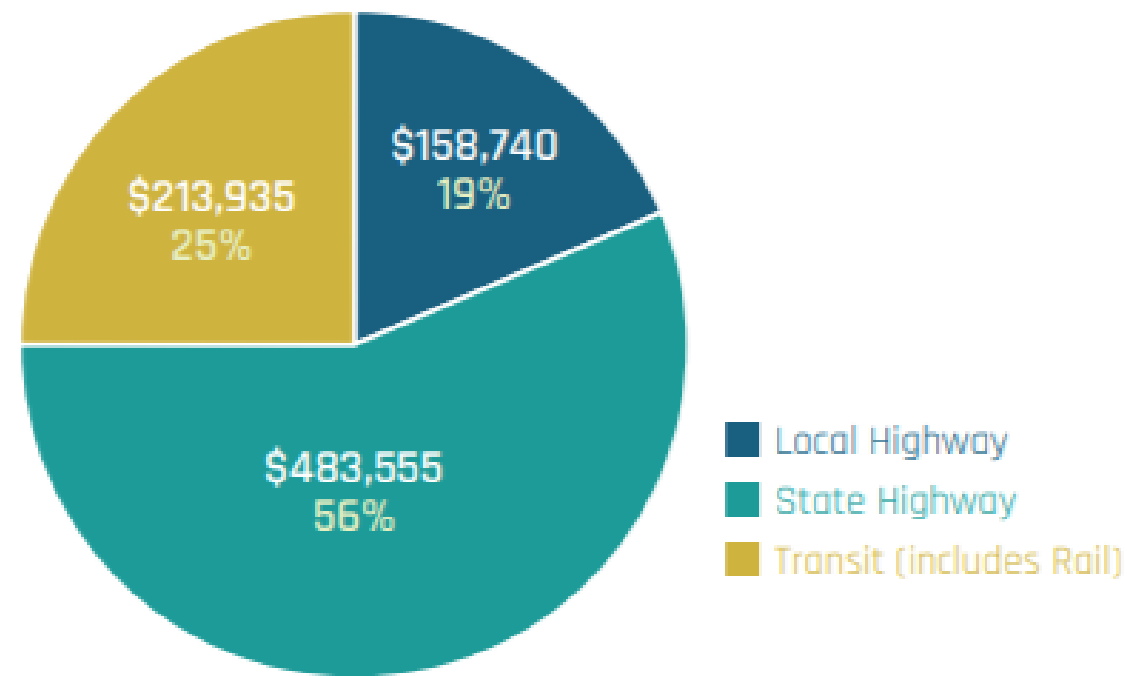
Summary of 2019 FTIP by Program and County (000's)



SAN BERNARDINO COUNTY: \$4,006,990 (in \$000's)



VENTURA COUNTY: \$856,230 (in \$000's)



2019 FTIP Investment Categories



Category	All Counties						Total	%
Unit: thousands	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024		
Transit Improvement								
Bus Equipment or Capital Lease	91,445	3,126	2,596	1,057	-	-	98,224	0%
Bus Vehicles Expansion	32,550	4,110	1,376	-	-	-	38,036	0%
Intercity/Heavy Rail Vehicles Expansion	100	-	-	-	131,000	131,000	262,100	1%
Intercity/Heavy Rail Extension	1,707,035	1,108,274	1,155,607	1,035,457	724,642	599,548	6,330,563	18%
Light Rail Equipment	36,000	175,000	-	-	-	-	211,000	1%
Light Rail Extension	256,480	316,410	210,500	218,000	191,000	426,400	1,618,790	5%
Light Rail Vehicles Expansion	410,632	43,628	27,800	-	-	-	482,060	1%
Transit Equipment, Structures, Facilities	82,858	38,038	126,742	52,828	40,166	96,164	436,796	1%
Transit Improvement Subtotal	2,617,100	1,688,586	1,524,621	1,307,342	1,086,808	1,253,112	9,477,569	27%
Transit Operations & Maintenance								
Bus Operations	247,077	76,371	181,640	46,673	615	670	553,046	2%
Bus Vehicles Rehab/Replace	632,432	1,135,640	308,241	308,960	-	-	2,385,273	7%
Commuter Rail Operations	8,719	1,675	1,676	750	-	-	12,820	0%
Intercity/Heavy Rail Operations	172,936	29,453	7,284	7,284	-	-	216,957	1%
Intercity/Heavy Rail Equipment	6,910	10,200	19,200	-	-	-	36,310	0%
Paratransit	214,336	166,802	101,392	107,483	125	135	590,273	2%
Transit O&M Subtotal	1,282,410	1,420,141	619,433	471,150	740	805	3,794,679	11%

