

TRANSPORTATION UNIFORM MITIGATION FEE NEXUS REPORT



CVAG

TUNE



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Nexus Report

Transportation Uniform Mitigation Fee (TUMF) 2018 Fee Schedule Update

Prepared for:

Coachella Valley Association of Governments

In Association with:

City of Cathedral City
City of Coachella
City of Desert Hot Springs
City of Indian Wells
City of Indio
City of La Quinta
City of Palm Desert
City of Palm Springs
City of Rancho Mirage
County of Riverside

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March 2018

EPS #144043

The Economics of Land Use



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1. REPORT OVERVIEW AND RESULTS

Introduction

This Nexus Report provides the Coachella Valley Association of Governments (CVAG) and its member jurisdictions with the necessary technical documentation to support the adoption of an updated Transportation Uniform Mitigation Fee (TUMF). Impact fees are one-time charges on new development approved and collected by jurisdictions to cover the cost of regional transportation-related capital facilities and infrastructure that are required to serve new growth.¹ The fees are typically collected upon issuance of a building permit or certificate of occupancy.

Initially established in 1989, the CVAG TUMF is a one-time fee charged on all new development occurring within the CVAG region designed to cover the “fair share” cost of regional serving transportation projects and improvements needed to serve growth. The program relies on local agencies (e.g., cities and the County) to collect TUMF as development occurs. The TUMF Nexus Report establishes a nexus or reasonable relationship between the updated fee amount and the proportion of transportation improvement costs attributable to new development.

This Nexus Report has been prepared by Economic & Planning Systems (EPS) with support from a broader consultant team, led by Michael Baker International, that has been retained by the CVAG to assist in developing key components of the Regional Transportation Plan (RTP). The analysis and methodology incorporate input from CVAG staff, its member jurisdictions, the TUMF Nexus Advisory Committee, and other stakeholders.

Institutional Context

The CVAG TUMF program is a component of Riverside County’s Measure A. Measure A is a one-half percent sales tax program that provides funding for a wide variety of transportation projects and services throughout Riverside County. It was originally approved by voters of Riverside County in 1988 and given a 30-year extension in 2002. Cities and the county in the Coachella Valley must participate in the TUMF program to assist in the financing of the priority regional arterial system in order to receive local Measure A funds.

If a city or the county chooses not to levy the TUMF, the funds they would otherwise receive from Measure A for local streets and roads is added to the Measure A funds for the Regional Arterial Program. A portion of the Measure A revenues for the Coachella Valley area is returned to the cities and the county in the Coachella Valley to assist with the funding of local street and road improvements. These funds supplement existing federal, state, and local funds. Local street improvements adjacent to new residential and business developments are typically paid for by the developers.

¹ New development includes any construction activity that requires a building permit and creates additional impacts on a jurisdiction’s regional transportation infrastructure once completed (e.g., through additional travel demand or “trips”).

Other key components of the RTP that have been updated as part of this study process, and used as critical inputs in the TUMF update, include:

- **Transportation Project Prioritization Study (TPPS):** The TPPS identifies and prioritizes the regional arterial transportation projects in the CVAG region.
- **Regional Arterial Cost Estimate (RACE):** The RACE provides costs estimates for the projects included in the TPPS.
- **Active Transportation Plan (ATP):** The Regional ATP defines the bicycle, pedestrian, and low speed electric vehicle (LSEV) networks designed to provide a multimodal complement and/or alternative to automobiles. The Regional ATP projects are included in the TPPS.

The TPPS, RACE, and ATP were formally approved by the CVAG Executive Committee on June 27, 2016. Since the TPPS, RACE, and ATP provide the underlying basis for the TUMF program, these updates have necessitated update of the TUMF program to reaffirm the nexus between projected development and needed transportation system improvements. The reevaluation of the TUMF nexus also provides the opportunity to address important policy issues including, fee land use categories, exemptions, cost indexing, and other factors, as described further in **Chapter 7**.

Legal Context

A Nexus Report provides a legal basis and necessary technical analysis to support a schedule of transportation impact fees consistent with Mitigation Fee Act (AB 1600/ Government Code Section 66000 et seq.). The Mitigation Fee Act allows jurisdictions to adopt, by resolution, the Transportation Impact Fee consistent with the supporting technical analysis and findings provided in this Report. The Resolution approach to setting the fee allows periodic adjustments of the fee amount that may be necessary over time, without amending the enabling ordinance.

Impact fee revenue can be collected and used to cover the cost of constructing capital and infrastructure improvements required to serve new development and growth in the jurisdictions in which it is charged. As such impact fees must be based on a reasonable nexus, or connection, between new growth and development and the need for a new facility or improvement. Impact fee revenue cannot be used to cover the operation and maintenance costs of these or any other facilities and infrastructure. In addition, impact fee revenue cannot be collected or used to cover the cost of existing needs/ deficiencies in the transportation capital improvement network.

In establishing, increasing, or imposing a fee as a condition for the approval of a development project, Government Code 66001(a) and (b) state that the local agency must:

1. Identify the purpose of the fee;
2. Identify how the fee is to be used;
3. Determine how a reasonable relationship exists between the fee use and type of development project for which the fee is being used;
4. Determine how the need for the public facility relates to the type of development project for which the fee is imposed; and
5. Show the relationship between the amount of the fee and the cost of the public facility.

These statutory requirements have been followed in establishing this TUMF, as documented in subsequent chapters. If the transportation impact fee is adopted, this Nexus Study and the technical information it contains should be maintained and reviewed periodically by CVAG to ensure accuracy and to enable the adequate programming of funding sources. To the extent that transportation improvement requirements, costs, and development potential changes over time, the TUMF will need to be updated. Further information on the implementation and administration of the TUMF is provided in **Chapter 7**.

Summary of the TUMF Calculation

Table 1 summarizes the TUMF calculation per trip consistent with nexus requirements and the associated analysis contained in this Technical Report. These transportation impact fees are designed to cover the cost of regional transportation improvements required to support new development after existing deficiencies and known other funding sources have been taken into account. The fees apply to all new residential and non-residential projects, except those exempted by State or federal law or other means.

Table 1 Summary of TUMF per trip Calculation

<u>Category</u>	<u>Source</u>	<u>Formula</u>	<u>Amount</u>
Net TUMF Cost	See Table 9	= a	\$263,335,000
Growth in ADT (2015 - 2040)	See Table 3	= b	1,074,520
Avg. TUMF / ADT		= a / b	\$245

While per trip sets the basis for the TUMF, individual land use categories will pay different fees depending on their trip rates per unit. **Table 2** provides an illustrative calculation of the fee level for various land use categories. The actual land use categories and their specific application, including various discounts, will be included in the TUMF Handbook, as described in **Chapter 7**.

Table 2 Illustrative TUMF Calculation for Selected Land Use Categories

Land Use Category	Fee Per Unit ¹
<u>Residential</u>	
Single Family Detached	\$2,310 per dwelling
Multi-Family	\$1,790 per dwelling
<u>Non-Residential</u>	
Industrial	\$1,220 per 1,000 sq. ft.
Office	\$2,390 per 1,000 sq. ft.
Retail ²	\$6,010 per 1,000 sq. ft.

[1] Based on a TUMF of \$245 per ADT.

[2] Includes a discount of 35% percent to account for pass-through trips.

2. TUMF BOUNDARY AND TRAVEL DEMAND

This chapter documents the land use and travel demand assumptions and forecasts that underlie the TUMF calculations. These factors drive the traffic generation and attraction in the CVAG region and, in turn, are critical in determining how to allocate new transportation improvement costs between existing and new development.

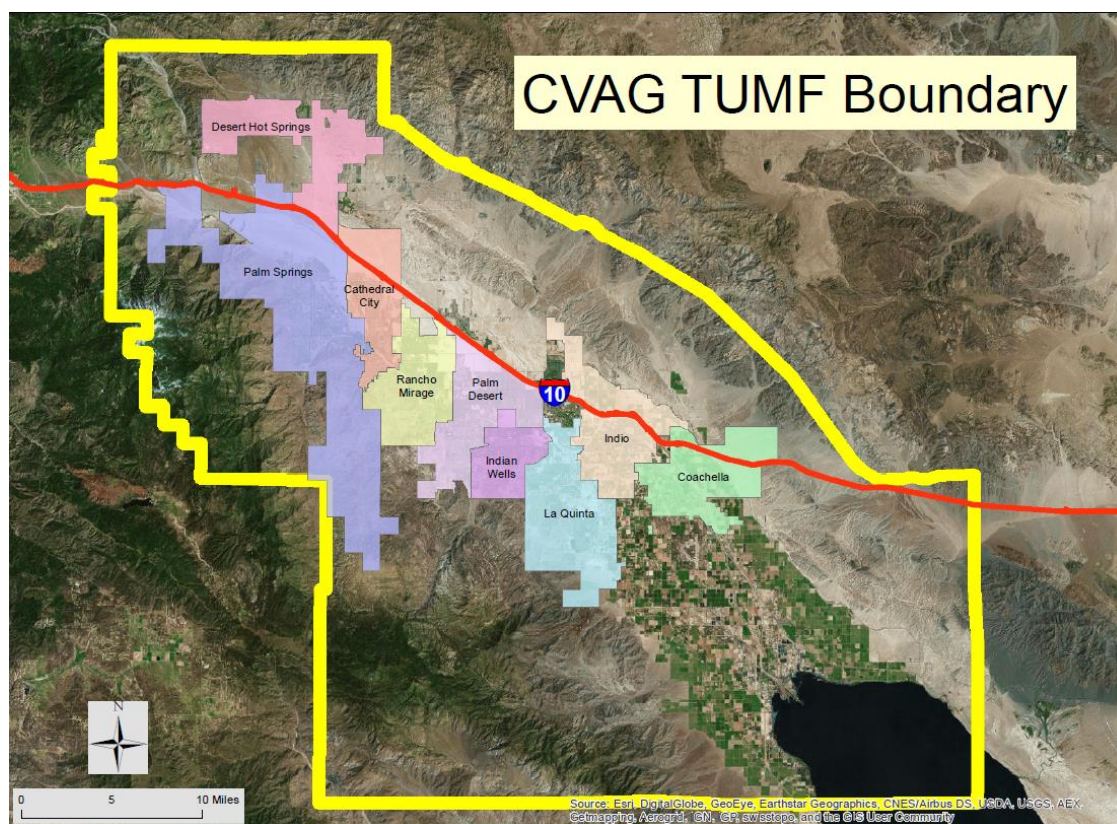
TUMF Boundary

The TUMF boundaries define the geography (i.e. cities and unincorporated areas) where new development will be subject to the TUMF. In order to assure accurate and timely implementation of the TUMF program, the applicable boundary should be easily identified and understood by developers and jurisdictions responsible for fee collection. Good boundary devices are easily identified, stay relatively constant over time, and can be related to data collection or analysis zones in order to facilitate future analysis updates.

As part of an update to the TUMF in 2005 (Parsons Brinckerhoff, 2005), the CVAG TUMF Boundary Determination established a roughly defined area within which there exists a “reasonable relationship” between new development and traffic conditions on TUMF roadways. Formal boundary lines were defined based on the results of the analysis in relation to easily administered features. This boundary is illustrated in **Figure 1** and includes the CVAG core, as well as outlying areas along the I-10 east, SR74 south, SR86 south, and SR111 south corridors. The boundary corresponds to several easily defined features:

- The Riverside County line to the north and south,
- Joshua Tree National Park to the northeast,
- Township line 10E-11E to the east, and
- The WRCOG/CVAG border to the west.

