



TischlerBise
FISCAL | ECONOMIC | PLANNING

Transportation Impact Fee

Town of Vail, Colorado

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Vail's Current Mitigation Fee

12-7A,H,I,J: MITIGATION OF DEVELOPMENT IMPACTS:

Property owners/developers shall also be responsible for mitigating direct impacts of their development on public infrastructure...

Ord. 29(2005) § 24: Ord. 23(1999) § 1)

Substantial off site impacts may include:

- Roadway improvements
- Pedestrian walkway improvements
- Streetscape improvements
- Loading/delivery...

- **CURRENT FEE STRUCTURE**

\$6500 per Net PM Peak Hour vehicular trip end (entering and exiting)



Colorado Impact Fee Act

- ✧ Fee schedules must be legislatively adopted and generally applicable to a broad class of property
- ✧ Local government shall quantify the reasonable impacts of proposed development on capital facilities
- ✧ A capital facility must have a useful life of five years or longer



Impact Fee Fundamentals

- Can't be used for operations, maintenance, or replacement
- Not a tax but more like a contractual arrangement to build infrastructure, with three requirements
 - Need (system improvements, not project-level improvements)
 - Benefit to fee payer (usually not developers/builders)
 - Short range expenditures
 - Geographic service areas or benefit districts
 - Proportionate (service units by type and size of development)



Impact Fee Methods

➤ Cost Recovery

- New Development Pays for its Share of Capacity or Remaining Life
- Common if Capacity is Required Before new Development

➤ Incremental Expansion

- Document Current Quantitative and Qualitative Standards
- New Development Pays Proportionate Share to Maintain Current Standards

➤ Plan-Based

- Allocates cost for Specific Set of Improvements to Specified Amount of Development

➤ Credits

- Project-level vs. System Improvements
- Developer Reimbursements or Site-Specific Credits

Transportation Impact Fee Comparison

	<u>Per Housing Unit</u>		<u>Per 1,000 Sq Ft</u>	
	<i>Single Family</i>	<i>Multifamily</i>	<i>Retail</i>	<i>Office</i>
National Average (1)	\$3,228	\$2,202	\$5,685	\$3,430
Incorporated Areas in Colorado				
Durango (1)	\$2,169	\$1,298	\$3,810	\$2,823
Ft. Collins 2016 Draft (2)	\$6,217	\$4,095	\$8,113	\$5,977
Vail current*	\$0	\$2,366	\$10,569	\$9,685
Proposed in Core Area of Vail (2)	not applicable	\$5,960	\$13,900	\$6,200
Proposed Outside Core Area (2)	\$9,686	\$7,450	\$13,900	\$6,200
Counties in Colorado				
Eagle Co. (1)	\$4,378	\$3,034	\$9,026	\$5,164
Jefferson Co. (1)	\$3,276	\$2,725	\$7,120	\$4,790
Larimer Co. (2)	\$3,418		\$8,812	\$4,726
Pitkin Co. (2)	\$9,339	\$5,115	\$10,910	\$5,130
Weld Co. (2)	\$2,377		\$3,296	\$2,174

