# REQUEST FOR COUNCIL ACTION

Date: 4/12/10 Item No.: 10.b

Department Approval

City Manager Approval

Item Description:

"Infrastructure Improvements for the Twin Lakes AUAR Area- Final Report"

Update

#### BACKGROUND

On February 25, 2008, the City Council adopted the "Infrastructure Improvements for the Twin Lakes"

3 AUAR Area- Final Report". The purpose of the document was to develop proportionate cost share for

4 individual properties within the Twin Lakes area for the public infrastructure needed to support the

redevelopment. The Council approved an update of this report on December 15, 2008. The attached

6 map and table show the 17 roadway infrastructure improvements that were identified as mitigation

measures in the AUAR that made up the network of public improvements.

8 In summary, the report developed overall cost estimates for the public infrastructure improvements.

9 We then estimated the traffic generation from each land use proposed as a part of AUAR Scenarios B&

10 C, and routed the PM peak hour trips through the network. This established a total number of network

trips for the planned build out of the Twin Lakes AUAR area. Using the total cost and total network

trips, the report established a cost allocation rate per network trip for each type of use; Residential,

13 Commercial- office and Commercial- retail.

The cost per network trip is a function of the total network trips contributed and subsequent cost

allocation of specific development types. As development proposals come forward, their respective

land uses are reviewed against the assumptions contained in the study in order to determine that the

specific cost per network trip value and associated cost allocation amount is appropriate for the

18 proposed use.

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The City Council has requested that staff review the study on an annual basis in order to ensure that the

cost allocation rates assigned to redevelopment are consistent with the real costs to construct the public

improvements. In 2009, the first phase of public infrastructure construction was completed. We have

determined that the cost allocation rate per network trip will need to be adjusted to ensure that the real

costs for these improvements are recovered.

The original cost estimates were created using the best information available at that time. They did not

include environmental costs including soil engineering, remediation plan development, and clean up

costs. They also did not include building demolition costs or actual appraised right-of-way value.

27 Finally, they assumed that the individual projects would be constructed under one construction contract,

achieving lower unit pricing. Upon review of actual costs for the construction of the first phase of the

public infrastructure construction, we are recommending that we update the cost allocation rates to

reflect the real costs for these public improvements.

### POLICY OBJECTIVE

The intent of the Infrastructure Study was to allocate public improvement costs related to

- redevelopment in the Twin Lakes area. We have incorporated the actual Twin Lakes Infrastructure
- Phase I costs and distributed them consistent with the original report.

#### 35 FINANCIAL IMPACTS

- The "Infrastructure Improvements for the Twin Lakes AUAR Area- Final Report" estimates each
- parcel's obligation for its share of costs for the infrastructure. In the long term, developers will
- contribute towards the cost of the improvements when their property redevelops. The allocation will be
- incorporated into development agreements, with contributions calculated according to the cost
- allocation formulas described in the report.

#### 41 STAFF RECOMMENDATION

- Staff would like to present information regarding the proposed Amendment to the "Infrastructure"
- Improvements for the Twin Lakes AUAR Area- Final Report" and receive feedback from the City
- Council. This information will be presented at a public meeting later this month, and brought back to
- the City Council on April 26 for action.

## 16 REQUESTED COUNCIL ACTION

- Discuss the Amendment to the "Infrastructure Improvements for the Twin Lakes AUAR Area- Final
- 48 Report".

