

# DKS MEMORANDUM

DATE: September 24, 2019  
TO: Rafael Martinez, Director of Transportation  
FROM: John P. Long, P.E., T.E.  
Cameron Shew, P.E., T.E.  
SUBJECT: TIM Fee Major Update  
Technical Memorandum 1C: Age-Restricted Fee Category

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## Executive Summary

Age-restricted dwelling units currently comprise 13.5% of the total number of dwelling units in the current Traffic Impact Mitigation (TIM) fee program. These age-restricted units are concentrated in Zone 2 (Cameron Park/Shingle Springs), Zone 3 (El Dorado/Diamond Springs), and Zone 8 (El Dorado Hills). The amount of TIM fees paid by development is determined by the number of PM peak hour vehicle trips generated. Because age-restricted units generate 73-75% fewer vehicle trips than non-restricted, single family homes, TIM fees for age-restricted units are 73-75% lower. The reduced trip-making of senior housing is well-supported by industry data, and is accounted for in many other TIM fee programs in the region, including Sacramento County, Placer County, and the cities of Folsom, Elk Grove, Roseville, and Rocklin.

County staff requested analysis of the potential effects of removing the distinction between “age-restricted” and “non-restricted” housing. Eliminating the age-restricted TIM fee category would recombine those housing units into the non-restricted categories in Zones 2, 3, and 8. The total cost of the fee program allocated to those zones would not change. The result would be substantial increases in fees for the previously age-restricted units, and modest reductions in fees for the non-restricted and nonresidential units in those zones.

County staff and their consultant (DKS Associates) request direction on whether the age-restricted categories should be maintained in the TIM Fee Program Major Update.

## Background

**Figure 1** shows growth projections in the current TIM fee program<sup>1</sup>, which estimate a total growth of 16,605 residential units in all zones. Of this total, 1,986 (12.0%) are single family, age restricted units and 256 (1.5%) are multi family, age restricted units. The totals in Zone 2 (Cameron Park/Shingle Springs) and Zone 3 (El Dorado/Diamond Springs) were based on the share allocated under previous updates to the TIM Fee program. The totals in Zone 8 (El Dorado Hills) were estimated from the proposed Carson Creek project.

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<sup>1</sup> TIM Fee Nexus Study 2018 Technical Update

	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7	Zone 8	Total
<b>Residential</b>	<i>(dwelling units)</i>								
Single Family									
Not Restricted	210	2,495	1,029	1,266	565	407	278	4,171	10,421
Age Restricted <sup>2</sup>	-	553	333	-	-	-	-	1,100	1,986
Subtotal	210	3,048	1,362	1,266	565	407	278	5,271	12,407
Multi-family									
Not Restricted	63	1,304	1,357	518	228	124	88	260	3,942
Age Restricted <sup>2</sup>	-	97	59	-	-	-	-	100	256
Subtotal	63	1,401	1,416	518	228	124	88	360	4,198
Total	273	4,449	2,778	1,784	793	531	366	5,631	16,605
<b>Nonresidential<sup>1</sup></b>	<i>(jobs)</i>								
Commercial	17	2,960	991	510	255	246	49	1,442	6,470
Office	60	553	229	75	81	60	-	4,578	5,636
Medical	-	260	75	142	160	72	8	883	1,600
Industrial	-	291	157	(6)	30	9	-	680	1,161
Total	77	4,064	1,452	721	526	387	57	7,583	14,867
<b>Nonresidential<sup>1</sup></b>	<i>(1,000 sq. ft.)</i>								
Commercial	9	1,480	496	255	128	123	25	721	3,237
Office	17	152	63	21	22	17	-	1,259	1,551
Medical	-	81	23	44	50	22	2	275	497
Industrial	-	291	157	(6)	30	9	-	680	1,161
Total	26	2,004	739	314	230	171	27	2,935	6,446
<sup>1</sup> Excludes local government growth that is exempt from the TIM Fee.									
<sup>2</sup> For zones 2 and 3, age-restricted dwelling unit estimates based on share allocated under current TIM Fee program. For zone 8 estimate based on proposed Carson Creek development project.									
Source: El Dorado County Travel Demand Model; Table 1.									

**Figure 1: Growth Projections**  
Source: 2018 TIM Fee Program, Table 2

The TIM Fee Program allocates the cost of roadway improvements by land use type based on the concept of “equivalent dwelling units” (EDU). An EDU equals the demand placed on the transportation network relative to one single family (non-restricted) dwelling unit which is assigned an EDU of 1. Land uses which have greater overall traffic impacts than a typical single-family residential unit are assigned values greater than 1, while land uses with lower overall traffic impacts are assigned values less than 1. EDU factors in the current fee program are shown in **Figure 2**.