Figure 1 CVAG TUMF Boundary



Travel Demand Assumptions and Forecasts

Pursuant to the Mitigation Fee Act, development impact fees must establish a reasonable relationship, or nexus, between the cost of new capital facilities and improvements allocated to future development and the contribution of growth to the need for these facilities. For transportation impact fees, recently updated and adopted traffic models are generally used as a key tool to estimate the allocation of costs of new transportation facilities between existing and future development.

Based on direction from the CVAG Executive Committee, the Riverside County Traffic Analysis Model (RIVTAM) has been used to calculate the TUMF. Specifically, as part of this study process, the RIVTAM model has been updated to reflect the latest 2040 socio-economic forecasts and roadway network assumptions in the CVAG region consistent with SCAG's 2016 Regional Transportation Plan (RTP). In addition to the Federal Transportation Improvement Program (FTIP) and projects identified in the 2016 RTP, the TPPS projects were also added to the model to estimate the daily trips generated in the CVAG region by Year 2040.²

² For transportation modeling purposes, even projects not included in the TUMF calculation but included as part of the RTP or FTIP are considered to be part of the regional network in 2040.

Table 3 shows the estimated growth in the number of daily vehicle trips ends in the CVAG region between existing (2015) and 2040 based on the updated RIVTAM model. As shown, the existing 2015 vehicle trip ends were estimated to be 3,141,640 and the total growth was estimated to be an additional 1,074,520 trip ends over the next 25 years, or by 2040.³ Based on this projection, the future growth in trip ends will represents about 25 percent of total trips in 2040. In other words, future growth is expected to account for roughly 25 percent of total trips ends within the CVAG region by 2040. This proportion is used to allocate a portion of the cost for TUMF eligible projects to future growth, as described further in subsequent chapters.

Table 3 Estimated Growth in Trip Ends in CVAG Region (2015 – 2040)

	Avg. Daily Trip (ADT) Ends in Year:		2015 - 2040 Growth in ADT		
	2015	2040 (with TPPS)	Total	Growth as % of 2040 total	Average Annual
Total for CVAG Regional Network	3,141,640	4,216,160	1,074,520	25.5%	1.2%

Source: F&P; RIVTAM

³ Trip ends are those that either start or end in the CVAG region. Through trips (i.e. those that pass through but do not stop in the CVAG region), are excluded from this calculation as described further in **Chapter 4**.

3. TUMF PROJECTS AND COSTS

This chapter documents the transportation facilities included in the TUMF as well as their estimated cost. Development impact fees are derived from a list of planned regional transportation capital improvement projects and associated costs that are needed in part or in full to accommodate new growth. Consequently, the capital improvements included in the fee program need to be described in sufficient detail to generate cost estimates.⁴

TUMF Project Selection

As noted in **Chapter 1**, the TPPS, as well as the RACE and ATP provide the core elements of the TUMF calculation by providing the list of potentially eligible projects and their corresponding costs. Updates to these documents were prepared by the consultant team, led by Michael Baker International, and formally approved by the CVAG Executive Committee on June 27, 2016.

While the projects included in the TPPS represent the universe of transportation facilities and improvements potentially eligible for funding through TUMF, not all of them need to be included in the program. A key component of the TUMF study process is to identify which of these eligible projects should be included in the TUMF based on both nexus and policy considerations. Accordingly, as part of this study, CVAG obtained input from member jurisdictions and the TUMF Nexus Committee to consider options for reducing the cost of the TUMF program.

The policy direction resulting from this consultation was to identify and remove projects from TUMF consideration where there was uncertainty in the likelihood of that project moving forward in the next 15-25 years. After meeting with each of the individual jurisdictions, CVAG found that nearly all projects scoring below 7.5 points on the TPPS met the criteria and thus should be “removed” from TUMF consideration. Jurisdictions pointed out that these projects may become more certain in the future, when the TUMF Nexus study is repeated.

CVAG, with concurrence from its members and the TUMF Nexus Committee, determined that the regional priority in the TPPS necessitated the inclusion of projects scoring above 7.5 points. By removing TPPS projects scoring 7.5 points and lower, jurisdictions acknowledge that regional funding will not be available for those projects until or unless the TUMF project list (those TPPS projects scoring above 7.5 points) is amended.

The ATP includes a comprehensive listing of all active transportation projects within the jurisdictions of the CVAG member agencies that were determined to have regional significance. Specifically, it includes local and regional bike plans as well as pedestrian improvement to transit hubs. In addition, the TPPS includes other regional transportation projects, such as CV Link, that correspond to long-term planning efforts and cannot analyzed in the same way as traditional TPPS projects. These projects were tested for regional significance based on factors that were agreed upon as part of the RTP study process. Based on CVAG committee direction, ATP and

⁴ Impact fees programs do not, in themselves, represent actual approval of a City plan or capital project (and as such do require clearance through the California Environmental Quality Act or CEQA).

these regional planning projects were not ranked against one another but are simply listed as part of the regional transportation system to be considered for funding.

In addition to this policy-based approach, TPPS projects focused on the resurfacing of existing arterials have been removed from the TUMF calculation based on nexus considerations (i.e., the costs of these projects are excluded from TUMF). These projects are needed to maintain the current regional arterial network rather than help accommodate growth. Based on the requirements of AB 1600, projects focused primarily on the operation and maintenance of existing facilities should be excluded from development impact fee programs. It should be noted that this is a relatively minor adjustment since total cost of these projects is only \$940,000.

Based on the process and criteria described above, about 80 TPPS projects were removed from TUMF consideration, or about 30 percent of the total.⁵ Eliminating these projects removed about \$605 million from TUMF consideration. A detailed list of the projects included and removed from the TPPS is provided in **Appendix A**.

TUMF Project Costs

As described earlier, the Regional Arterial Cost Estimate (RACE) study provides a uniform methodology to create planning-level cost estimates for transportation projects included in the TPPS. As further described in the RACE, these costs estimates include construction, right-of-way, and impact factors to cover other related project conditions.⁶ The costs for CV Link and Regional Signal Synchronization were estimated from other planning efforts and added to the overall TPPS cost.

Table 4 provides cost estimates for TPPS projects after removing those that scored at or below 7.5 points. As shown, the total delivery cost for the projects included as part of the TUMF calculations is estimated at approximately \$2.809 billion, including the TPPS, ATP, and two other regional projects. The cost estimates for each project are attached to this Report as **Appendix B** (with further detail available in the RACE).

⁵ This total excludes ATP and other Regional Projects such as CV Link.

⁶ Impact factors are multipliers applied to the project's construction cost to account for special conditions likely add to its complexity in the construction process. These include project conditions like the existence of utilities structures, nearby drainage facilities, and medians that add complexity and costs.

Table 4 Summary of TUMF Projects and Total Costs

<u>Type of Projects</u>	<u>TUMF Project Cost</u>	
	<u>\$ Amount</u>	<u>%</u>
Buildable Projects	\$2,506,140,000	89.2%
-- Capacity Improvement Projects	\$2,143,490,000	76.3%
-- Widening or Updating Cross-Sections	\$69,910,000	2.5%
-- Other Operational Improvements	\$292,570,000	10.4%
-- Resurface or Reconstruction Only	\$170,000	0.01%
ATP Regional Projects	\$157,700,000	5.6%
-- Regional Bicycle Projects	\$149,700,000	5.3%
-- Regional Pedestrian Improvements	\$8,000,000	0.3%
Other Regional Transportation Projects	\$146,100,000	5.2%
-- CV Link	\$99,400,000	3.5%
-- Valley-wide Signal Synchronization	\$46,700,000	1.7%
Regional Traffic System Costs	\$2,809,940,000	100%

The bulk of the TUMF project costs, or approximately 76.3 percent, are identified as "Capacity Improvement Projects." These projects are so-named because they expand the capacity of the regional transportation network by adding lanes or entirely new arterials and connections, allowing the network to better accommodate growth. The projects referred to as "Widening or Updating of Cross-Sections" and "Other Operational Improvements", which combine for about 13 percent of costs, provide a variety of benefits to both new and existing commuters, but do not expand the network capacity in a measurable way. ATP and other regional projects such as CV Link and valley-wide signal synchronization, combine for slightly less than 11 percent of total costs.

4. TUMF COST ALLOCATION

This Chapter describes how the cost of TUMF eligible projects (described in **Chapter 3**) are allocated to new development. Under the Mitigation Fee Act, development impact fees cannot include the cost of infrastructure improvements needed to address “existing deficiencies”. In other words, the cost of new capital facilities and improvements needed solely to address the needs of existing users must be excluded from the TUMF calculation.

Application of Transportation Demand Model

As noted in **Chapter 2**, the nexus calculations provided in this Report utilize RIVTAM projections to allocate the cost of the TUMF eligible projects between new and existing development. The RIVTAM model is a mathematical representation of travel demand in the CVAG region between Base Year 2008 and Future Year 2040, updated by Fehr & Peers as part of this study effort. The model uses socioeconomic data, such as number of jobs and households to estimate the expected travel in, between, and through CVAG. Existing 2015 origin-destination (O-D) trip table and daily volumes were developed using the interpolation between the Base Year 2008 Model and Future Year 2040 Model.

The traffic growth in CVAG was estimated using the change in origin-destination (O-D) trip tables between existing 2015 Model and Future Year 2040 Model. In order to capture the trips only associated with the Coachella Valley region, the external-to-external trips (meaning trips starting from and ending at areas outside of the Coachella Valley) were excluded from traffic growth. For external-to-internal or internal-to-external trips (meaning trips having one end in CVAG and the other end outside of CVAG), only half of those trips were included in the traffic growth calculation.

For the purpose of the TUMF, the number of trip ends was used to calculate the fee which is consistent with the 2005 TUMF study. Any internal-to-internal trip (meaning trips traveling inside CVAG) is considered as two trip ends and any external-to-internal or internal-to-external trip is considered to have one trip end in Coachella Valley.

The results from the traffic demand model are applied differently depending on the type of TUMF project under consideration. Specifically, this nexus analysis employs different cost allocation methodologies depending on whether the project is primarily designed to increase the overall travel capacity within the CVAG region versus those that are primarily designed for other purposes, such as safety or bicycle / pedestrian access. The cost allocation methodology for each category of TUMF improvement is described separately below.

TUMF Capacity Improvement Projects

As described in **Chapter 3**, the TPPS identified a number of projects as “capacity improvements.” These projects are so-named because they expand the capacity of the regional transportation network by adding lanes to existing facilities or adding entirely new arterials and connections, allowing the network to accommodate growth. For these projects the RIVTAM model was used to estimate the portion of costs attributable to growth. Specifically, the existing 2015 daily volumes were compared to capacity to develop the existing volume/capacity (v/c)

ratio to determine whether the project is experiencing an existing deficiency based on level of service (LOS) criteria. Consistent with the 2005 TUMF study, LOS D or worse is considered to be unacceptable LOS for arterial roadway network.

Any project's roadway segment with a v/c ratio exceeding 0.62 (LOS D or worse) were considered to operate with existing deficiency, and a fair share calculation was then performed to estimate the portion of costs attributable to growth for the project. The fair share percentage was calculated by subtracting the existing volumes from future demand and then divided by the future demand, and the percentage was applied to the project's total cost to estimate the portion of costs attributable to growth. For projects with roadway segments operating at LOS C or better (or v/c ratio of 0.62 or less), it is assumed 100 percent of the project's cost is attributable to growth.

Table 5 shows the list of TUMF projects experiencing a v/c ratio above 0.62 and how the cost of these projects has been allocated between new and existing development. Overall, out of the 190 TUMF projects (excluding ATP) 13 are estimated to operate with an existing deficiency. As shown in **Table 5**, out of the \$121.7 million in total cost estimated for these projects, approximately \$54.4 million is allocated to the TUMF. The remaining \$67 million, or about 55 percent, is attributable to existing deficiencies.