#### Prepared by: Debra Bloom, City Engineer

Attachments: A: Infrastructure Improvement Location Map

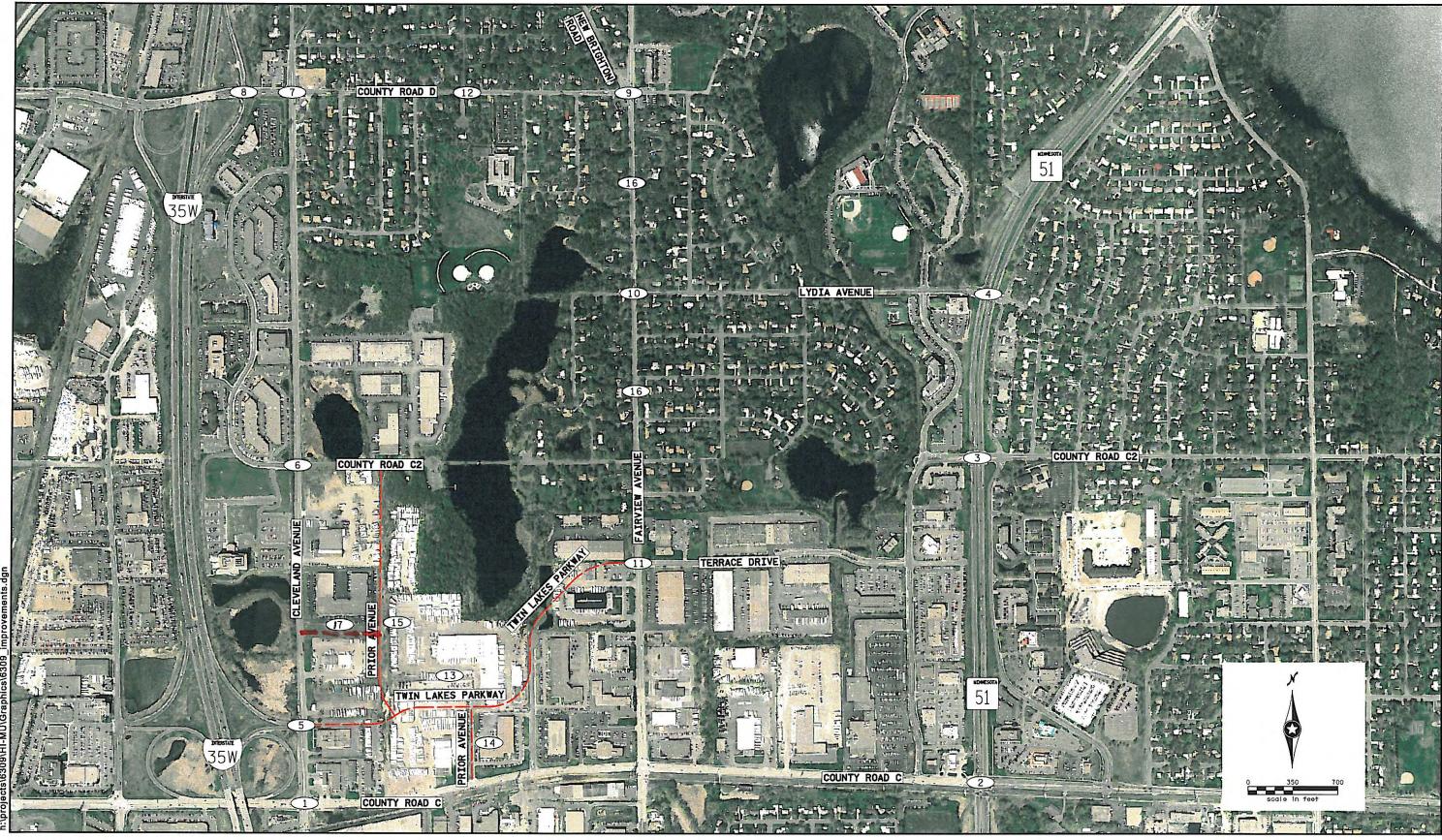
B: Twin Lakes AUAR Boundary Map

C: Figure 19- 2008

D: Revised Figure 19

E: Figure 21- 2008

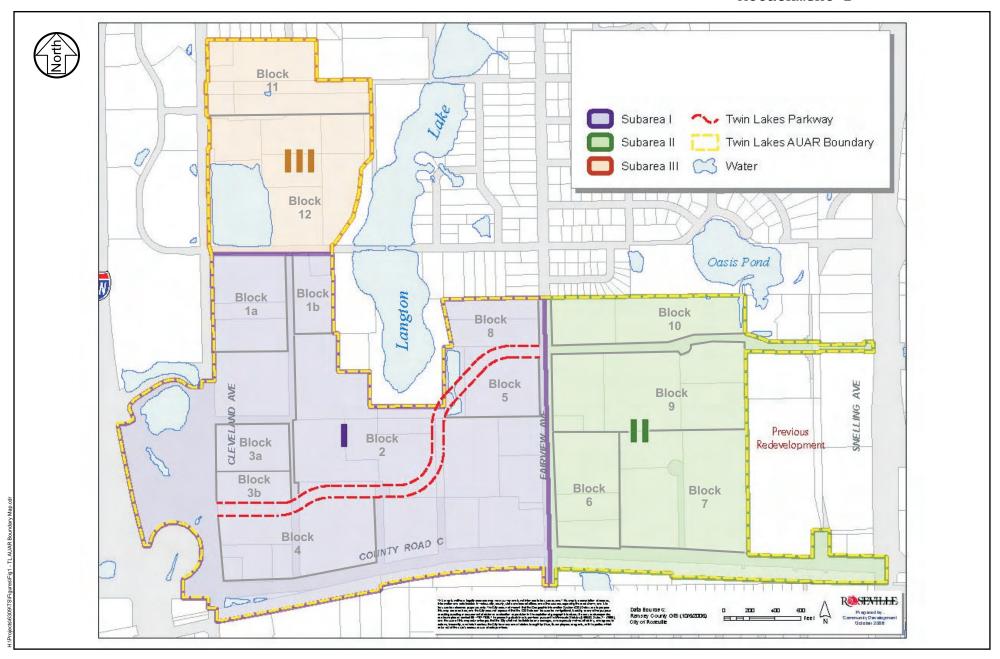
F: Revised Figure 21





# **INFRASTRUCTURE IMPROVEMENT LOCATIONS**

Twin Lakes Infrastructure Improvements City of Roseville





# TWIN LAKES AUAR BOUNDARY MAP

Twin Lakes Infrastructure Improvements City of Roseville

Figure 1

Figure 19 2030 Weekday PM Peak Hour - Cost Allocation per Network Trip based on proposed Use

Nov-08

Sub Area	Block	Proposed Land Use	SCEN	AVERAGE COST PER NETWORK TRIP BASED ON LAND USE AND LOCATION			
			Network Trips	Total Cost Allocation			
	10	Commercial - Office	2050	\$2,445,728	\$1,193		
	1a	Residential	136	\$176,531	\$1,298		
	1b	Commercial - Office	823	\$991,030	\$1,204		
		Commercial - Office	2114	\$3,137,459	\$1,484		
	2	Residential	80	\$134,919	\$1,692		
	0 - 0'	Commercial - Retail	418	\$550,152	\$1,316		
ı	3a, 3b	Transit	1052	\$1,597,921	\$1,519		
	4	Commercial - Retail	2036	\$3,155,774	\$1,550		
	4	Commercial - Office	321	\$495,598	\$1,545		
	5	Commercial - Office	395	\$712,948	\$1,805		
	_	Commercial - Office	105	\$197,771	\$1,880		
	8	Residential	63	\$121,136	\$1,932		
	6	Commercial - Office	77	\$101,100	\$1,313		
		Commercial - Office	68	\$87,309	\$1,284		
Ш	7	Commercial - Retail	1146	\$1,463,185	\$1,277		
	9	Commercial - Office	642	\$839,879	\$1,308		
	10	Residential	424	\$648,635	\$1,530		