2019 FTIP Investment Categories



Category	All Counties						Total	%
Unit: thousands	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024		
Highway Improvement								
Auxiliary, Passing, Truck Climbing Lane	86,668	-	25,716	9,956	-	-	122,340	0%
Bridge Improvement	58,776	65,696	43,482	14,469	245,305	13,300	441,028	1%
Capacity Enhancing Improvements (Highway)	1,508,039	638,991	2,156,581	1,881,259	255,466	826,784	7,267,120	21%
Grade Separations	298,687	232,984	370,407	106,595	43,000	157,759	1,209,432	3%
HOV Lanes	427,302	348,656	178,255	291,153	38,529	-	1,283,895	4%
Interchange, ramps, over/undercrossing	734,917	734,161	379,333	290,196	100,720	205,361	2,444,688	7%
Non-Capacity Improvements	305,667	222,807	54,161	26,115	27,172	6,853	642,775	2%
Highway Improvement Subtotal	3,420,056	2,243,295	3,207,935	2,619,743	710,192	1,210,057	13,411,278	39%
Highway Operations & Maintenance								
SHOPP Operations	296,907	186,285	29,434	25,748	-	3,250	541,624	2%
SHOPP Rehabilitation	1,095,259	1,391,325	544,438	586,201	-	-	3,617,223	10%
SHOPP Safety	443,435	318,830	66,432	169,510	-	-	998,207	3%
Road Rehabilitation/Replacement	232,601	373,745	113,709	60,095	660,666	21,700	1,462,516	4%
Safety Improvements	93,470	42,498	4,131	-	-	-	140,099	0%
Soundwalls	1,520	3,000	-	-	-	-	4,520	0%
Highway O&M Subtotal	2,163,192	2,315,683	758,144	841,554	660,666	24,950	6,764,189	20%

2019 FTIP Investment Categories

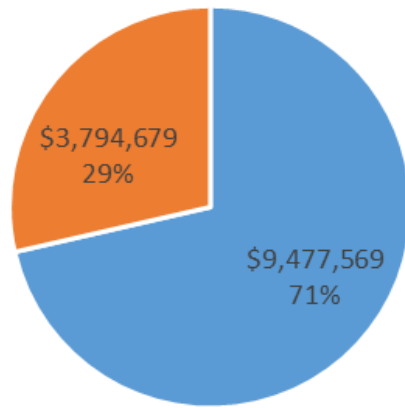


Category	All Counties						Total	%
Unit: thousands	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024		
ITS, TDM, and Non-Motorized								
ITS	163,822	25,897	24,699	8,919	250	-	223,587	1%
Bicycle and Pedestrian Facilities	251,742	98,523	51,448	4,297	2,000	-	408,010	1%
Rideshare	17,386	643	443	443	-	-	18,915	0%
TDM, Park and Ride (excl. ridematching)	27,776	4,915	4,459	3,224	-	-	40,374	0%
ITS, TDM, and Non-Motorized Subtotal	460,726	129,978	81,049	16,883	2,250	-	690,886	2%
Other								
Administration, Admin. Facilities, Vehicles, Misc.	66,371	15,086	3,939	7,864	4,538	3,550	101,348	0%
Ferry Service	70	-	-	-	-	-	70	0%
Land Acquisition	-	-	-	-	-	-	-	0%
Landscaping	33,326	25,816	14,453	4,000	-	-	77,595	0%
Planning	7,145	1,047	1,586	3,434	3,433	-	16,645	0%
Study	13,618	3,908	3,530	-	25,050	-	46,106	0%
Transportation Enhancement Activities	3,063	-	-	-	-	-	3,063	0%
Other Subtotal	123,593	45,857	23,508	15,298	33,021	3,550	244,827	1%
	\$	\$	\$	\$			\$	
Various Agencies Lump Amounts	52,452	47,626	34,153	50,455			184,686	1%
Total	10,119,529	7,891,166	6,248,843	5,322,425	2,493,677	2,492,474	34,568,114	100%