Table 5 TUMF Capacity Improvements with Existing Deficiencies

Street Name	Segment #	Segment Description	Cost Considered in TUMF a	Existing Year 20151		Future Year 2040 w/ TPPS ¹		Fair Share Factor $d = (c - b) / c$	Cost Contributed to Future Growth $e = a * d$
				ADT b	V/C	ADT c	V/C		
AVE 48	48H	Grade Separation at Hwy 111/SPRR	\$22,011,480	21,120	0.85	49,420	0.48	0.57	\$12,604,712
AVE 50	50A	Future Ave 50 SR-86S IC	\$55,222,500	20,260	0.82	37,930	0.35	0.47	\$25,725,852
AVE 50	50I2	Cabazon Rd to SR-86S (Incl. Br. at Whitewater Chnl)	\$3,356,880	20,150	0.72	38,870	0.37	0.48	\$1,616,691
Dillon Rd.	DLN13	S side of Whitewater Br. to Hwy 111	\$4,062,858	19,440	0.71	46,870	0.43	0.59	\$2,377,730
Hwy. 74	Hwy.74A	Highway 111 to El Paseo	\$450,240	38,960	0.63	39,080	0.34	0.00	\$1,383
Hwy. 111	Hwy.111F	Cook St to Eldorado Dr	\$3,537,600	47,240	0.72	67,580	0.58	0.30	\$1,064,735
Hwy. 111	Hwy.111G	Eldorado Dr to Miles Ave	\$4,924,800	53,240	0.81	73,300	0.64	0.27	\$1,347,769
Hwy. 111	Hwy.111H	Miles Ave to Washington St (incl. Br. Over Deep Cyn Chnl)	\$7,573,400	46,430	0.70	62,300	0.43	0.25	\$1,929,211
Indian Cyn Dr.	INC�8	Garnet Ave to 20th Ave	\$165,000	20,370	0.68	37,920	0.56	0.46	\$0
Indian Cyn Dr.	INC�9	20th Ave to 19th Ave	\$1,722,800	24,960	0.85	45,050	0.31	0.45	\$768,281
Indian Cyn Dr.	INC�10	19th Ave to Dillon Rd	\$7,379,840	21,780	0.78	39,410	0.26	0.45	\$3,301,360
Indian Cyn Dr.	INC�13	Pierson Blvd to Mission Lakes Blvd (Incl. Future Br. at Mission Cr.)	\$6,945,600	16,460	0.62	27,730	0.40	0.41	\$2,822,824
Palm Dr.	PD1	I-10 IC to Varner Rd	\$4,024,416	28,340	0.85	35,290	0.24	0.20	\$792,567
Total			\$121,377,414						\$54,353,115

[1] Data provided by Fehr & Peers based on updated RIVTAM.

As noted, the bulk of the capacity improvement projects, in terms of both number and costs, currently operate with a v/c ratio below 0.62. Consequently, these projects are assumed to be entirely attributable to new development.

TUMF Operational, Safety, and ATP Projects

In addition to “capacity improvement projects”, other regional projects are included in the TUMF calculation because they improve the regional network for both existing and new users. While these projects provide a variety of benefits to both new and existing commuters, they do not expand the network capacity in a measurable way. The TUMF projects that fall into this category include operational improvements such as reconfiguring intersections, adding turn lanes at intersections, adding traffic signals, and ATP projects (e.g. bike / pedestrian facility and transit station improvements, and CV Link).

Since these improvements and facilities associated with the project categories above are designed to serve and benefit both existing and new development, the costs are allocated in proportion to growth. Specifically, 25 percent of the cost of these projects are allocated to growth reflecting the estimated share of new trip ends to total trip ends in 2040 (see **Table 3** in **Chapter 2**).

Summary of TUMF Cost Allocation

Table 6 summarizes the allocation of TUMF eligible project costs between new and existing development based on the methodology described above. As shown, overall, about 80 percent of the TUMF eligible project costs are allocated to new development. This amount includes 97 percent of the cost of “Capacity Improvement Projects” since the majority of these projects are not currently needed given level of service standards assumed for this analysis (i.e. v/c ratios of 0.62 or less).

Table 6 Allocation of TUMF Eligible Project Costs to New Development

Type of Projects	Project Costs	Proportion of Costs Allocated to Growth	Total Costs Allocated to Growth
Buildable Projects	\$2,505,970,000		\$2,169,010,747
-- Capacity Improvement Projects ¹	\$2,143,490,000	96.9%	\$2,076,630,000
-- Widening or Updating Cross-Sections ²	\$69,910,000	25.5%	\$17,817,088
-- Other Operational Improvements ²	\$292,570,000	25.5%	\$74,563,659
ATP Regional Projects	\$157,700,000		\$40,191,028
-- Regional Bicycle Projects ²	\$149,700,000	25.5%	\$38,152,168
-- Regional Pedestrian Improvements ²	\$8,000,000	25.5%	\$2,038,860
Other Regional Transportation Projects	\$146,100,000		\$37,234,681
-- CV Link ²	\$99,400,000	25.5%	\$25,332,836
-- Valley-wide Signal Synchronization ²	\$46,700,000	25.5%	\$11,901,845.28
Total	\$2,809,770,000	80%	\$2,246,436,456

[1] Cost allocation based on RIVTAM analysis. For projects with no existing deficiencies, 100 percent of costs are allocated to growth.

[2] Cost allocation based on new trips from 2015 - 2040 divided by total trips in 2040, as shown in Table 3.

5. OTHER FUNDING FOR TUMF PROJECTS

It is a common practice in calculation of a development impact fee to deduct any obligated or projected revenue from other funding sources from the total cost of planned capital facilities and improvements. Accordingly, this section identifies and quantifies the separate external revenue or funding sources (other than the TUMF itself) and deducts these amounts from the TUMF calculation.

CVAG has programming authority for Measure A, State and Federal formula funds. Riverside County Transportation Commission (RCTC) is the regional transportation planning agency responsible for administration of funds throughout Riverside County. Due to the diverse needs of sub-regions throughout the County, programming decisions within Coachella Valley are typically delegated to CVAG. Competitive grant funding and programming is typically managed directly by RCTC or State and Federal sponsoring agencies.

Obligated Funds

TUMF project costs should exclude funding that has already been secured or is obligated from other external sources. As of November, 2016, CVAG has approximately \$232 million allocated to TPPS projects from available sources. Programming decisions are made periodically and obligation values are updated as needed. A list of current projects and funding commitments is summarized in **Table 7**.

Table 7 Summary of Obligated Funds Available to Off-set TUMF Costs

<u>Type of Projects</u>	<u>Project Cost</u>		<u>Obligated Funding¹</u>
	<u>\$ Amount</u>	<u>%</u>	
Buildable Projects	\$2,505,970,000	89.2%	\$145,886,000
-- Capacity Improvement Projects	\$2,143,490,000	76.3%	\$102,956,000
-- Widening or Updating Cross-Sections	\$69,910,000	2.5%	\$1,972,000
-- Other Operational Improvements	\$292,570,000	10.4%	\$40,958,000
ATP Regional Projects	\$157,700,000	5.6%	\$8,300,000
-- Regional Bicycle Projects	\$149,700,000	5.3%	\$8,300,000
-- Regional Pedestrian Improvements	\$8,000,000	0.3%	\$0
Other Regional Transportation Projects	\$146,100,000	5.2%	\$77,767,625
-- CV Link	\$99,400,000	3.5%	\$75,000,000
-- Valley-wide Signal Synchronization	\$46,700,000	1.7%	\$2,767,625
Regional Traffic System Costs	\$2,809,770,000	100%	\$231,953,625

[1] Only includes portion of obligated funding applicable to TUMF related costs.

Although a significant portion of obligated funds are under CVAG's control, competitive funding from State and/or federal sources, such as Active Transportation Program (ATP) funding, is determined by others. ATP projects in the CVAG region, including major infrastructure projects such as CV Link, have received approximately \$75 million in grants and funding allocations from CMAQ and various other sources. The values are deducted from the TPPS and ATP gross network.

Other External Funding

As part of the TUMF study effort, CVAG staff identified and estimated the level of non-TUMF external funding assumptions inherent in each jurisdiction's ability to move specific TPPS projects forward. These external funding assumptions have been removed from the TUMF obligation. Specifically, CVAG staff have worked with member jurisdictions to identify and estimate the additional, external (i.e. non-TUMF) funding assumptions associated with the all TPPS projects rated above 7.5 points. The total external funding estimate from all the jurisdictions was \$328,032,689. Consequently, this amount has been removed from the TUMF calculation.

Developer Funded Improvements

Section 6 (d) (2) of the CVAG TUMF model ordinance indicates that CVAG will "establish an estimate of the value of customary developer dedications to the extent they have been included in the total cost of the regional system." Dedications are right of way and/or completed roadway segments that are required to be completed by developers as part of their development approvals. In previous TUMF Nexus Studies, the estimated value of developer dedications has been used to offset or reduce the TUMF collection target.

This reduction of the TUMF collection target provides an appropriate program 'credit' to developers for completing actual improvements to the arterial system. While the value of developer contributions is difficult to quantify, they are real and should be accounted for in the TUMF. As part of the initial TUMF calculation in 1988 it was estimated that such dedications represented 25 percent of the value of total TPPS (regional system) costs. This estimate was affirmed in 2005. It is recommended that we retain the 25 percent estimate for the value of developer dedications for the 2018 Nexus Study, excluding CV Link.

State and Federal Transportation Funding

CVAG receives transportation funding from a variety of State and federal sources, much of which is allocated by formula or agreement through RCTC. This includes funding through the State Transportation Improvement Program (STIP), Congestion Mitigation and Air Quality funding (CMAQ), the federal Surface Transportation Program (STP), and other sources. While the funding levels from State and Federal sources can vary significantly from year to year, for the purposes of the TUMF analysis, CVAG projects that the region will receive about \$172 million from these sources over the next 25 years, or an average of about \$6.86 million per year.⁷

⁷ Based on the last call for projects in 2013 for federal grant funds STP, CVAG received \$21,458,175, or about 33 percent of the total pot for Riverside County. For CMAQ funds, CVAG is averaging about

Local Match

The CVAG share of regional road system project costs has been set by the Executive Committee at 75 percent of qualified project costs, has been applied after any external funding comes off the top. Local jurisdictions are required to provide the remaining 25 percent of project costs, as well as 100 percent of unqualified project costs. For the purposes of the TUMF, CVAG has indicated that projects on the TPPS will be funded with 75 percent regional funds with a 25 percent local match requirement. Accordingly, this analysis assumes that the TUMF costs are reduced by 25 percent to account for this local match.

Measure A

In accordance with RCTC Ordinance No.02-001, Riverside County Transportation Commission Transportation Expenditure Plan and Retail Transaction and Use Tax (Measure A), 50 percent of the sales tax revenue generated by Measure A within the Coachella Valley is allocated to CVAG for use on the Regional Arterial System. This sales tax was approved through 2038. CVAG uses this revenue to complete projects included in the TPPS. CVAG intends to continue to utilize this revenue for projects included in the TPPS

For the purpose of determining the share of Measure A revenues that will likely be available for completing future TPPS projects, an average of actual revenues between 2007 and 2016 (adjusted for inflation) and projected growth in trips through 2040 was used. In addition, it is assumed that 80 percent of the Measure A revenue would be used to off-set TUMF costs, with the remaining available to cover future project costs not covered by TUMF (e.g., the amount allocated to “existing deficiencies”). This methodology yields average annual Measure A revenues available to off-set TUMF costs of about \$22.8 million per year or \$461 million over 25 years, as shown in **Table 8**.