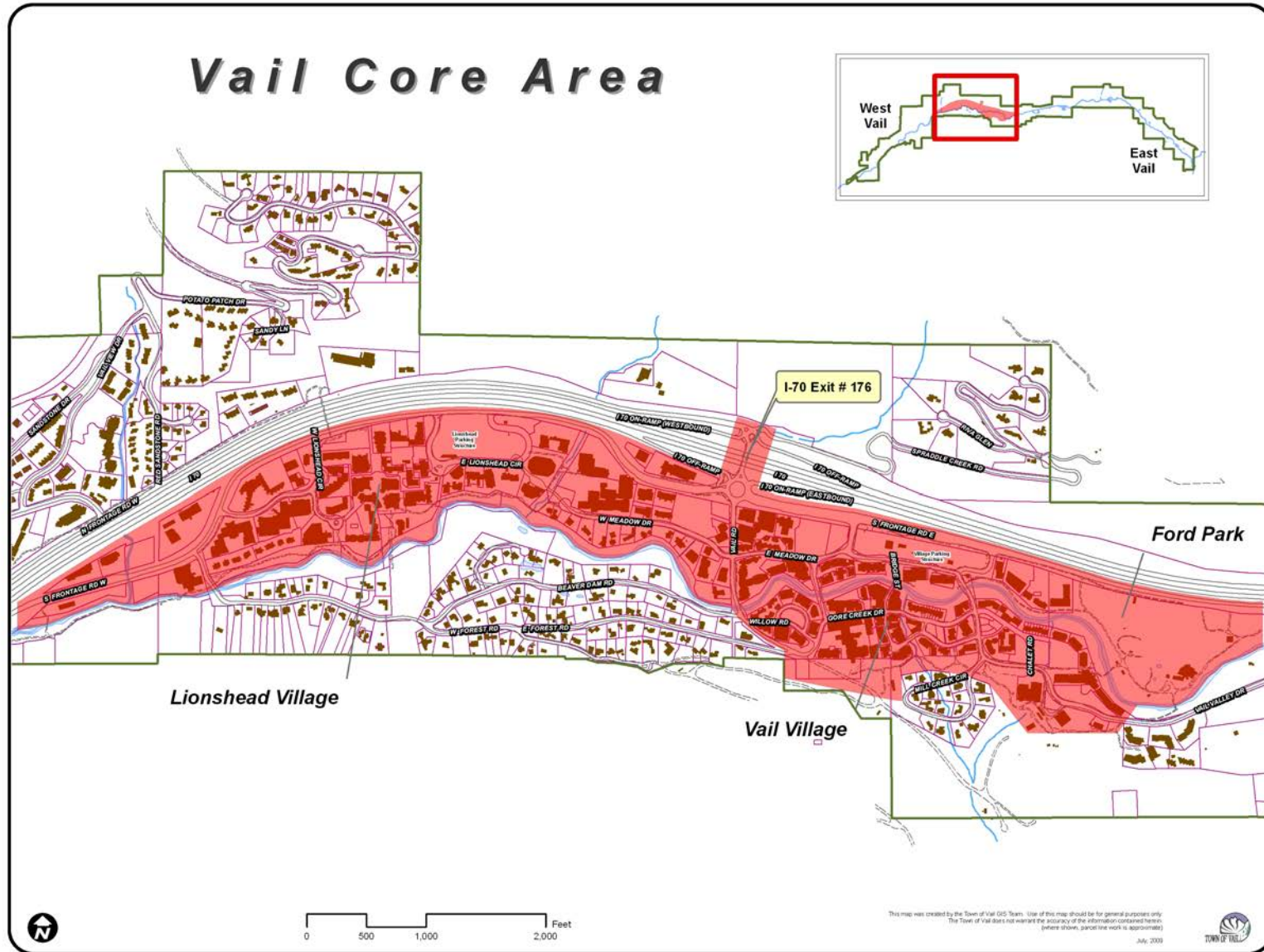
Sources: (1) National Impact Fee Survey by Duncan Associations (2012). Single Family assumes 2,000 square feet. Nonresidential fees per thousand square feet assume a building with 100,000 square feet of floor area.

(2) TischlerBise. Single Family in Vail and Pitkin County assumes 4,000 square feet.

** Current fees in Vail are based on the net increase in PM Peak Hour vehicle trip ends generated by the entire development, with mitigation limited to certain areas and reductions given for multi-modal travel.*

Town staff provided the average mitigation fees currently collected.

Map of Core Area



Projected Increase in Vehicle Trips

<i>Development Type</i>	<i>Additional Development Units (2)</i>	<i>Inbound Trip Rate per Development Unit (3)</i>	<i>Additional PM-Peak Inbound Trips</i>
Attached Housing Units in Core Area	705	0.24	169
Attached Housing Units Outside Core	554	0.30	166
Employee Housing Units in Core Area	41	0.24	10
Employee Housing Units Outside Core	310	0.30	93
Detached Housing Units	120	0.39	47
Hotel Rooms in Core Area	270	0.24	65
Hotel Rooms Outside Core	102	0.30	31
Commercial KSF (1)	320	0.56	179
Hospital KSF (1)	140	0.40	56
Office & Other Services KSF (1)	88	0.25	22
TOTAL =>			838

(1) KSF = square feet of floor area in thousands.

(2) Appendix E, Vail Transportation Master Plan (FHU 2009) and Town staff (12/06/16).