2019 FTIP Investment Categories - SCAG

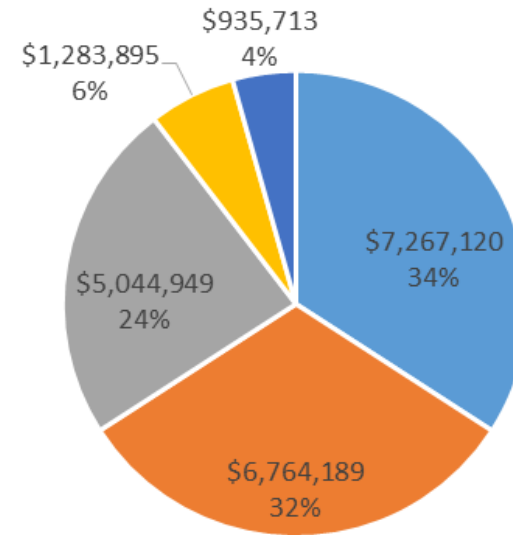


TRANSIT INVESTMENT: \$13,272,248 (IN \$000'S)



■ Transit Improvement ■ Transit Operations & Maintenance

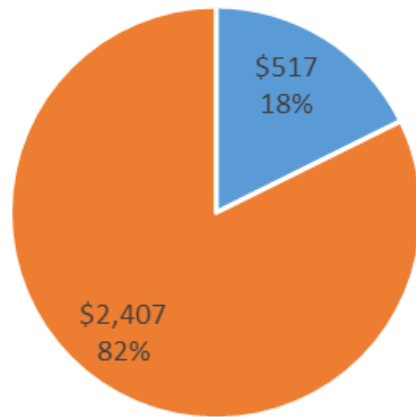
HIGHWAY INVESTMENT: \$21,295,866 (IN \$000'S)



- Capacity Enhancing Improvements (Highway)
- Highway Operations & Maintenance
- Other Highway Improvement
- HOV Lanes
- ITS, TDM, and Non-Motorized

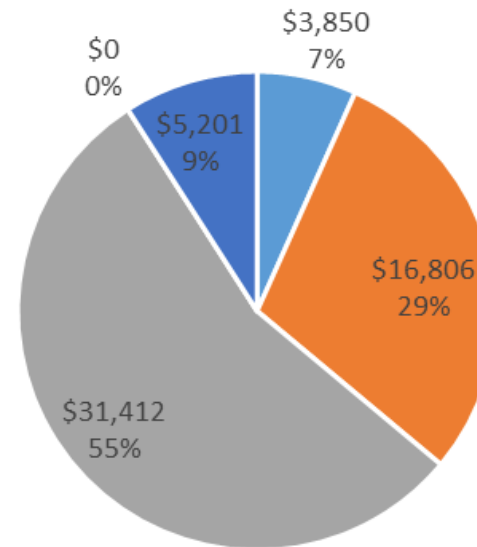
2019 FTIP Investment Categories - Imperial

TRANSIT INVESTMENT: \$2,924 (IN \$000'S)



■ Transit Improvement ■ Transit Operations & Maintenance

HIGHWAY INVESTMENT: \$57,269 (IN \$000'S)

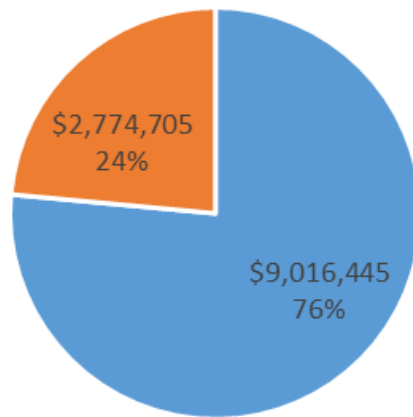


■ Capacity Enhancing Improvements (Highway)
■ Highway Operations & Maintenance
■ Other Highway Improvement
■ HOV Lanes
■ ITS, TDM, and Non-Motorized

2019 FTIP Investment Categories – Los Angeles

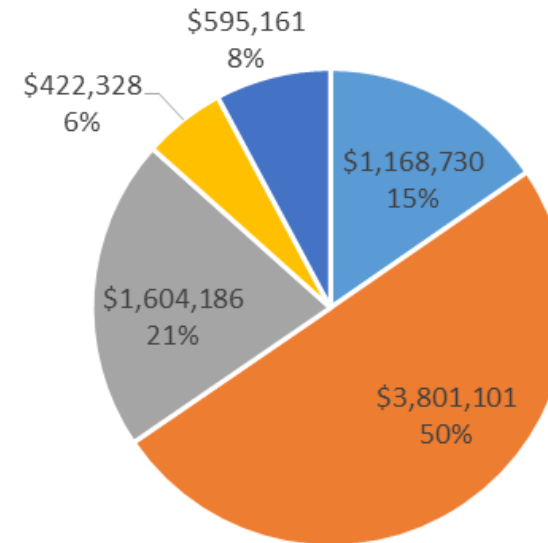


TRANSIT INVESTMENT: \$11,791,150 (IN \$000'S)