\$6 million per year. These two sources would combine for about \$171,458,175 over a 25-year period (\$21,458,175 + \$6 million times 25 years).

Table 8 Estimated Measure A Revenues Available To Off-set TUMF Costs

Type of Projection	Average Annual Amount	Total Projected Through 2040
Based on 2007-16 Growth Rate In Measure A \$s	\$20,308,586	\$487,406,064
Based on 2010-16 Growth Rate in Measure A \$s	\$26,270,481	\$630,491,536
Based on SCAG Trip Growth (2017 - 2040)	<u>\$21,934,342</u>	\$526,424,215
Average of All Projections	\$22,837,803	\$548,107,272
25 Year Total		\$570,945,075
Allocation to TUMF Eligible Projects @ 80% [1]		\$456,475,736

[1] Equals to proportion of total TUMF costs allocated to growth, as shown in **Table 6**.

Summary of Other Funding Sources

Table 9 summarizes the assumptions above to estimate the total revenue that is likely to be available to off-set TUMF project costs over the next 25 years. As shown, the total TUMF Costs of \$2.176 billion (i.e., the TPPS costs attributable to growth) are reduced by an additional \$1.934 billion to account for other funding sources, leaving a net TUMF cost of about \$242.7 million.

Table 9 Net TUMF Costs After Funding from Other Sources

<u>Category</u>	<u>Source</u>	<u>Formula</u>	<u>Amount (rounded)</u>
TUMF Cost Allocation	See Table 6	= a	\$2,246,436,000
Obligated Funding	See Table 7	= b	\$231,953,625
External Funding	CVAG Jurisdiction data	= c	\$328,000,000
CV Link Costs Allocated to Growth	See Table 6	= d	\$25,332,836
Developer Funded Improvements	CVAG Estimate	e = 25% * (a - d)	\$555,276,000
State and Federal Funding	CVAG Estimate	= f	\$171,458,000
Subtotal		g = a - b - c - e - f	\$959,748,000
25% Local Match	CVAG Policy	h = g * 25%	\$239,937,000
Measure A Funding to TUMF	See Table 8	= i	\$456,476,000
Net TUMF Costs		j = g - h - i	\$263,335,000

6. NEXUS FINDINGS AND FEE CALCULATION

This chapter summarizes the nexus findings presents in the previous chapters and calculates and presents the final TUMF calculations.

Overview of Nexus Findings

A “nexus” or relationship between new development in the CVAG region and transportation improvements and their costs must be established before incorporating transportation improvement costs into a transportation impact fee calculation. To determine the appropriate costs to include in the new transportation fee calculation, it is necessary to conduct a series of steps:

- **Identify Total Costs of Transportation Improvements.** The identification of the required transportation improvement projects and their associated costs is the first step (see **Chapter 3**).
- **Remove Existing Deficiencies.** Next, it is necessary to evaluate whether there is an existing deficiency at any of the project locations, and if so, the magnitude of that deficiency. Existing deficiencies are accounted for by reducing the project cost that is included in the Fee Program with funding required from other sources (see **Chapter 4**).
- **Determine Proportionate Allocation to New Development.** Once existing deficiencies are identified, it is necessary to determine the proportion of the remaining project cost that is attributable to new development, and therefore can be the subject of a fee program (see **Chapter 4**).
- **Account for Known Funding.** To the extent there is dedicated funding for any of the transportation improvements, this portion of costs should not be included in the transportation fee calculation. For this TIF calculation, funding from external sources has been excluded (see **Chapter 5**).

The technical calculations described above and further detailed in subsequent sections establish the following nexus findings, consistent with the requirements of the Mitigation Fee Act.

Purpose

The TUMF will help maintain adequate levels of transportation service in the CVAG region. It is levied on all new development throughout the Coachella Valley to mitigate the cumulative regional impacts on the transportation system.

Use of Fee

Fee revenue will be used to fund regional transportation improvements, including roadway, intersection, interchange, and traffic signal improvements, ATP facilities and other regional serving projects. The list of eligible transportation projects and costs are summarized in Chapter 3 and further detailed in the **Appendix B** and the TPPS.

Relationship

New development in the CVAG region will increase demands for, and travel on, the region's transportation network. Transportation fee revenue will be used to fund additional transportation capacity necessary to accommodate this growth. New development will benefit from the increased transportation capacity.

Need

Each new development project will add to the incremental need for transportation capacity and improvements. The transportation improvements considered in this Study have been identified and are necessary to support the future transportation needs in the CVAG region.

Proportionality

The fee levels are tied to fair share cost allocations to new development based on the RIVTAM transportation model and adapted for this study purpose. Recognizing that some improvements within the Coachella Valley will be completed by developer dedications or using alternate funding sources, the TUMF program establishes the share of unfunded improvement costs in rough proportionality to the number of trips generated by new development and assigns the fair-share fee to new developments on this basis.

The TUMF Calculation

The data and analysis described above provide the core components of the TUMF calculation. The final step in the TUMF calculation is to estimate the fee per trip and by land use category (i.e. different types of residential and non-residential development). These calculations are described below.

TUMF per Trip

The TUMF rate per trip is calculated by dividing the net TUMF cost above by the projected growth in average daily trips (ADT) over from 2015 – 2040. Specifically, the fee per trip is calculated by dividing the aggregate fee program cost of \$263.3 million by the total number of trips generated by new development, or 1,074,520, as shown in **Table 10**. The results in a TUMF of \$245 per ADT.

Table 10 Calculation of TUMF per Average Daily Trip (ADT)

<u>Category</u>	<u>Source</u>	<u>Formula</u>	<u>Amount</u>
Net TUMF Cost	See Table 9	= a	\$263,335,000
Growth in ADT (2015 - 2040)	See Table 3	= b	1,074,520
Avg. TUMF / ADT		= a / b	\$245

TUMF by Land Use

This average TUMF per trip amount will be used as the basis for calculating the actual TUMF obligation for particular types of development based on ADT generation factors for specific land use categories. **Table 11** provides the ADT rates for generalized land use categories based on the Institute of Transportation Engineers (ITE) Trip Generation Manual (10th Edition released in 2017). The actual land use categories and their specific application, including various discounts, will be included in the TUMF Handbook, as described in **Chapter 7**. In addition, CVAG may update these rates and land use categories over time as conditions change and new data becomes available.

Table 11 Trip Rate Assumptions for illustrative Land Use Categories

Land Use Category	ITE Daily Trip Rate / Unit		ITE Code	ITE Land Use Description
<u>Residential</u>				
Single Family Detached	9.44	dwelling	210	Single-Family Detached Housing
Multi-Family	7.32	dwelling	220	Multifamily Housing Low Rise
<u>Non-Residential</u>				
Industrial	4.96	1000 sq. ft.	110	General Light Industrial
Office	9.74	1000 sq. ft.	710	General Office Building
Retail	37.75	1000 sq. ft.	820	Shopping Center

Table 12 calculates the TUMF for each land use categories defined above based on the fee per trip. It should be noted that, the TUMF per trip rate for retail is reduced by 35 percent to account “linked” and pass-through trips, or trips that are part of multi-purpose commute (e.g., stopping at a retail store on the way to or from work). Typically, retail-based trips often involve multiple stops. To recognize this traffic pattern, an adjustment for pass-through trips, or percentage of new trip adjustment, takes into account vehicle trips using the adjacent roadway that enter a site as an intermediate stop on the way to another destination. For example, some drivers will stop for fuel on their way home from work. The pass-by adjustment reduces total number of vehicle trips to account for the sharing of the one trip for two destinations (fuel and then home).

Table 12 Illustrative TUMF Calculation for Selected Land Use Categories

Land Use Category	Fee Per Unit ¹
<u>Residential</u>	
Single Family Detached	\$2,310 per dwelling
Multi-Family	\$1,790 per dwelling
<u>Non-Residential</u>	
Industrial	\$1,220 per 1,000 sq. ft.
Office	\$2,390 per 1,000 sq. ft.
Retail ²	\$6,010 per 1,000 sq. ft.

[1] Based on a TUMF of \$245 per ADT.

[2] Includes a discount of 35% percent to account for pass-through trips.

7. TUMF IMPLEMENTATION AND ADMINISTRATION

This chapter summarizes the implementation and administrative issues and procedures associated with the TUMF program. Implementation and administrative elements of this Updated TUMF are specified in the CVAG TUMF Handbook as well as the CVAG TUMF model ordinance. This TUMF update incorporates a number of modifications requested by CVAG's member jurisdictions and other stakeholders. The key elements of these documents that are expected to be modified as part of this update are described below.

Elimination of Land Use Exemptions

The 2012 TUMF policy handbook exempts a number of land use categories from paying the fee (examples include affordable housing, public buildings, and some religious structures). It is proposed that the new TUMF update will eliminate any TUMF land use exemptions except those required by State or federal law (for example, public schools are statutorily exempt from AB 1600 impact fees). In other words, all new development that increases trips in the CVAG region will be subject to the TUMF unless otherwise exempt due to State and / or federal law.

While the goal is to eliminate all exemptions, consistent with State or federal law, CVAG has also proposed a TUMF discount for Transit Oriented Residential Development projects. With the new Handbook, CVAG is also considering an exemption for Affordable housing (below 80% of the ACI).

Regional fee programs approach affordable housing fees in a variety of ways; charge a full fee, allow fee reductions of a stated percentage, and completely exempting fees. These are evenly implemented throughout programs in California. The Institute of Transportation Engineers Trip Generation Manual does not include affordable housing as a land use. Programs that charge a fee often simply define a reduction of 20% or 50% of the fee for affordable housing but don't provide a methodology on how it was arrived at other than it was a policy decision.

Simplification of Land Use Categories

The current TUMF Manual defines over 35 separate land use categories, and numerous sub-categories, each with different fee rates based upon trip generation. Concerns have been raised by developers and CVAG member agencies that this structure is overly complicated and confusing. Consequently, CVAG has simplified the land use categories which eliminate factors that override the basic fee rate of a land use.

For example, under the current TUMF Program, the highest TUMF rates are for convenience markets and fast food restaurants. When convenience stores are located within shopping centers it can create confusion because under the current TUMF Manual, shopping centers are defined as having at least three business establishments which may be housed in one or more buildings; have a total building floor area of at least 10,000 square feet (sq. ft.), and that the largest establishment not contain more than 50 percent of the floor area.

Under the new TUMF Program, it is proposed that the land use categories be simplified and consolidated. For example, convenience stores, restaurants and shopping centers are proposed

to be charged strictly as “retail” and charged one flat rate. Therefore, TUMF would apply to each new building based on square footage without any additional factors.

Application of Annual Inflation Adjustment

It is common practice to include an annual adjustment factor so that the fee revenues keep pace with inflation. By way of example, the Coachella Valley Local Development Mitigation Fee is revised annually by means of an adjustment at the beginning of each fiscal year based on the average percentage change over the previous calendar year set forth in the Consumer Price Index (CPI) for the Los Angeles-Anaheim-Riverside Area. Accordingly, it is proposed that an inflation adjustment for TUMF be reviewed by CVAG’s Executive Committee on an annual basis. Such inflation adjustment shall be the same as the Coachella Valley Local Development Mitigation Fee.