(3) Trip generation rates are from Appendix E, Vail Transportation Master Plan, except detached housing rate, which is derived from ITE formulas and data.

Growth-Related Capital Improvements (1 of 2)

Transportation Improvements Town of Vail, Colorado		Estimated Cost (Millions)	Project- Level Cost	System-Level Improvements			
ID	PROJECT DESCRIPTION			Percent Funded By Impact Fee	Percent Other Revenue	Cost by Impact Fee	Cost by Other Revenue
A	West Vail Commercial Roundabout & Medians	\$ 6.70	\$ 6.70	0%	0%	\$ -	\$ -
B	Buffehr Creek Turn Lanes	\$ 1.20	\$ -	52%	48%	\$ 0.62	\$ 0.58
C	Buffehr Creek NRT connection to Marriott Roost	\$ 0.50	\$ 0.50	0%	0%	\$ -	\$ -
D	Marriott Roost Turn Lanes	\$ 1.20	\$ 1.20	0%	0%	\$ -	\$ -
E	Timber Ridge Turn Lanes	\$ 1.20	\$ 1.20	0%	0%	\$ -	\$ -
F	Lions Ridge Loop Turn Lanes	\$ 1.20	\$ -	35%	65%	\$ 0.41	\$ 0.79
G	Red Sandstone Drive Turn lanes	\$ 1.20	\$ -	35%	65%	\$ 0.41	\$ 0.79
H	Main Vail North Roundabout Expansion to Two Lanes	\$ 5.60	\$ -	35%	65%	\$ 1.98	\$ 3.62
I	Main Vail Underpass Reversible Lane	\$ 2.00	\$ -	35%	65%	\$ 0.71	\$ 1.29
J	Gore Creek Drive Turn Lanes	\$ 1.20	\$ -	14%	86%	\$ 0.17	\$ 1.03
K	Underpass (Cost Recovery)	\$ 9.10	\$ -	22%	78%	\$ 1.96	\$ 7.14
L	Underpass to Forest Road Improvements (5 Lane/Walk)	\$ 7.00	\$ 7.00	0%	0%	\$ -	\$ -
M	Vail Spa to ELHC Improvements (5 Lane/Walk)	\$ 4.50	\$ -	46%	54%	\$ 2.05	\$ 2.45
N	ELHC to LH Parking Structure Entrance Medians	\$ 0.75	\$ -	46%	54%	\$ 0.34	\$ 0.41
O	LH Parking Structure Entrance to Municipal Bldg (5 Lane & Rdabt)	\$ 9.00	\$ 2.25	39%	36%	\$ 3.55	\$ 3.20
P	Village Ctr Road to Vail Valley Drive (Medians, TC Device, Compact Rdabt)	\$ 6.50	\$ -	29%	71%	\$ 1.92	\$ 4.58

Growth-Related Capital Improvements (2 of 2)