■ Transit Improvement ■ Transit Operations & Maintenance

HIGHWAY INVESTMENT: \$7,591,506 (IN \$000'S)

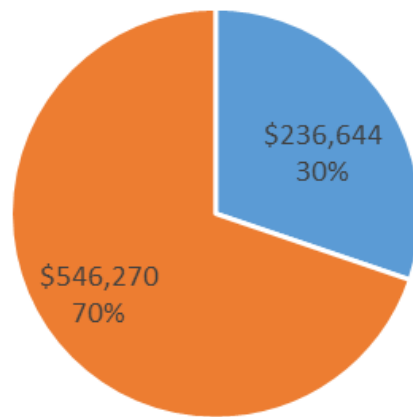


■ Capacity Enhancing Improvements (Highway)
■ Highway Operations & Maintenance
■ Other Highway Improvement
■ HOV Lanes
■ ITS, TDM, and Non-Motorized

2019 FTIP Investment Categories – Orange

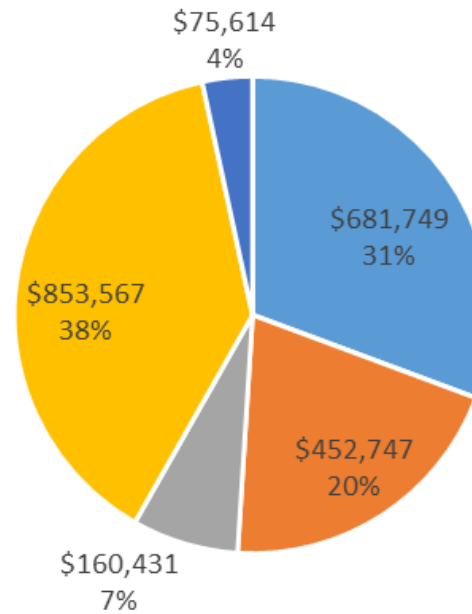


TRANSIT INVESTMENT: \$782,914 (IN \$000'S)



■ Transit Improvement ■ Transit Operations & Maintenance

HIGHWAY INVESTMENT: \$2,224,108 (IN \$000'S)

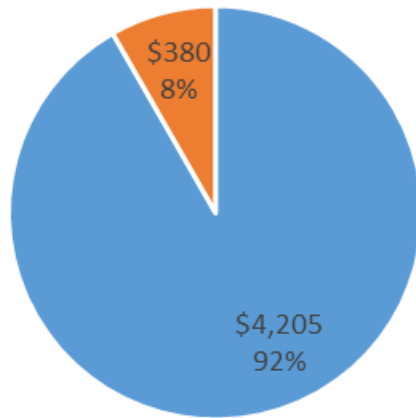


■ Capacity Enhancing Improvements (Highway)
■ Highway Operations & Maintenance
■ Other Highway Improvement
■ HOV Lanes
■ ITS, TDM, and Non-Motorized

2019 FTIP Investment Categories – Riverside

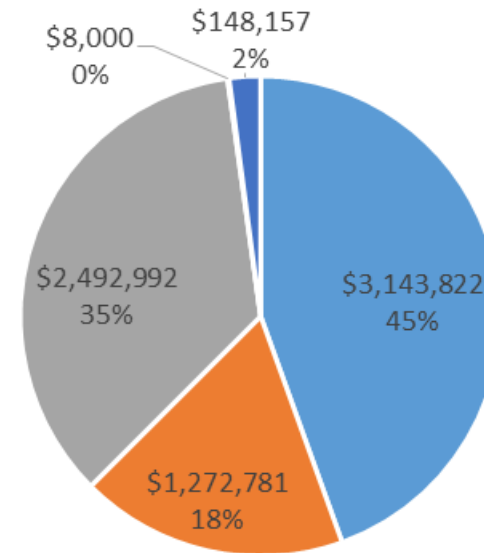


TRANSIT INVESTMENT: \$4,585 (IN \$000'S)



■ Transit Improvement ■ Transit Operations & Maintenance

HIGHWAY INVESTMENT: \$7,065,752 (IN \$000'S)