Vehicle trips for all categories of residential units (single and multi-family, non-restricted and age-restricted) were derived from studies compiled and vetted by the Institute of Transportation Engineers, which measure the vehicle trips entering and leaving a specific development. Since roadway needs are primarily based on traffic flows and conditions during the PM peak hour on an average weekday, the EDUs reflect the relative trip generation for the evening peak hour. The Institute of Transportation Engineers (ITE) data indicates that age-restricted units generate between 25% (multi-family) and 27% (single-family) of the vehicle trips that would be generated by a single family, non-restricted unit. Because age-restricted units generate 73-75% fewer PM peak hour trips than single family, non-restricted units, they currently pay 73-75% lower TIM fees.

Land Use	Institute for Transportation Engineers Category	Units	Trip Rate <sup>1</sup>	New Trip Ends	Net New Trip Rate	Preliminary EDU Factor <sup>2</sup>
Residential						
SFD Not Restricted	210: Single Family Detached	Dwelling Units	1.00	100%	1.00	1.00
SFD Age Restricted	251: Senior Adult - Detached	Dwelling Units	0.27	100%	0.27	0.27
MFD Not Restricted	220: Apartment	Dwelling Units	0.62	100%	0.62	0.62
MFD Age Restricted	252: Senior Adult - Attached	Dwelling Units	0.25	100%	0.25	0.25
Nonresidential						
Commercial						
General Commercial	820: Shopping Center	1,000 SqFt	3.71	47%	1.74	1.74
Hotel/Motel/B&B	320: Motel	Rooms	0.47	58%	0.27	0.27
Church	560: Church	1,000 SqFt	0.55	64%	0.35	0.35
Office						
General Office	710: General Office	1,000 SqFt	1.49	77%	1.15	1.15
Medical	720: Medical-Dental Office	1,000 SqFt	3.57	60%	2.14	2.14
Industrial	110: General Light Industrial	1,000 SqFt	0.97	79%	0.77	0.77

<sup>1</sup> Evening peak hour trip rate.

<sup>2</sup> The equivalent dwelling unit (EDU) factor is the net new trip rate normalized so one single family unit is one EDU. Residential EDU factors are per dwelling unit. Nonresidential EDU factors are per 1,000 building square feet except Hotel/Motel/B&B EDU factor is per room.

Source: Institute of Transportation Engineers, *Trip Generation 9th Edition*, 2012; San Diego Association of Governments, *Brief Guide of Vehicular Trip Generation Rates*, April 2002.

**Figure 2: Lane Use Categories, Trip Generation Rates, and Preliminary EDU Factors**  
Source: 2018 TIM Fee Program, Table 3

### Analysis

County staff and DKS Associates are commencing the next major update to the TIM Fee program. The question has come up on whether the age-restricted category should be maintained or eliminated. Assuming the age-restricted category remains, **Figure 3** shows the new EDU factors, based on the latest *Trip Generation 10th Edition*.

Land Use	Institute for Transportation Engineers Category	Units	Trip Rate <sup>1</sup>	New Trip Ends	Net New Trip Rate	Preliminary EDU Factor <sup>2</sup>
Residential						
SFD Not Restricted	210: Single Family Detached	Dwelling Units	0.99	100%	0.99	1.00
SFD Age Restricted	251: Senior Adult - Detached	Dwelling Units	0.30	100%	0.30	0.30
MFD Not Restricted	220: Apartment	Dwelling Units	0.56	100%	0.56	0.57
MFD Age Restricted	252: Senior Adult - Attached	Dwelling Units	0.26	100%	0.26	0.26

**Figure 3: Updated Trip Generation Rates and Preliminary EDU Factors for 2020 Major Update**  
Source: DKS Associates, 2019.

The latest ITE Trip Generation data indicates that age-restricted units generate between 26% (multi-family) and 30% (single-family) of the net new PM peak hour vehicle trips that would be generated by a single family, non-restricted unit. Under the current calculation methodology, they would continue to pay a proportionately lower TIM fee.

For the on-going TIM Fee Major Update, the growth projections will be revised. However assuming the development in the current TIM Fee Program, eliminating the “age restricted” categories would increase the TIM fee for both single family age-restricted units (175-225%) and multi-family age-restricted units (75-100%). In Zones 2, 3, and 8 specifically, the TIM fee would decrease (5-15%) for non-restricted units and nonresidential development.

**Recommended Action:** DKS Associates and County staff recommend the Board consider maintaining the separate age-restricted and non-restricted TIM Fee categories.