APPENDIX A:

TPPS Projects Included in the TUMF



Appendix A
TPPS Projects Included and Excluded From TUMF

Street Name	Segment Number	Segment Description	Included in TUMF? (Yes/No)	
			Yes	No
20TH AVE	20A	Worsley Rd to N Indian Canyon Dr		No
20TH AVE	20B	N Indian Canyon Dr to Little Morongo Rd (missing link)	Yes	
20TH AVE	20C	Little Morongo Rd to Palm Dr (missing link)	Yes	
20TH AVE	20D	Palm Dr to Mountain View Rd	Yes	
AVE 44	44A	Ave 44 Br./Low Water Xing	Yes	
AVE 44	44B	Monroe St to Low Water Xing	Yes	
AVE 44	44C	Low Water Xing to Dillon Rd	Yes	
AVE 48	48B1	Jefferson St to Madison St		No
AVE 48	48B	Madison St to W side of All-Amer. Canal (Excl. Br. At All-Amer. Canal)		No
AVE 48	48E	Jackson St to Van Buren St	Yes	
AVE 48	48F	Van Buren St to W of SR-86	Yes	
AVE 48	48H	Grade Separation at Hwy 111/SPRR	Yes	
AVE 50	50A	Future Ave 50 SR-86S IC	Yes	
AVE 50	50B1	Washington St to E side of Br. at Evac. Chnl (Incl. Br. at Evac. Chnl)	Yes	
AVE 50	50C	Jefferson St to Madison St (Incl. Br. at All-Amer. Canal)	Yes	
AVE 50	50D	Madison St to Monroe St	Yes	
AVE 50	50E	Monroe St to Jackson St	Yes	
AVE 50	50F	Jackson St to Van Buren St	Yes	
AVE 50	50G	Van Buren St to Harrison St	Yes	
AVE 50	50I2	Cabazon Rd to SR-86S (Incl. Br. at Whitewater Chnl)	Yes	
AVE 50	50J	Grade Separation Hwy 111/SPRR	Yes	
AVE 50	50K	SR-86S to I-10 IC	Yes	
AVE 50	50L	Br. at All-Amer. Canal (in 50K)	Yes	
AVE 50	50M	Future Ave 50 I-10 IC	Yes	
AVE 52	52B	Jefferson St to Madison St (Excl. Br. at All-Amer. Canal)	Yes	
AVE 52	52D	Monroe St to Jackson St	Yes	
AVE 52	52E	Jackson St to Calhoun St	Yes	
AVE 52	52F1	Calhoun St to Van Buren St	Yes	
AVE 52	52F2	Van Buren St to Frederick St	Yes	
AVE 52	52G	Frederick St to Harrison St	Yes	
AVE 52	52H	Intersection of Ave 52 and SR-86		No
AVE 52	52IA	Harrison St to Shady Ln	Yes	
AVE 52	52IB	Shady Ln to Hwy 111	Yes	
AVE 52	52K	Future Ave 52 SR-86S IC	Yes	
AVE 52	52L	Hwy 111 to SR-86S (Incl. Br. at Whitewater Chnl)	Yes	
AVE 52	52M	SR-86S to Pierce St	Yes	
AVE 54	54A	Van Buren St to Harrison St	Yes	
AVE 54	54B	Harrison St to Tyler St	Yes	
AVE 54	54C	Tyler St to Hwy 111	Yes	
AVE 56 / AIRPORT BLVD	56B	Monroe St to Jackson St		No
AVE 56 / AIRPORT BLVD	56C	Jackson St to 0.25 miles W of Van Buren St		No
AVE 56 / AIRPORT BLVD	56D	0.25 mi. W of Van Buren St to Harrison St		No
AVE 56 / AIRPORT BLVD	56E	Harrison St to Tyler St		No
AVE 56 / AIRPORT BLVD	56F	Tyler St to Polk St		No
AVE 56 / AIRPORT BLVD	56G	Polk St to Highway 111 (Grapefruit Blvd)	Yes	
AVE 56 / AIRPORT BLVD	56I	SPRR to SR-86 (Incl. Br. at Whitewater Chnl)	Yes	

Appendix A
TPPS Projects Included and Excluded From TUMF

Street Name	Segment Number	Segment Description	Included in TUMF? (Yes/No)	
			Yes	No
58TH AVE	58A	Jefferson St to Madison St		No
58TH AVE	58B	Madison St to Monroe St		No
58TH AVE	58C	Monroe St to Jackson St		No
58TH AVE	58D	Jackson St to Van Buren St	Yes	
58TH AVE	58E	Van Buren St to Harrison St	Yes	
66TH AVE	66A	Future 66th Ave SR-86 IC	Yes	
66TH AVE	66B	66th Ave Br./Low Water Xing	Yes	
66TH AVE	66C	Grade Separation at Hwy 111/SPRR (Bridge)	Yes	
BOB HOPE DR	BH1-6	Frank Sinatra Dr to Gerald Ford Dr		No
BOB HOPE DR	BH2-6	Gerald Ford to Dinah Shore Dr		No
BOB HOPE DR	BH3-6	Dinah Shore Dr to Ramon Rd (southbound only)		No
CATHEDRAL CYN DR	CTHCN1	Terrace Rd to E Palm Canyon Dr		No
CATHEDRAL CYN DR	CTHCN2	E Palm Canyon Dr to N side of Whitewater Br. (Incl. Cath Cyn Br.)	Yes	
CATHEDRAL CYN DR	CTHCN4	N side of Whitewater Br. to Dinah Shore Dr		No
CATHEDRAL CYN DR	CTHCN5	Dinah Shore Dr to Ramon Rd		No
COOK ST (formerly CHASE SCHOOL RD)	CHSC1	I-10 IC to Ramon Rd	Yes	
COOK ST	CK4	Frank Sinatra Dr to Country Club Dr	Yes	
COOK ST	CK5	Country Club Dr to N side of Whitewater Br.	Yes	
COOK ST	CK6	S side of Whitewater Br. to Fred Waring Dr	Yes	
COOK ST	CK7	Br. at Whitewater Chnl		No
COUNTRY CLUB DR	CC4	Monterey Ave to Portola Ave		No
COUNTRY CLUB DR	CC5	Portola Ave to Cook St	Yes	
COUNTRY CLUB DR	CC6	Cook St to Eldorado Dr		No
COUNTRY CLUB DR	CC7	Eldorado Dr to Oasis Club Dr		No
COUNTRY CLUB DR	CC8	Oasis Club Dr to Washington St	Yes	
CROSSLEY RD / GOLF CLUB DR	CROSLY1	Ramon Rd to Mesquite Ave/Dinah Shore Dr	Yes	
CROSSLEY RD / GOLF CLUB DR	CROSLY2	Dinah Shore Dr/Mesquite Ave to 34th Ave	Yes	
CROSSLEY RD / GOLF CLUB DR	CROSLY3A	Br. at Palm Cyn Chnl		No
DA VALL DR	DVALL1	Dinah Shore to Ramon Rd		No
DA VALL DR	DVALL2	Ramon Rd to McCallum Way		No
DA VALL DR	DVALL3	McCallum Way to 30th Ave		No
DA VALL DR	DVALL4	30th Ave to I-10 IC (Incl. Br. over RR)		No
DA VALL DR	DVALL5	Future Da Vall I-10 IC	Yes	
DA VALL DR	DVALL6	I-10 IC to Varner Rd (Incl. Br. at Long Cyn Chnl)	Yes	
DATE PALM DR	DPLM0A	Hwy 111 (E Palm Cyn Dr) to Gerald Ford Dr (Incl. at Cath. Cyn Br., excludes WW Br.)		No
DATE PALM DR	DPLM0B	Gerald Ford Dr to Dinah Shore Dr		No
DATE PALM DR	DPLM0C	Dinah Shore Dr to Ramon Rd		No
DATE PALM DR	DPLM1	Ramon Rd to McCallum Way		No
DATE PALM DR	DPLM2	McCallum Way to 30th Ave		No
DATE PALM DR	DPLM3	30th Ave to Vista Chino		No
DILLON RD	DLN1	SR-62 to N Indian Canyon Dr	Yes	
DILLON RD	DLN2	Intersection of Dillon Rd & N Indian Canyon Dr	Yes	
DILLON RD	DLN3	N Indian Canyon Dr to Palm Dr (Incl. Future Br. at Mission Cr.)	Yes	
DILLON RD	DLN4	Intersection of Dillon Rd & Palm Dr	Yes	
DILLON RD	DLN5	Palm Dr to Mountain View Rd	Yes	

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Street Name	Segment Number	Segment Description	Included in TUMF? (Yes/No)	
			Yes	No
DILLON RD	DLN6	Mountain View Rd to Bennett Rd	Yes	
DILLON RD	DLN7	Bennett Rd to Thousand Palms Cyn Rd (Incl. Br. At Wide Cyn Chnl)		No
DILLON RD	DLN8	Thousand Palms Cyn Rd to Sunny Rock Rd		No
DILLON RD	DLN9	Sunny Rock Rd to Ave 44 (Incl. Br. over All-Amer. Canal)		No
DILLON RD	DLN10	Ave 44 to I-10 IC	Yes	
DILLON RD	DLN11	I-10 IC to N side of Whitewater Br.		No
DILLON RD	DLN12	Br. at Whitewater Chnl	Yes	
DILLON RD	DLN13	S side of Whitewater Br. to Hwy 111	Yes	
DILLON RD	DLN14	Dillon Rd I-10 IC	Yes	
DILLON RD	DLN15	Dillon Rd SR-86S IC	Yes	
DUNE PALMS RD	DUNEP1	Br. at Whitewater Chnl		No
DUNE PALMS RD	DUNEP2	Highway 111 to Blackhawk Way (formerly Westward Ho)		No
E PALM CYN DR	PLCN7	Palm Cyn Dr to Sunrise Way		No
E PALM CYN DR	PLCN8	Sunrise Way to Farrell Dr	Yes	
E PALM CYN DR	PLCN9	Farrell Dr to Gene Autry Trl (Incl. Br. at Palm Cyn Wash)	Yes	
E PALM CYN DR	PLCN11A	Cathedral Canyon Dr to Date Palm Dr	Yes	
E PALM CYN DR	PLCN11B	Date Palm Dr to E Cath. City limits	Yes	
FRANK SINATRA DR	FS6	Monterey Ave to Portola Ave	Yes	
FRANK SINATRA DR	FS7	Portola Ave to Cook St		No
FRANK SINATRA DR	FS8	Cook St to Eldorado Dr		No
FRANK SINATRA DR	FS9	Eldorado Dr to Tamarisk Row Dr		No
FRED WARING DR	FW1	Bridge at Whitewater River		No
GENE AUTRY TR	GAT1A	Intersection of Gene Autry Trl and Mesquite Ave / Dinah Shore Dr		No
GENE AUTRY TR	GAT2A	E Palm Cyn to Eagle Way	Yes	
GENE AUTRY TR	GAT2B	Bridge over Palm Canyon Wash	Yes	
GENE AUTRY TR	GAT2C	N of Palm Canyon Wash Bridge to 0.18 mi south of Mesquite Ave		No
GENE AUTRY TR	GAT2D	0.18 mi S of Mesquite Ave to Mesquite Ave		No
GENE AUTRY TR	GAT2E	Mesquite Ave to Ramon Rd	Yes	
GENE AUTRY TR	GAT2F	Ramon to Escena Way		No
GENE AUTRY TR	GAT2G	Escena Way to Vista Chino		No
GENE AUTRY TR	GAT3	Future Whitewater Rvr Br.	Yes	
GERALD FORD DR	GFD4	Cook St to Frank Sinatra Dr		No
GERALD FORD DR	GFD5	Intersection of Gerald Ford Dr and Bob Hope Dr	Yes	
GOLF CENTER PKWY	GPKWY1	Golf Center Pkwy. I-10 IC	Yes	
GOLF CENTER PKWY	GPKWY4	Ave 45 to Hwy 111	Yes	
GRAPEFRUIT BLVD	GRPF1	Ave 48/Dillon Rd to Ave 50	Yes	
GRAPEFRUIT BLVD	GRPF2	Ave 50 to Ave 52	Yes	
GRAPEFRUIT BLVD	GRPF3	Ave 52 to Ave 54	Yes	
GRAPEFRUIT BLVD	GRPF4	Ave 54 to Ave 56		No
HACIENDA AVE (now RUBY DR & E	HAC0A	SR62 to N Indian Canyon Dr	Yes	
HACIENDA AVE (currently 13TH AV	HAC0B	N Indian Canyon Dr to Little Morongo Rd	Yes	
HACIENDA AVE	HAC1A	Little Morongo Rd to Cholla Dr	Yes	
HACIENDA AVE	HAC1B	Cholla Dr to Palm Dr	Yes	
HACIENDA AVE	HAC2	Palm Dr to Mountain View Rd		No