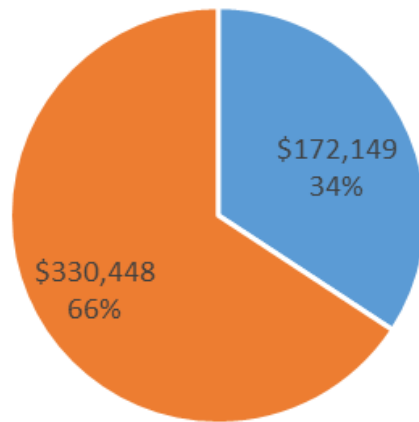


- Capacity Enhancing Improvements (Highway)
- Highway Operations & Maintenance
- Other Highway Improvement
- HOV Lanes
- ITS, TDM, and Non-Motorized

2019 FTIP Investment Categories – San Bernardino

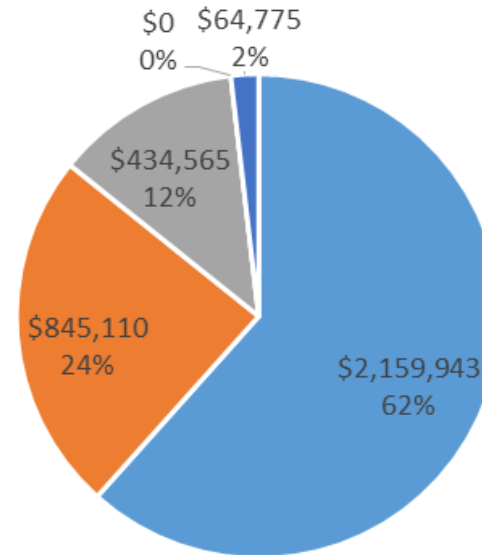


TRANSIT INVESTMENT: \$502,597 (IN \$000'S)



■ Transit Improvement ■ Transit Operations & Maintenance

HIGHWAY INVESTMENT: \$3,504,393 (IN \$000'S)

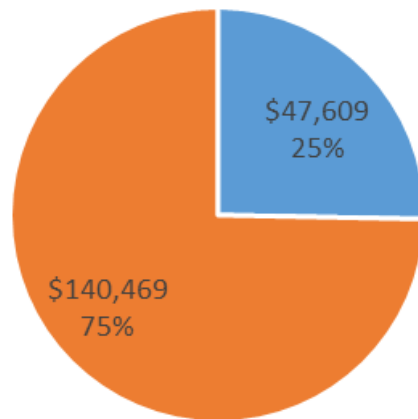


- Capacity Enhancing Improvements (Highway)
- Highway Operations & Maintenance
- Other Highway Improvement
- HOV Lanes
- ITS, TDM, and Non-Motorized

2019 FTIP Investment Categories – Ventura

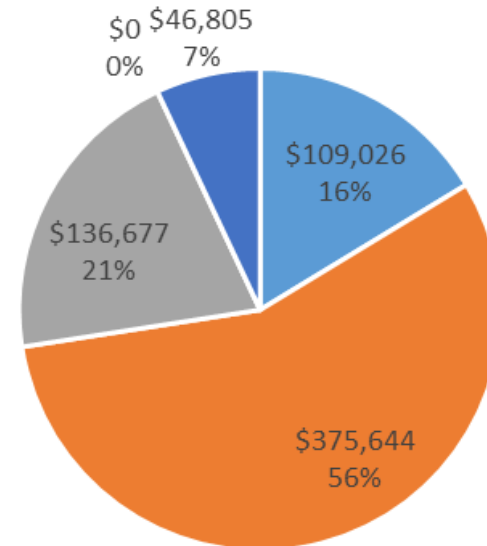


TRANSIT INVESTMENT: \$188,078 (IN \$000'S)



■ Transit Improvement ■ Transit Operations & Maintenance

HIGHWAY INVESTMENT: \$668,152 (IN \$000'S)



■ Capacity Enhancing Improvements (Highway)
■ Highway Operations & Maintenance
■ Other Highway Improvement
■ HOV Lanes
■ ITS, TDM, and Non-Motorized

