

MEMORANDUM OF RECORD
Impact Fee Regional Improvement Projects-2007 Adjustment

This memorandum describes the resources used to calculate the adjustments associated with improvements to be financed with Gateway Impact Fees as provided in Section 50-60 (4). The Colorado Department of Transportation (CDOT) *Composite Construction Cost Index* was used for roads and the *Engineering News-Record Construction Cost Index* (CCI) was used for all other improvements.

CDOT Composite Construction Cost Index. These figures are generated by CDOT and are Colorado-specific. The Composite Index provides a weighted index of costs associated with earthwork, surfacing and road construction. The costs contained within the ordinance (842, Series of 2000) were based on an index of 162.3. The average index for the time period 7/2006 to 6/2007 is 278.48. To update the ordinance estimates to mid-2007, a factor of 1.72 has been applied to roads only.

Engineering News-Record Inflation Index. The inflation index is developed by *Engineering News-Record*, which is a weekly trade publication for the construction industry. They have published inflation indices since the 1920's. The *Construction Cost Index*, established in 1921, was designed as a general purpose tool to chart basic cost trends. It is a weighted aggregate index of the prices of constant quantities of structural steel, portland cement, lumber and common labor. This hypothetical package of construction goods and services was valued at \$100 using 1913 prices. Steel, cement and lumber were chosen because they have a stable relation to the nation's economy and price structure and because their use is predominant in construction. Currently, this index is 78% labor and 22% materials. The costs contained within the ordinance (842, Series of 2000) were based on an index of 6005. The average index for the time period 7/2006 to 6/2007 is 7854. To update the ordinance estimates to mid-2007, a factor of 1.31 has been applied to parks and trails, fire, and drainage improvements.

Department of Public Works
District Management Office

Date

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Fire Protection

Southern station

Location: 48th and Laredo

Land: .75 acres to be dedicated by Parkfield and repaid through impact fees at same rate as subdivision in-lieu payments

Improvements: 3-by station with living area and community room

Equipment: pumper and rescue squad

Estimated cost: \$5,764,000; Gateway share 78.1% less bond credit

Status: construction not scheduled

Northern station

Location: 64th and Winchester

Land: .75 acres to be dedicated by Fulenwider and repaid through the GRMD at same rate as subdivision in-lieu payments

Improvements: 3-bay station with living area and regional road cost contribution for 64th

Equipment: pumper, aerial ladder truck, and chief's car

Estimated cost: \$6,353,500; Gateway share 100% less bond credit

Status: construction not scheduled

Parks and Trails

Parkfield Park

Location: near the southeast corner of Chambers and 56th

Land: 90 acres; dedication required by PUD

Improvements: rough grading, fine grading, seeding, irrigation, 1-mile concrete trail, 4 tennis courts, 3 softball backstops, playground, san-o-let enclosure, 50 trees, drinking fountain, 3 trash containers, 6 6-foot benches, 12-acre lake (regional detention for Irondale Gulch)

Estimate cost: \$5,635,928; Gateway share 44.4% less bond credit

Status: construction not scheduled; new Montbello Recreation Center to be incorporated into park

Town Center Park

Location: Green Valley Ranch north of 48th and east of Tower

Land: 26-45 acres; dedication required by annexation agreement, subdivision

Improvements: rough grading, fine grading, seeding, irrigation, 1-mile concrete trail, 4 tennis courts, 3 softball backstops, playground, san-o-let enclosure, 50 trees, drinking fountain, 3 trash containers, 6 6-foot benches

Estimated cost: \$4,496,829; Gateway share 44.4% bond credit

Status: construction not scheduled; new GVR Recreation Center to be incorporated into park

Trails

Location: along Highline Canal, 1st Creek, and 2nd Creek

Land: open space dedication required by subdivision

Improvements: 8 miles of 10-foot wide concrete trail with 2 foot shoulders; road bridges used for underpasses, some sections located adjacent to street right of way

Estimated cost: \$2,457,200; Gateway share 100% less bond credit

Status: Some trail construction being scheduled with phased development of parcels

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Roads (Regional Share)

Tower Road

Improvements: 6-lane parkway; regional portion 2 lanes and 18-foot-side median

Special considerations: north of 56th constructed by city with reimbursement and deferral as per IGA with the GRMD; south of 48th only portions of the road are entirely within the Gateway or Denver