Appendix A
TPPS Projects Included and Excluded From TUMF

Street Name	Segment Number	Segment Description	Included in TUMF? (Yes/No)	
			Yes	No
HACIENDA AVE	HAC3	Mountain View Rd to Dillon Rd (Long Cyn Rd)		No
HARRISON ST	HARSN1	Grapefruit Blvd to Ave 52	Yes	
HARRISON ST	HARSN2	Ave 52 to Ave 54		No
HARRISON ST	HARSN3	Ave 54 to Ave 56 (Airport Blvd)	Yes	
HIGHWAY 74	HWY74A	Highway 111 to El Paseo	Yes	
HIGHWAY 74	HWY74B	El Paseo to Mesa View Dr		No
HIGHWAY 74	HWY74C	Mesa View Dr to S Palm Desert City Limits		No
HIGHWAY 111	HWY111F	Cook St to Eldorado Dr	Yes	
HIGHWAY 111	HWY111G	Eldorado Dr to Miles Ave	Yes	
HIGHWAY 111	HWY111H	Miles Ave to Washington St (incl. Br. Over Deep Cyn Chnl)	Yes	
INDIAN CYN DR	INCN1	Ramon Rd to Tahquitz Cyn Way	Yes	
INDIAN CYN DR	INCN2	Tahquitz Cyn Way to Alejo Rd	Yes	
INDIAN CYN DR	INCN3	Alejo Rd to Tachevah Dr	Yes	
INDIAN CYN DR	INCN4	Tachevah Dr to Vista Chino	Yes	
INDIAN CYN DR	INCN5	Vista Chino to Racquet Club Rd	Yes	
INDIAN CYN DR	INCN6	Racquet Club Rd to Sunrise Pkwy		No
INDIAN CYN DR	INCN7	Sunrise Pkwy to Garnet Avenue	Yes	
INDIAN CYN DR	INCN8	Garnet Ave to 20th Ave	Yes	
INDIAN CYN DR	INCN9	20th Ave to 19th Ave	Yes	
INDIAN CYN DR	INCN10	19th Ave to Dillon Rd	Yes	
INDIAN CYN DR	INCN11	Dillon Rd to 14th Ave	Yes	
INDIAN CYN DR	INCN12	14th Ave to Pierson Blvd	Yes	
INDIAN CYN DR	INCN13	Pierson Blvd to Mission Lakes Blvd (Incl. Future Br. at Mission Cr.)	Yes	
INDIAN CYN DR	INCN14	Mission Lakes Blvd to SR-62		No
INDIO BLVD	INDIO0	I-10 Interchange to Jefferson St (includes 2 railroad bridges)	Yes	
INDIO BLVD	INDIO1	Jefferson St to Madison St (over All-Amer. Canal)	Yes	
JACKSON ST	JAC2A1	I-10 IC to 43rd Ave	Yes	
JACKSON ST	JAC2A2	43rd Ave to Ave 44	Yes	
JACKSON ST	JAC4	Ave 48 to Ave 50	Yes	
JACKSON ST	JAC5	Ave 50 to Ave 52	Yes	
JACKSON ST	JAC6	Jackson St I-10 IC	Yes	
JEFFERSON ST	JEF1A	Intersection of Jefferson St and Dunbar Dr		No
JEFFERSON ST	JEF2A	58th Ave to 62th Ave	Yes	
JEFFERSON ST	JEF9A1	40th Ave to 0.27 mi S of Ave 39	Yes	
JEFFERSON ST	JEF9B	Ave 39 to Ave 38		No
KEY LARGO AVE	KL1	Dinah Shore Dr. to Varner Rd (Incl. flyover at I-10 and RR)	Yes	
LANDAU BLVD	LAN1	Vista Chino to Verona Rd	Yes	
LANDAU BLVD	LAN2	Verona Rd to I-10 IC (Incl. Br. over RR, missing link)	Yes	
LANDAU BLVD	LAN3	Future Landau Blvd I-10 IC (missing link)	Yes	
LANDAU BLVD	LAN4	I-10 IC to Varner Rd (missing link)	Yes	
LITTLE MORONGO RD	LM1	Mission Lakes Blvd to Pierson Blvd		No
LITTLE MORONGO RD	LM2	Pierson Blvd to Two Bunch Palms Trl	Yes	
LITTLE MORONGO RD	LM3	Two Bunch Palms Trl to Dillon Rd (Incl. Future Br. at Mission Cr.)	Yes	
LITTLE MORONGO RD	LM4	Dillon Rd to 20th Ave	Yes	
MADISON ST	MAD5	Ave 52 to Ave 50	Yes	

Appendix A
TPPS Projects Included and Excluded From TUMF

Street Name	Segment Number	Segment Description	Included in TUMF? (Yes/No)	
			Yes	No
MADISON ST	MAD7A	0.25 mi N of Ave 49 to Ave 48	Yes	
MADISON ST	MAD7B	Ave 48 to Hwy 111	Yes	
MADISON ST	MAD9	Miles Ave to Fred Waring Dr (Incl. Br. over WW Chnl and All-Amer. Canal, missing link)	Yes	
MISSION LAKES BLVD	MSLK0	SR 62 to Indian Canyon Dr	Yes	
MISSION LAKES BLVD	MSLK1	N Indian Canyon Dr to Little Morongo Rd		No
MISSION LAKES BLVD	MSLK2	Little Morongo Rd to Palm Dr		No
MISSION LAKES BLVD	MSLK3	Palm Dr to Eastern Terminus at Verbena Dr		No
MONROE ST	MON1	0.25 mi N of Ave 42 to Ave 42	Yes	
MONROE ST	MON6	Monroe St I-10 IC	Yes	
MONROE ST	MON7	Ave 54 to 58th Ave		No
MONROE ST	MON8A	58th Ave to Ave 60		No
MONROE ST	MON8B	Ave 60 to 62nd Ave		No
MONROE ST	MON9	I-10 Interchange to 900 ft N of Oleander	Yes	
MONTEREY AVE	MNT1-6	Highway 111 to Fred Waring Dr	Yes	
MONTEREY AVE	MNT2-6	Fred Waring Dr to Clancy Lane (Incl. Br. at Whitewater River)	Yes	
MONTEREY AVE	MNT3-6	Clancy Lane to Country Club Dr	Yes	
MOUNTAIN VIEW RD	MTV0	Pierson Blvd at E Terminus of Desert View Ave to Hacienda Ave		No
MOUNTAIN VIEW RD	MTV1A	Hacienda Ave to Brunner Ln	Yes	
MOUNTAIN VIEW RD	MTV1B	Brunner Ln to Dillon Rd	Yes	
MOUNTAIN VIEW RD	MTV2	Dillon Rd to 20th Ave		No
MOUNTAIN VIEW RD	MTV3	20th Ave to Varner Rd		No
N PALM CYN DR	PLCN1	Vista Chino to Tachevah Dr		No
N PALM CYN DR	PLCN2	Tachevah Dr to Alejo Rd		No
N PALM CYN DR	PLCN3	Alejo Rd to Tahquitz Cyn Rd	Yes	
N PALM CYN DR	PLCN4	Tahquitz Cyn Rd to Ramon Rd	Yes	
N PALM CYN DR	PLCN5	Ramon Rd to Mesquite Ave (Incl. Br at Tahquitz Crk.)	Yes	
N PALM CYN DR	PLCN6	Mesquite Ave to E Palm Cyn Dr	Yes	
PALM DR	PD1	I-10 IC to Varner Rd	Yes	
PALM DR	PD2	Varner Rd to 20th Ave		No
PALM DR	PD3	20th Ave to Dillon Rd	Yes	
PALM DR	PD4	Dillon Rd to Two Bunch Palms Trl	Yes	
PALM DR	PD5	Two Bunch Palms Trl to Hacienda Ave		No
PALM DR	PD6	Hacienda Ave to Pierson Blvd		No
PALM DR	PD7	Pierson Blvd to Mission Lakes Blvd	Yes	
PIERSON BLVD	PRS1	SR-62 to N Indian Canyon Dr		No
PIERSON BLVD	PRS2	N Indian Canyon Dr to Little Morongo Rd (Incl. Br. at Mission Cr.)		No
PIERSON BLVD	PRS3A	Little Morongo Rd to Cholla Dr		No
PIERSON BLVD	PRS3B	Cholla Dr to Palm Dr		No
PIERSON BLVD	PRS4A	Palm Dr to Miracle Hill Rd		No
PIERSON BLVD	PRS4B	Miracle Hill Rd to Eastern Terminus of Desert View Av.		No
POLK ST	PLK1	Polk St from Ave 52 to Ave 48	Yes	
PORTOLA AVE	POR1	Hwy 111 to Magnesia Falls Dr	Yes	
PORTOLA AVE	POR2	Magnesia Falls Dr to Country Club Dr (Excl. Br. at Whitewater Chnl)		No
PORTOLA AVE	POR3	Country Club Dr to Frank Sinatra Dr	Yes	
PORTOLA AVE	POR4A	Frank Sinatra Dr to Julie Ln	Yes	