Transportation Improvements Town of Vail, Colorado		Estimated Cost (Millions)	Project- Level Cost	System-Level Improvements			
ID	PROJECT DESCRIPTION			Percent Funded By Impact Fee	Percent Other Revenue	Cost by Impact Fee	Cost by Other Revenue
Q	PW/VVD Turn Lanes	\$ 1.20	\$ -	27%	73%	\$ 0.33	\$ 0.87
R	Booth Creek Turn Lanes	\$ 1.20	\$ -	27%	73%	\$ 0.33	\$ 0.87
S	GVT Dowd Junction to WV Rdabt	\$ 8.50	\$ -	22%	78%	\$ 1.83	\$ 6.67
T	Donovan to Westhaven Drive Walk	\$ 1.50	\$ -	22%	78%	\$ 0.32	\$ 1.18
U	WLHC walk (Vail Spa to S. Frtge)	\$ 0.75	\$ 0.75	0%	0%	\$ -	\$ -
V	VVD Path improvements	\$ 1.20	\$ -	22%	78%	\$ 0.26	\$ 0.94
W	Vail Rd (Willow Way to Forest Rd) Walk	\$ 0.50	\$ -	22%	78%	\$ 0.11	\$ 0.39
X	ELHC (LHWC to Dobson) Walk	\$ 1.00	\$ -	22%	78%	\$ 0.22	\$ 0.78
Y	Ford Park to Sunburst Path	\$ 6.00	\$ -	22%	78%	\$ 1.29	\$ 4.71
Z	VMS to Bighorn Path	\$ 1.50	\$ -	22%	78%	\$ 0.32	\$ 1.18
AA	ELHC (Vantage Point to S. Frontage Road) Walk	\$ 0.20	\$ -	22%	78%	\$ 0.04	\$ 0.16
BB	Chamonix (Arosa to Chamonix)	\$ 1.00	\$ -	22%	78%	\$ 0.22	\$ 0.78
CC	Chamonix (Chamonix to Buffehr Creek Rd)	\$ 1.00	\$ -	22%	78%	\$ 0.22	\$ 0.78
DD	Line Haul Transit Stop Improvement Projects	\$ 1.60	\$ -	22%	78%	\$ 0.34	\$ 1.26
EE	Vail Bus Stops (10 Shelters)	\$ 1.50	\$ -	22%	78%	\$ 0.32	\$ 1.18
FF	Arosa Transit Parking	\$ 2.50	\$ -	22%	78%	\$ 0.54	\$ 1.96
GG	Frontage Road Lighting Improvements	\$ 5.00	\$ -	0%	100%	\$ -	\$ 5.00
HH	Structured Parking Expansion & Buses	\$ -	\$ -	0%	100%	\$ -	\$ -
Grand Totals		\$ 95.00	\$ 19.60	28%	72%	\$ 20.81	\$ 54.59

Net New PM Peak Inbound Trips => 838

Capacity Cost per Additional PM Peak Inbound Trip => \$ 24,836

Impact Fee Inputs and Outputs

<i>Residential (per Housing Unit)</i>	Heated Sq Ft	PM-Peak Inbound Vehicle Trips
Attached in Core Area	all sizes	0.24
Attached Outside Core	all sizes	0.30
Detached	2099 or less	0.33
Detached	2100 to 2399	0.34
Detached	2400 to 2699	0.35
Detached	2700 to 2999	0.36
Detached	3000 to 3299	0.37
Detached	3300 to 3599	0.37
Detached	3600 to 3899	0.38
Detached	3900 to 4199	0.39
Detached	4200 to 4499	0.39
Detached	4500 to 4799	0.40
Detached	4800 to 5099	0.40
Detached	5100 to 5399	0.41
Detached	5400 to 5699	0.41
Detached	5700 to 5999	0.41
Detached	6000 to 6299	0.42
Detached	6300 or more	0.42
<i>Hotel (per room)</i>		
Hotel in Core Area		0.24
Hotel Outside Core		0.30
<i>Nonresidential (per 1,000 Sq Ft of floor area)</i>		
Commercial		0.56
Hospital		0.40
Office & Other Services		0.25
<i>Infrastructure Standards</i>		
Cost per Trip =>		\$24,836
Revenue Credit Per Trip =>		\$0

<i>Maximum Supportable Transportation Impact Fees</i>		
<i>Residential (per housing unit)</i>	Heated Sq Ft	
Attached in Core Area	all sizes	\$5,960
Attached Outside Core	all sizes	\$7,450
Detached	2099 or less	\$8,195
Detached	2100 to 2399	\$8,444
Detached	2400 to 2699	\$8,692
Detached	2700 to 2999	\$8,940
Detached	3000 to 3299	\$9,189
Detached	3300 to 3599	\$9,189
Detached	3600 to 3899	\$9,437
Detached	3900 to 4199	\$9,686
Detached	4200 to 4499	\$9,686
Detached	4500 to 4799	\$9,934
Detached	4800 to 5099	\$9,934
Detached	5100 to 5399	\$10,182
Detached	5400 to 5699	\$10,182
Detached	5700 to 5999	\$10,182
Detached	6000 to 6299	\$10,431
Detached	6300 or more	\$10,431
<i>Hotel (per room)</i>		
Hotel in Core Area		\$5,960
Hotel Outside Core		\$7,450
<i>Nonresidential (per square foot of floor area)</i>		
Commercial		\$13.90
Hospital		\$9.93
Office & Other Services		\$6.20