Estimate cost: \$15,634,943; Gateway share, median less bond credit

Status: segment north of 56th completed, GRMD to install landscaping in median and future lanes 1 and 2

64th Avenue

Improvements: east of Tower, 4-lane arterial, no regional improvements; west of Tower 6-lane parkway, regional portion 2-lanes and 18-foot wide median

Special considerations: the regional portion of 64th west of Tower should be deferred and the cost incorporated into a future interchange for 64th and Pena; entirely within GRMD

Estimated cost: \$4,826,220; Gateway share median less bond credit

Status: no construction planned

56th Avenue

Improvements: 6-lane parkway; regional portion 2 lanes and 18-foot-side median, full road in Pena ROW, north half of road along Rocky Mountain Wildlife Refuge, and south ½ of median and one lane Dunkirk to Picadilly

Special considerations: east side of Pena to Tower constructed by city with reimbursement and deferral as per IGA with GRMD, and lane 1 and 2, and medians to be constructed by GRMD from Pena to Tower Road

Estimated cost: \$16,796,476; Gateway share, median less bond credit

Status: Four lane segment between Tower and Pena completed; GRMD to install landscaping in median; no construction on remainder to road planned, two additional lanes is a District cost in the future.

48th Avenue

Improvements: Chambers to Pena, 4-lane parkway with median; Pena Blvd ROW, 6-lane parkway with median; Pena to Tower, 6-lane parkway with median; Tower to Picadilly, 4-lane parkway with median

Special considerations: regional trail to be located adjacent to street right of way in some locations

Estimated cost: \$10,173,520; Gateway share median less bond credit

Status: two lane constructed

40th Avenue

Improvements: 4-lane parkway from Chambers to city limits; regional portion north ½ median except at Chambers, full median

Estimated cost: \$841,080; Gateway share median less bond credit

Status: already constructed from Chambers to Pena

Picadilly

Improvements: 6-lane parkway from 48th to 56th with west half in Denver; regional portion one lane and ½ median

Special considerations: coordinate design with Aurora

Estimated cost: \$1,917,250; Gateway share, ½ median less bond credit

Status: no construction planned

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Himalaya

Improvements: 4-lane parkway; regional portion median

Special considerations: regional trail to be located adjacent to street right-of-way in some locations

Estimated cost: \$1,780,303; Gateway share median less bond credit

Status: no construction planned

Biscay/Winchester bike lanes

Improvements: 5-foot bike lanes on either side of collector streets parallel to Tower; regional portion additional pavement

Special considerations: consider constructing as part of local street with reimbursement to adjacent developer

Estimated cost: \$2,530,770 for each street; 100% Gateway share less bond credit

Status: no construction planned

Chambers

Improvements: 4-lane parkway

Special considerations: funded with federal dollars; no cost to Gateway

Traffic signals

Improvements: signals at arterial-arterial or arterial-collector intersections; a total of 22 traffic signals; 100% regional cost

Special considerations: where intersection is partially in Gateway only that portion is assigned to Gateway share

Estimated cost: \$6,676,137; 12 signals at 100%, 3 at 75%, 4 at 50%, 3 at 25%

Status: Signals at Tower-56th, 56th-Chambers, 56th-Pena ramps, 48th-Chambers, 40th-Chambers already installed

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Regional Stormwater Drainage

Irondale Gulch

Parkfield Lake

Location: east of Chambers Road between 53rd Avenue and Maxwell Place

Improvement: regional detention facility and outflow structure

Special considerations: located in the interior of developing Parkfield Lake Park

Estimated cost: \$262,000; Gateway share 73% less bond credit

Status: existing regional detention facility

Chambers I

Location: Chambers Road and 48th Avenue

Improvement: regional detention facility and outflow structure

Estimated cost: \$1,093,850; Gateway share 73% less bond credit

Status: no construction schedule

Chambers II

Location: NE of Chambers Road and 46th Avenue intersection

Improvement: regional detention facility and outflow structure

Estimated cost: \$131,000; Gateway share 73% less bond credit

Status: completed and existing regional detention facility

Highline

Location: Pena Boulevard and 53rd Avenue

Improvement: regional detention facility and outflow structure

Estimated cost: \$524,000; Gateway share 73% less bond credit

Status: no construction scheduled; some initial grading performed as part of Pena Boulevard construction

Silverado I

Location: Pena Boulevard and 48th Avenue

Improvement: regional detention facility and outflow structure

Estimated cost: \$419,200; Gateway share 73% less bond credit

Status: no construction scheduled; some initial grading performed as part of Pena Boulevard construction