Appendix A
TPPS Projects Included and Excluded From TUMF

Street Name	Segment Number	Segment Description	Included in TUMF? (Yes/No)	
			Yes	No
PORTOLA AVE	POR5B	Dinah Shore Dr to I-10 IC (Incl. Br. over RR)	Yes	
PORTOLA AVE	POR6	Future Portola Ave I-10 IC	Yes	
RAMON RD	RAM1	S Palm Cyn Dr to S Indian Cyn Dr	Yes	
RAMON RD	RAM2	S Indian Cyn to Sunrise Way (Incl. Baristo Storm Chnl Xing)	Yes	
RAMON RD	RAM3	Sunrise Way to Farrell Dr	Yes	
RAMON RD	RAM3A	Intersection of Ramon Rd and Sunrise Way	Yes	
RAMON RD	RAM4	Farrell Dr to El Cielo Rd	Yes	
RAMON RD	RAM4A	Intersection of Ramon Rd and Farrell Drive	Yes	
RAMON RD	RAM5	El Cielo Rd to Gene Autry Trl	Yes	
RAMON RD	RAM5A	Intersection of Ramon Rd and Crossley Rd	Yes	
RAMON RD	RAM7	Br. at Whitewater Rvr	Yes	
RAMON RD	RAM15	Monterey Ave to Thousand Palms Cyn Rd		No
S VALLEY PKWY / AVE 60	SV1	Monroe St to Jackson St	Yes	
S VALLEY PKWY / AVE 60	SV2	Jackson St to Van Buren St	Yes	
S VALLEY PKWY / AVE 60	SV3	Van Buren St to Harrison St	Yes	
S VALLEY PKWY	SV4	Harrison St to Tyler St (missing link)	Yes	
S VALLEY PKWY	SV5	Tyler St to Polk St (missing link)	Yes	
S VALLEY PKWY / 62ND AVE	SV6	Polk St to Fillmore St		No
S VALLEY PKWY / 62ND AVE	SV7	Fillmore St to Pierce St (Incl. Br. at Whitewater Chnl)		No
S VALLEY PKWY / 62ND AVE	SV8	Pierce St to SR-86	Yes	
S VALLEY PKWY / 62ND AVE	SV9	Future Ave 62 SR-86 IC	Yes	
THOUSAND PALMS CYN RD	THPL1	Ramon Rd to Dillon Rd	Yes	
TWO BUNCH PALMS TR / 14TH AVE	TBP1	N Indian Canyon Dr to Little Morongo Rd	Yes	
TWO BUNCH PALMS TR	TBP2	Little Morongo Rd to Palm Dr	Yes	
TWO BUNCH PALMS TR	TBP3	Palm Dr to Miracle Hill Rd	Yes	
TYLER ST	TYL1	Ave 50 to I-10 frontage road	Yes	
VAN BUREN ST	VANB2	Ave 48 to Ave 50	Yes	
VAN BUREN ST	VANB3	Ave 50 to Ave 52	Yes	
VAN BUREN ST	VANB4	Ave 52 to Ave 54		No
VAN BUREN ST	VANB5	Ave 54 to Ave 56/Airport Blvd	Yes	
VARNER RD	VRNR0	20th Ave to Palm Dr	Yes	
VARNER RD	VRNR1	Palm Dr to Mountain View Rd	Yes	
VARNER RD	VRNR2	Mountain View Rd to Date Palm Dr	Yes	
VARNER RD	VRNR3	Date Palm Dr to Ramon Rd	Yes	
VARNER RD	VRNR6	Monterey Ave to Cook St		No
VARNER RD	VRNR7B	Ave 38 to Washington St	Yes	
VARNER RD / AVE 42	VRNR9	Jefferson St to Madison St (Incl. Br. over All-Amer. Canal)	Yes	
VARNER RD / AVE 42	VRNR10A	Madison St to Clinton St		No
VARNER RD / AVE 42	VRNR10B	Clinton St to Monroe St	Yes	
VARNER RD / AVE 42	VRNR11	Monroe St to Gore St	Yes	
VISTA CHINO	VC1	N Palm Canyon Drive to Sunrise Way	Yes	
VISTA CHINO	VC1A	Intersection of Vista Chino and N Palm Canyon Dr	Yes	
VISTA CHINO	VC2	Sunrise Way to Gene Autry Trl	Yes	
VISTA CHINO	VC2AA	Intersection of Vista Chino and Sunrise Way	Yes	
VISTA CHINO	VC2AB	Intersection of Vista Chino and Farrell Drive	Yes	
VISTA CHINO	VC2A	Intersection of Vista Chino and Gene Autry Trl	Yes	
VISTA CHINO	VC3	Gene Autry Trl to W side of Whitewater Rvr	Yes	

Appendix A
TPPS Projects Included and Excluded From TUMF

Street Name	Segment Number	Segment Description	Included in TUMF? (Yes/No)	
			Yes	No
VISTA CHINO	VC4	Future Whitewater Rvr Br.	Yes	
VISTA CHINO	VC5	E side of Whitewater Rvr to Landau Blvd		No
VISTA CHINO	VC7	Date Palm Dr to Da Vall Dr	Yes	
WASHINGTON ST	WSH9	I-10 IC to Ave 38	Yes	
WASHINGTON ST	WSH10A	Ave 38 to Coyote Song Way		No
WASHINGTON ST	WSH10B	Coyote Song Way to Ramon Rd		No
WORSLEY RD	WORS1	20th Ave to Dillon Rd		No
WORSLEY RD	WORS2	Dillon Rd to 1 mile S of Pierson Blvd		No
WORSLEY RD	WORS3	1 mile S of Pierson Blvd to Pierson Blvd		No
WORSLEY RD	WORS4	Pierson Blvd to N Indian Canyon Dr	Yes	
Total			188	94

APPENDIX B:

Detailed TUMF Project Cost Estimates



Appendix B
List of Costs for Projects Considered in TUMF

Street Name	Segment Number	Segment Description	Project Costs
20TH AVE	20B	N Indian Canyon Dr to Little Morongo Rd (missing link)	\$11,208,000
20TH AVE	20C	Little Morongo Rd to Palm Dr (missing link)	\$15,974,400
20TH AVE	20D	Palm Dr to Mountain View Rd	\$7,036,800
AVE 44	44A	Ave 44 Br./Low Water Xing	\$14,313,000
AVE 44	44B	Monroe St to Low Water Xing	\$7,411,950
AVE 44	44C	Low Water Xing to Dillon Rd	\$12,083,250
AVE 48	48E	Jackson St to Van Buren St	\$5,315,970
AVE 48	48F	Van Buren St to W of SR-86	\$2,275,088
AVE 48	48H	Grade Separation at Hwy 111/SPRR	\$22,011,480
AVE 50	50A	Future Ave 50 SR-86S IC	\$55,222,500
AVE 50	50B1	Washington St to E side of Br. at Evac. Chnl (Incl. Br. at Evac. Chnl)	\$8,799,480
AVE 50	50C	Jefferson St to Madison St (Incl. Br. at All-Amer. Canal)	\$7,131,405
AVE 50	50D	Madison St to Monroe St	\$4,977,480
AVE 50	50E	Monroe St to Jackson St	\$2,304,030
AVE 50	50F	Jackson St to Van Buren St	\$12,084,000
AVE 50	50G	Van Buren St to Harrison St	\$14,301,582
AVE 50	50I2	Cabazon Rd to SR-86S (Incl. Br. at Whitewater Chnl)	\$3,356,880
AVE 50	50J	Grade Separation Hwy 111/SPRR	\$21,687,600
AVE 50	50K	SR-86S to I-10 IC	\$45,177,600
AVE 50	50L	Br. at All-Amer. Canal (in 50K)	\$3,952,320
AVE 50	50M	Future Ave 50 I-10 IC	\$62,687,500
AVE 52	52B	Jefferson St to Madison St (Excl. Br. at All-Amer. Canal)	\$2,075,940
AVE 52	52D	Monroe St to Jackson St	\$4,195,800
AVE 52	52E	Jackson St to Calhoun St	\$2,660,400
AVE 52	52F1	Calhoun St to Van Buren St	\$2,699,400
AVE 52	52F2	Van Buren St to Frederick St	\$4,689,300
AVE 52	52G	Frederick St to Harrison St	\$6,190,104
AVE 52	52IA	Harrison St to Shady Ln	\$13,286,328
AVE 52	52IB	Shady Ln to Hwy 111	\$1,629,900
AVE 52	52K	Future Ave 52 SR-86S IC	\$53,782,500
AVE 52	52L	Hwy 111 to SR-86S (Incl. Br. at Whitewater Chnl)	\$22,536,194
AVE 52	52M	SR-86S to Pierce St	\$20,556,880
AVE 54	54A	Van Buren St to Harrison St	\$4,794,900
AVE 54	54B	Harrison St to Tyler St	\$4,560,300
AVE 54	54C	Tyler St to Hwy 111	\$6,380,750
AVE 56 / AIRPORT BLVD	56G	Polk St to Highway 111 (Grapefruit Blvd)	\$1,155,714
AVE 56 / AIRPORT BLVD	56I	SPRR to SR-86 (Incl. Br. at Whitewater Chnl)	\$13,329,000
58TH AVE	58D	Jackson St to Van Buren St	\$4,583,040
58TH AVE	58E	Van Buren St to Harrison St	\$4,583,040
66TH AVE	66A	Future 66th Ave SR-86 IC	\$46,934,500
66TH AVE	66B	66th Ave Br./Low Water Xing	\$2,826,960
66TH AVE	66C	Grade Separation at Hwy 111/SPRR (Bridge)	\$48,044,000
CATHEDRAL CYN DR	CTHCN2	E Palm Canyon Dr to N side of Whitewater Br. (Incl. Cath Cyn Br.)	\$4,815,850
COOK ST (formerly CHASE SCHOOL RD)	CHSC1	I-10 IC to Ramon Rd	\$25,501,600
COOK ST	CK4	Frank Sinatra Dr to Country Club Dr	\$3,997,488
COOK ST	CK5	Country Club Dr to N side of Whitewater Br.	\$6,228,320

Appendix B
List of Costs for Projects Considered in TUMF

Street Name	Segment Number	Segment Description	Project Costs
COOK ST	CK6	S side of Whitewater Br. to Fred Waring Dr	\$1,212,030
COUNTRY CLUB DR	CC5	Portola Ave to Cook St	\$3,714,480
COUNTRY CLUB DR	CC8	Oasis Club Dr to Washington St	\$3,812,300
CROSSLEY RD / GOLF CLUB DR	CROSLY1	Ramon Rd to Mesquite Ave/Dinah Shore Dr	\$2,283,600
CROSSLEY RD / GOLF CLUB DR	CROSLY2	Dinah Shore Dr/Mesquite Ave to 34th Ave	\$2,928,100
DA VALL DR	DVALL5	Future Da Vall I-10 IC	\$71,647,500
DA VALL DR	DVALL6	I-10 IC to Varner Rd (Incl. Br. at Long Cyn Chnl)	\$24,753,600
DILLON RD	DLN1	SR-62 to N Indian Canyon Dr	\$29,522,800
DILLON RD	DLN2	Intersection of Dillon Rd & N Indian Canyon Dr	\$956,500
DILLON RD	DLN3	N Indian Canyon Dr to Palm Dr (Incl. Future Br. at Mission Cr.)	\$12,887,680
DILLON RD	DLN4	Intersection of Dillon Rd & Palm Dr	\$956,500
DILLON RD	DLN5	Palm Dr to Mountain View Rd	\$5,353,920
DILLON RD	DLN6	Mountain View Rd to Bennett Rd	\$11,495,760
DILLON RD	DLN10	Ave 44 to I-10 IC	\$9,427,480
DILLON RD	DLN12	Br. at Whitewater Chnl	\$1,487,125
DILLON RD	DLN13	S side of Whitewater Br. to Hwy 111	\$4,062,858
DILLON RD	DLN14	Dillon Rd I-10 IC	\$18,150,000
DILLON RD	DLN15	Dillon Rd SR-86S IC	\$15,360,000
E PALM CYN DR	PLCN8	Sunrise Way to Farrell Dr	\$1,531,200
E PALM CYN DR	PLCN9	Farrell Dr to Gene Autry Trl (Incl. Br. at Palm Cyn Wash)	\$7,725,600
E PALM CYN DR	PLCN11A	Cathedral Canyon Dr to Date Palm Dr	\$2,166,000
E PALM CYN DR	PLCN11B	Date Palm Dr to E Cath. City limits	\$2,483,800
FRANK SINATRA DR	FS6	Monterey Ave to Portola Ave	\$4,750,434
GENE AUTRY TR	GAT2A	E Palm Cyn to Eagle Way	\$631,450
GENE AUTRY TR	GAT2B	Bridge over Palm Canyon Wash	\$6,655,700
GENE AUTRY TR	GAT2E	Mesquite Ave to Ramon Rd	\$957,600
GENE AUTRY TR	GAT3	Future Whitewater Rvr Br.	\$233,900,000
GERALD FORD DR	GFD5	Intersection of Gerald Ford Dr and Bob Hope Dr	\$1,099,332
GOLF CENTER PKWY	GPKWY1	Golf Center Pkwy. I-10 IC	\$19,481,100
GOLF CENTER PKWY	GPKWY4	Ave 45 to Hwy 111	\$2,725,800
GRAPEFRUIT BLVD	GRPF1	Ave 48/Dillon Rd to Ave 50	\$4,978,000
GRAPEFRUIT BLVD	GRPF2	Ave 50 to Ave 52	\$12,157,200
GRAPEFRUIT BLVD	GRPF3	Ave 52 to Ave 54	\$12,772,500
HACIENDA AVE (now RUBY DR and ESTRADA AVE)	HAC0A	SR62 to N Indian Canyon Dr	\$34,336,000
HACIENDA AVE (now 13TH AVE)	HAC0B	N Indian Canyon Dr to Little Morongo Rd	\$12,503,040
HACIENDA AVE	HAC1A	Little Morongo Rd to Cholla Dr	\$7,793,280
HACIENDA AVE	HAC1B	Cholla Dr to Palm Dr	\$2,653,200
HARRISON ST	HARSN1	Grapefruit Blvd to Ave 52	\$3,677,200
HARRISON ST	HARSN3	Ave 54 to Ave 56 (Airport Blvd)	\$9,694,080
HIGHWAY 74	HWY74A	Highway 111 to El Paseo	\$450,240
HIGHWAY 111	HWY111F	Cook St to Eldorado Dr	\$3,537,600
HIGHWAY 111	HWY111G	Eldorado Dr to Miles Ave	\$4,924,800
HIGHWAY 111	HWY111H	Miles Ave to Washington St (incl. Br. Over Deep Cyn Chnl)	\$7,573,400
INDIAN CYN DR	INCN1	Ramon Rd to Tahquitz Cyn Way	\$5,847,600
INDIAN CYN DR	INCN2	Tahquitz Cyn Way to Alejo Rd	\$2,123,550
INDIAN CYN DR	INCN3	Alejo Rd to Tachevah Dr	\$2,383,200