					+ 1,500		
	11	Residential - Already approved	N/A	N/A	N/A		
Ш		Commercial - Office	1057	\$1,156,620	\$1,094		
	12	Residential	205	\$218,534	\$1,066		
N/A	N/A	Year 2030 Background Traffic	18,520	\$4,958,341	\$268		
N/A	N/A	Northwestern College	408	\$191,469	\$469		
		Total	32139	\$23,382,039			



Sub Area	Block	Proposed Land Use	SCEN	ARIO C	AVERAGE COST PER NETWORK TRIP BASED ON LAND USE AND			
			Network Trips	Total Cost Allocation				
	1a	Commercial - Office	2050	\$2,850,070	\$1,390			
	- i u	Residential	136	\$207,479	\$1,526			
	1b	Commercial - Office	823	\$1,154,658	\$1,403			
	2	Commercial - Office	2114	\$3,743,377	\$1,770			
		Residential	80	\$162,473	\$2,038			
	3a,	Commercial - Retail	418	\$635,009	\$1,519			
	3b	Transit	1052	\$1,597,921	\$1,519			
	4	Commercial - Retail	2036	\$3,655,111	\$1,796			
	4	Commercial - Office	321	\$573,746	\$1,789			
	5	Commercial - Office	395	\$844,887	\$2,139			
	8	Commercial - Office	105	\$236,338	\$2,247			
	0	Residential	63	\$143,464	\$2,288			
	6	Commercial - Office	77	\$109,220	\$1,418			
	7	Commercial - Office	68	\$94,413	\$1,388			
	′	Commercial - Retail	1146	\$1,470,289	\$1,283			
	9	Commercial - Office	642	\$908,894	\$1,416			
	10	Residential	424	\$702,342	\$1,656			
	11	Residential - Already approved	N/A	N/A	N/A			
Ш	40	Commercial - Office	1057	\$1,192,809	\$1,128			
	12	Residential	205	\$224,773	\$1,096			
N/A	N/A	Year 2030 Background Traffic	18,520	\$4,958,341	\$268			
N/A	N/A	Northwestern College	408	\$191,469	\$469			
		Total	32139	\$25,657,084				