Impact Fee Revenue Projection

<i>Development Type</i>	<i>Additional Development Units</i>	<i>Fee per Development Unit</i>	<i>Projected Revenue</i>	<i>Percent of Impact Fees</i>
Attached Housing Units in Core Area	705	\$5,960	\$4,202,000	20%
Attached Housing Units Outside Core	554	\$7,450	\$4,127,000	20%
Employee Housing Units in Core Area	41	\$5,960	\$244,000	1%
Employee Housing Units Outside Core	310	\$7,450	\$2,310,000	11%
Detached Housing Units	120	\$9,686	\$1,162,000	6%
Hotel Rooms in Core Area	270	\$5,960	\$1,609,000	8%
Hotel Rooms Outside Core	102	\$7,450	\$760,000	4%
Commercial KSF	320	\$13,900	\$4,448,000	21%
Hospital KSF	140	\$9,930	\$1,390,000	7%
Office & Other Services KSF	88	\$6,200	\$546,000	3%
Total =>			\$20,798,000	100%

Trip Ends by Bedroom Range

ACS 2013 5-Year PUMS Data for PUMA 400 (Pitkin, Eagle, Summit, Grand and Jackson Counties)

Bedroom Range	Persons (1)	Vehicles Available (1)	Households (1)	PUMA 400 Hshld Mix	Unadjusted Persons/Hshld	Adj Persons per Hshld (2)	Unadjusted VehAvl/Hshld	Adj Veh Avl per Hshld (2)
0-2	134	156	75	19.7%	1.79	1.62	2.08	1.38
3	409	376	165	43.4%	2.48	2.24	2.28	1.52
4	248	229	97	25.5%	2.56	2.31	2.36	1.57
5+	114	112	43	11.3%	2.65	2.39	2.60	1.73
Total	905	873	380		2.38	2.15	2.30	1.53

National Averages According to ITE

ITE Code	PM-Peak VTE per Person	PM-Peak VTE per Vehicle Available	PM-Peak VTE per Household	Vail Hshld Mix	Persons per Household	Veh Avl per Household
230 Condo / Townhouse	0.24	0.31	0.52	77.7%	2.17	1.68
210 SFD	0.27	0.67	1.02	22.3%	3.78	1.52
Wgtd Avg	0.25	0.39	0.63		2.53	1.64

Recommended Trip Rate by Bedroom Range

Bedroom Range	PM-Peak VTE per Hshld Based on Persons (3)	PM-Peak VTE per Hshld Based on Veh Available (4)	Vail PM-Peak VTE per Hshld (5)
0-2	0.41	0.54	0.48
3	0.56	0.59	0.58
4	0.58	0.61	0.60
5+	0.60	0.67	0.64
Total	0.54	0.60	0.57

- (1) American Community Survey, Public Use Microdata Sample for CO PUMA 400 (2013 Five-Year unweighted data).
 (2) Adjusted multipliers are scaled to make the average PUMS values match control totals for Vail (ACS 2014 Five-Year data).
 (3) Adjusted persons per household multiplied by national weighted average trip rate per person.
 (4) Adjusted vehicles available per household multiplied by national weighted average trip rate per vehicle available.
 (5) Average of trip rates based on persons and vehicles available per housing unit. Does not show adjustment to inbound trips (64% entering).

Trip Ends by Square Feet of Living Space

Average dwelling size by bedroom range is from County Assessor parcel database. PM-Peak vehicle trip ends are derived using ACS PUMS data and calibrated to Town of Vail demographics. Inbound trips are 64% of trip ends (ITE 2012).

Actual Averages per Hsg Unit			Fitted-Curve Values	
Bedrooms	Square Feet	Inbound Trips	Square Feet	Inbound Trips
0-2	1,594	0.31	2099 or less	0.33
3	2,667	0.37	2100 to 2399	0.34
4	3,698	0.38	2400 to 2699	0.35
5+	5,706	0.41	2700 to 2999	0.36
			3000 to 3299	0.37
			3300 to 3599	0.37
			3600 to 3899	0.38
			3900 to 4199	0.39
			4200 to 4499	0.39
			4500 to 4799	0.40
			4800 to 5099	0.40
			5100 to 5399	0.41
			5400 to 5699	0.41
			5700 to 5999	0.41
			6000 to 6299	0.42
			6300 or more	0.42

PM-Peak Inbound Vehicle Trips per Detached Dwelling by Size within Vail, CO