Appendix B
List of Costs for Projects Considered in TUMF

Street Name	Segment Number	Segment Description	Project Costs
INDIAN CYN DR	INC�4	Tachevah Dr to Vista Chino	\$1,463,550
INDIAN CYN DR	INC�5	Vista Chino to Racquet Club Rd	\$1,440,900
INDIAN CYN DR	INC�7	Sunrise Pkwy to Garnet Avenue	\$204,099,790
INDIAN CYN DR	INC�9	20th Ave to 19th Ave	\$1,722,800
INDIAN CYN DR	INC�10	19th Ave to Dillon Rd	\$7,379,840
INDIAN CYN DR	INC�11	Dillon Rd to 14th Ave	\$5,510,000
INDIAN CYN DR	INC�12	14th Ave to Pierson Blvd	\$4,903,440
INDIAN CYN DR	INC�13	Pierson Blvd to Mission Lakes Blvd (Incl. Future Br. at Mission Cr.)	\$6,945,600
INDIO BLVD	INDIO0	I-10 Interchange to Jefferson St (includes 2 railroad bridges)	\$21,888,720
INDIO BLVD	INDIO1	Jefferson St to Madison St (over All-Amer. Canal)	\$2,920,195
JACKSON ST	JAC2A1	I-10 IC to 43rd Ave	\$17,915,106
JACKSON ST	JAC2A2	43rd Ave to Ave 44	\$10,967,500
JACKSON ST	JAC4	Ave 48 to Ave 50	\$5,615,280
JACKSON ST	JAC5	Ave 50 to Ave 52	\$2,047,650
JACKSON ST	JAC6	Jackson St I-10 IC	\$19,826,100
JEFFERSON ST	JEF2A	58th Ave to 62th Ave	\$13,518,000
JEFFERSON ST	JEF9A1	40th Ave to 0.27 mi S of Ave 39	\$1,011,840
KEY LARGO AVE	KL1	Dinah Shore Dr. to Varner Rd (Incl. flyover at I-10 and RR)	\$23,868,000
LANDAU BLVD	LAN1	Vista Chino to Verona Rd	\$832,000
LANDAU BLVD	LAN2	Verona Rd to I-10 IC (Incl. Br. over RR, missing link)	\$19,280,000
LANDAU BLVD	LAN3	Future Landau Blvd I-10 IC (missing link)	\$71,647,500
LANDAU BLVD	LAN4	I-10 IC to Varner Rd (missing link)	\$22,614,400
LITTLE MORONGO RD	LM2	Pierson Blvd to Two Bunch Palms Trl	\$4,506,240
LITTLE MORONGO RD	LM3	Two Bunch Palms Trl to Dillon Rd (Incl. Future Br. at Mission Cr.)	\$14,539,120
LITTLE MORONGO RD	LM4	Dillon Rd to 20th Ave	\$19,768,320
MADISON ST	MAD5	Ave 52 to Ave 50	\$6,608,460
MADISON ST	MAD7A	0.25 mi N of Ave 49 to Ave 48	\$898,920
MADISON ST	MAD7B	Ave 48 to Hwy 111	\$1,450,140
MADISON ST	MAD9	Miles Ave to Fred Waring Dr (Incl. Br. over WW Chnl and All-Amer. Canal, missing link)	\$18,607,200
MISSION LAKES BLVD	MSLK0	SR 62 to Indian Canyon Dr	\$29,315,840
MONROE ST	MON1	0.25 mi N of Ave 42 to Ave 42	\$1,754,280
MONROE ST	MON6	Monroe St I-10 IC	\$2,400,000
MONROE ST	MON9	I-10 Interchange to 900 ft N of Oleander	\$15,467,750
MONTEREY AVE	MNT1-6	Highway 111 to Fred Waring Dr	\$1,240,800
MONTEREY AVE	MNT2-6	Fred Waring Dr to Clancy Lane (Incl. Br. at Whitewater River)	\$13,247,266
MONTEREY AVE	MNT3-6	Clancy Lane to Country Club Dr	\$3,557,376
MOUNTAIN VIEW RD	MTV1A	Hacienda Ave to Brunner Ln	\$4,016,160
MOUNTAIN VIEW RD	MTV1B	Brunner Ln to Dillon Rd	\$3,315,840
N PALM CYN DR	PLCN3	Alejo Rd to Tahquitz Cyn Rd	\$1,182,150
N PALM CYN DR	PLCN4	Tahquitz Cyn Rd to Ramon Rd	\$1,310,850
N PALM CYN DR	PLCN5	Ramon Rd to Mesquite Ave (Incl. Br at Tahquitz Creek)	\$6,437,440
N PALM CYN DR	PLCN6	Mesquite Ave to E Palm Cyn Dr	\$1,436,200
PALM DR	PD1	I-10 IC to Varner Rd	\$4,024,416
PALM DR	PD3	20th Ave to Dillon Rd	\$7,736,256
PALM DR	PD4	Dillon Rd to Two Bunch Palms Trl	\$5,359,464

Appendix B
List of Costs for Projects Considered in TUMF

Street Name	Segment Number	Segment Description	Project Costs
PALM DR	PD7	Pierson Blvd to Mission Lakes Blvd	\$4,241,952
POLK ST	PLK1	Polk St from Ave 52 to Ave 48	\$19,754,280
PORTOLA AVE	POR1	Hwy 111 to Magnesia Falls Dr	\$5,638,410
PORTOLA AVE	POR3	Country Club Dr to Frank Sinatra Dr	\$4,180,000
PORTOLA AVE	POR4A	Frank Sinatra Dr to Julie Ln	\$2,606,400
PORTOLA AVE	POR5B	Dinah Shore Dr to I-10 IC (Incl. Br. over RR)	\$23,026,500
PORTOLA AVE	POR6	Future Portola Ave I-10 IC	\$71,647,500
RAMON RD	RAM1	S Palm Cyn Dr to S Indian Cyn Dr	\$372,240
RAMON RD	RAM2	S Indian Cyn to Sunrise Way (Incl. Baristo Storm Chnl Xing)	\$4,279,950
RAMON RD	RAM3	Sunrise Way to Farrell Dr	\$2,574,880
RAMON RD	RAM3A	Intersection of Ramon Rd and Sunrise Way	\$1,051,947
RAMON RD	RAM4	Farrell Dr to El Cielo Rd	\$1,717,600
RAMON RD	RAM4A	Intersection of Ramon Rd and Farrell Drive	\$957,177
RAMON RD	RAM5	El Cielo Rd to Gene Autry Trl	\$8,367,900
RAMON RD	RAM5A	Intersection of Ramon Rd and Crossley Rd	\$1,051,947
RAMON RD	RAM7	Br. at Whitewater Rvr	\$24,864,323
S VALLEY PKWY / AVE 60	SV1	Monroe St to Jackson St	\$4,494,240
S VALLEY PKWY / AVE 60	SV2	Jackson St to Van Buren St	\$4,741,440
S VALLEY PKWY / AVE 60	SV3	Van Buren St to Harrison St	\$5,269,440
S VALLEY PKWY	SV4	Harrison St to Tyler St (missing link)	\$9,583,600
S VALLEY PKWY	SV5	Tyler St to Polk St (missing link)	\$10,562,080
S VALLEY PKWY / 62ND AVE	SV8	Pierce St to SR-86	\$3,892,200
S VALLEY PKWY / 62ND AVE	SV9	Future Ave 62 SR-86 IC	\$46,550,500
THOUSAND PALMS CYN RD	THPL1	Ramon Rd to Dillon Rd	\$17,252,840
TWO BUNCH PALMS TR / 14TH AVE	TBP1	N Indian Canyon Dr to Little Morongo Rd	\$12,522,240
TWO BUNCH PALMS TR	TBP2	Little Morongo Rd to Palm Dr	\$5,422,560
TWO BUNCH PALMS TR	TBP3	Palm Dr to Miracle Hill Rd	\$4,278,787
TYLER ST	TYL1	Ave 50 to I-10 frontage road	\$11,854,020
VAN BUREN ST	VANB2	Ave 48 to Ave 50	\$3,519,200
VAN BUREN ST	VANB3	Ave 50 to Ave 52	\$4,690,800
VAN BUREN ST	VANB5	Ave 54 to Ave 56/Airport Blvd	\$5,332,536
VARNER RD	VRNR0	20th Ave to Palm Dr	\$20,249,600
VARNER RD	VRNR1	Palm Dr to Mountain View Rd	\$6,295,000
VARNER RD	VRNR2	Mountain View Rd to Date Palm Dr	\$12,505,200
VARNER RD	VRNR3	Date Palm Dr to Ramon Rd	\$47,489,880
VARNER RD	VRNR7B	Ave 38 to Washington St	\$11,293,450
VARNER RD / AVE 42	VRNR9	Jefferson St to Madison St (Incl. Br. over All-Amer. Canal)	\$9,872,400
VARNER RD / AVE 42	VRNR10B	Clinton St to Monroe St	\$4,952,640
VARNER RD / AVE 42	VRNR11	Monroe St to Gore St	\$2,327,424
VISTA CHINO	VC1	N Palm Canyon Drive to Sunrise Way	\$5,288,420
VISTA CHINO	VC1A	Intersection of Vista Chino and N Palm Canyon Dr	\$984,150
VISTA CHINO	VC2	Sunrise Way to Gene Autry Trl	\$5,668,080
VISTA CHINO	VC2AA	Intersection of Vista Chino and Sunrise Way	\$1,073,547
VISTA CHINO	VC2AB	Intersection of Vista Chino and Farrell Drive	\$967,677
VISTA CHINO	VC2A	Intersection of Vista Chino and Gene Autry Trl	\$1,014,039
VISTA CHINO	VC3	Gene Autry Trl to W side of Whitewater Rvr	\$1,185,600

Appendix B
List of Costs for Projects Considered in TUMF

Street Name	Segment Number	Segment Description	Project Costs
VISTA CHINO	VC4	Future Whitewater Rvr Br.	\$94,701,810
VISTA CHINO	VC7	Date Palm Dr to Da Vall Dr	\$20,625,000
WASHINGTON ST	WSH9	I-10 IC to Ave 38	\$3,055,200
WORSLEY RD	WORS4	Pierson Blvd to N Indian Canyon Dr	<u>\$11,646,600</u>
			Total \$2,505,969,566