Industry Sector in SCAG REMI Transight Model



Investment Category	REMI sector	
Highway Improvement, Highway Operations & Maintenance, Bicycle and Pedestrian Facilities, TDM, Park and Ride	Construction	Highway & streets
Transit Equipment, Structures, Facilities	Construction	Other nonresidential structures
Bus Equipment or Capital Lease, Bus Vehicles Expansion, Bus Vehicles Rehab/Replace	Manufacturing	Heavy duty truck manufacturing
Intercity/Heavy Rail Vehicles Expansion, Intercity/Heavy Rail Extension, Light Rail Equipment, Light Rail Extension, Light Rail Vehicles Expansion, Intercity/Heavy Rail Equipment	Manufacturing	Railroad rolling stock manufacturing
Bus Operations, Paratransit, Rideshare	Transportation and Warehousing	Transit and ground passenger transportation
Commuter Rail Operations, Intercity/Heavy Rail Operations	Transportation and Warehousing	Rail Transportation
Ferry Service	Transportation and Warehousing	Water transportation
ITS, Landscaping, Planning, Study, Transportation Enhancement Activities	Professional, Scientific, and Technical Services	Architectural, engineering, and related services
Administration, Admin. Facilities, Vehicles, Misc.	Management of companies and enterprises	Management of companies and enterprises

Framework of SCAG REMI TranSight Model



Geographic area: This analysis covers the six county SCAG region, which corresponds to the majority of Southern California as contained in Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties, Rest of California, and Rest of US.

Time frame: The analysis evaluates the impact of implementing the planned transportation investment from 2018 to 2024.

Costs and units: All costs and dollar amounts are shown in current dollars.

Employment is measured in number of persons.

Policy Variable Inputs of SCAG REMI TranSight Model



Policy Variable Inputs

Active	Edit	Group			
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Construction- Highway & streets			
Active	View	Category	Detail	Region	Units
<input checked="" type="checkbox"/>		Detailed Industry Sales (Exogenous Production)	Highways and streets	Los Angeles County	Nominal \$ (000s)
<input checked="" type="checkbox"/>		Detailed Industry Sales (Exogenous Production)	Highways and streets	Orange County	Nominal \$ (000s)
<input checked="" type="checkbox"/>		Detailed Industry Sales (Exogenous Production)	Highways and streets	Riverside County	Nominal \$ (000s)
<input checked="" type="checkbox"/>		Detailed Industry Sales (Exogenous Production)	Highways and streets	San Bernardino County	Nominal \$ (000s)
<input checked="" type="checkbox"/>		Detailed Industry Sales (Exogenous Production)	Highways and streets	Imperial County	Nominal \$ (000s)
<input checked="" type="checkbox"/>		Detailed Industry Sales (Exogenous Production)	Highways and streets	Ventura County	Nominal \$ (000s)
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Construction- Other nonresidential structures			
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Manufacturing- Heavy duty truck manufacturing			
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Manufacturing- Railroad rolling stock manufacturing			
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	T&W- Transit and ground passenger transportation			
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	T&W- Rail transportation			
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	T&W- Water transportation			
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Prof, Scien, & Tec Servcies- Archi, Eng, & related services			
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Manag of com & ent- Manag of com and enterprises			

Results: Jobs created Annually



FIGURE 3 JOBS CREATED ANNUALLY BY 2019 FTIP INVESTMENTS (REMI ANALYSIS)

	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	AVERAGE
SCAG REGION	168,793	128,077	105,571	85,684	34,793	25,382	91,383
LOS ANGELES COUNTY	93,285	61,102	37,969	38,204	14,363	9,836	42,460
ORANGE COUNTY	26,332	23,045	14,168	9,067	3,579	1,001	12,865
SAN BERNARDINO COUNTY	16,246	14,178	19,116	18,125	4,236	2,042	12,324
RIVERSIDE COUNTY	26,005	24,794	31,113	16,887	11,929	10,987	20,286
VENTURA COUNTY	5,647	3,538	2,336	2,352	481	1,471	2,637
IMPERIAL COUNTY	294	524	219	152	152	57	233

Results: Spillover Impact



In addition to supporting job basis and creation in the region, the rest of California will also benefit from spillover impacts of these investments totaling an additional 5,500 jobs per year on average, and an additional 21,000 jobs per year on average in other US states.

Interestingly, Job creation in the rest of California and other states is greater in the 2019 FTIP investment compared to the 2017 FTIP investment due to increased trade between the SCAG region and other areas in California and the US.

This shows that investing for transportation in SCAG region is becoming more important for job creation not only for our region but also beyond.

Thank you

For more information, please visit:

<http://ftip.scag.ca.gov>

www.scagrtpscs.net

Or email us at choj@scag.ca.gov



SCAGTM

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