Silverado II

Location: Pena Boulevard and 46th Avenue

Improvement: regional detention facility and outflow structure

Special considerations: detention pond is located on both sides of Pena Boulevard

Estimated cost: \$222,700; Gateway share 73% less bond credit

Status: no construction scheduled; some initial grading performed as part of Pena Boulevard construction

Parkfield II

Location: NW of Chambers Road and 56th Avenue intersection, inside Rocky Mountain Arsenal

Improvement: regional detention facility

Special considerations:

Estimated cost: \$736,220; Gateway share 73% less bond credit

Status: no construction scheduled

Rod and Gun

Location: North of Uvalda Street and 56th Avenue intersection, and inside the Rocky Mountain Arsenal

Improvement: Diversion structure, replaces the Randolph Channel which is no longer needed

Estimated cost: \$267,240; Gateway share 73% less bond credit

Special considerations:

Status: no construction scheduled

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Box Culvert

Location: under 56th near Chambers

Improvement: conduit from Parkfield Lake across 56th Avenue and into Parkfield II pond

Estimated cost: \$869,840; Gateway share 73% less bond credit

Special considerations: construction is a part of the Chambers Road project

Status: presently under construction

First Creek

Pond #305

Location: Pena Boulevard north of 56th Avenue

Improvement: regional detention facility and outflow structure

Special considerations: IGA assigns cost allocation among metro district, Denver, and Aurora

Estimated cost: \$1,175,208; Gateway share 83% less bond credit

Status: partially constructed

Pond #808

Location: Himalaya Street north of 48th Avenue

Improvement: regional detention facility and outflow structure

Special considerations: IGA assigns cost allocation among metro district, Denver, and Aurora

Estimated cost: \$318,486; Gateway share 83% less bond credit

Status: construction to proceed with development of golf course

Note: remaining ponds in First Creek and both ponds in Second Creek are subregional improvements that are the responsibility of the GRMD.

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Impact Fee Regional Improvement Projects-2007 Adjustment Section 50-57. Impact Fee Formulas (by Subarea and Type of Facility).

(1) Fire impact fee per unit

<u>Development type</u>		<u>Fee Per unit</u>
Single family house	\$	140.17 Per du
Multifamily dwellings	\$	258.07 Per du
Retail building	\$	108.73 Per 1000 SF
Hotel building	\$	381.21 Per 1000 SF
Office building	\$	104.80 Per 1000 SF
Other commercial	\$	106.11 Per 1000 SF

(all figures in year 2007 dollars)

(2) Parks and trails impact fee per unit

<u>Development type</u>		<u>Fee Per unit</u>
Single family house	\$	489.94 per du
Multifamily dwellings (8-18 du/acre)	\$	408.72 per du
Multifamily dwellings (over 18 du/acre)	\$	327.50 per du
Nonresidential building	\$	527.93 per acre

(all figures in year 2007 dollars)

(3) Road impact fee per unit

<u>Development type</u>	Subarea 1	Subarea 2	Subarea 3
	<u>Fee</u>	<u>Fee</u>	<u>Fee Per unit</u>
Single family house	\$ 954.60	\$ 1,011.36	612.32 per du
Multifamily dwellings (8-18 du/acre)	466.12	493.64	297.56 per du
Multifamily dwellings (19+ du/acre)	421.40	421.40	270.04 per du
Retail building	1.63	1.74	1.05 Per SF
Hotel building	1.63	1.74	1.05 Per SF
Office building	1.63	1.74	1.05 Per SF
Other commercial	1.63	1.74	1.05 Per SF

(all figures in year 2007 dollars)

(4) Drainage impact fee per unit

<u>Development Type</u>	Irondale Gulch	1 st Creek	2 nd Creek
	<u>Fee</u>	<u>Fee</u>	<u>Fee per unit</u>
Single family house	\$ 513.52	\$ 146.72	N/a per du
Multifamily dwellings (8-18 du/ac)	230.56	65.50	N/a per du
Multifamily dwellings (19+ du/ac)	104.80	28.82	N/a per du
Retail building	3,851.12	1,115.70	5,727.90 per impervious acre
Hotel building	3,851.12	1,115.70	5,727.90 per impervious acre
Office building	3,851.12	1,115.70	5,727.90 per impervious acre
Other commercial	3,851.12	1,115.70	5,727.90 per impervious acre

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