ub Area	Block	PM Peak Hour - Land Use Breakdov  Land Use Type (ITE Land-Use Code)	Land Use Size	Improvement Location	County Road C and Clev eland Av enue	County Road C and Snelling Av enue	Snelling Avenue and County Road C2	Snelling Avenue and Lydia Avenue	Clev eland Av enue and I-35W Northbound Ramps	Clev eland Av enue and County Road C2	Clev eland Av enue and County Road D	County Road D and I-35W Northbound Ramps	County Road D and Fairview Avenue	Fairview Avenue and Lydia Avenue	Fairview Avenue and Terrace Drive	County Road D (Three-Lane Section)	Twin Lakes Parkway	Prior Avenue (South of Twin Lakes Parkway)	Prior Avenue (North of Twin Lakes Parkway)	Fairview Avenue (Three-Lane Section)	Iona Lane	November-
				Improvement #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
				Improvement Costs	\$476,580	\$1,276,700	\$742,350	\$623,750	\$1,974,700	\$519,900	\$1,366,600	\$584,850	\$1,443,450	\$639,850	\$1,941,200	\$1,747,850	\$6,375,034	\$669,600	\$987,600	\$1,585,950	\$426,075	\$23,382,039
		Medical Office (720)	140,000 sq. ft.	% Trips at Intersection	16.6% 157	1.9% 134	1.5% 80	1.3% 78	16.2% 208	23.6% 194	17.0% 130	16.3% 94	6.2% 31	0.0%	4.2% 40	2.4%	13.7% 299	20.1%	33.7% 433	0.0%	0.0%	6.4% 2.050
	1a	. , ,		Cost per Development	\$79,262	\$24,545	\$11,058	\$8,354	\$320,293	\$122,444	\$232,233	\$95,607	\$89,457	\$0	\$81,137	\$42,553	\$871,177	\$134,304	\$333,305	\$0	\$0	\$2,445,728
		Multi-Family Housing (220)	70 Units	% Trips at Intersection Trips	1.0%	0.1%	0.0%	0.0%	1.4%	1.3%	9	1.0%	0.4%	0.0%	0.2%	0.2%	1.0%	1.3%	2.9%	0.0%	0.0%	0.4%
				Cost per Development % Trips at Intersection	\$4,544	\$1,099	0.4%	\$107 0.4%	\$27,718	9.8%	\$16,078 8.6%	9.4%	\$5,687	0.6%	\$4,057 1.7%	\$2,705	\$64,100 5.3%	9.9%	\$28,481	0.2%	1.4%	\$176,531
	1b	Hi-Tech Office (710)	140,000 sq. ft.	Trips Cost per Development	52 \$26,252	43 \$7,876	24 \$3,317	25 \$2,680	47 \$72,374	81 \$51.123	66 \$117,903	54 \$54,923	14 \$39,809	4 \$3.948	16 \$32,455	10 \$13,526	116 \$337.982	69 \$66,193	197 \$151,642	4 \$3,268	1 \$5,758	823 \$991,030
				% Trips at Intersection	8.6%	0.8%	0.7%	0.7%	8.2%	7.0%	7.8%	8.9%	3.7%	2.2%	4.5%	0.4%	11.1%	13.8%	23.8%	0.7%	18.9%	3.9%
		General Office (710)	215,000 sq. ft.	Trips Cost per Development	81 \$40,893	58 \$10,624	39 \$5,391	38 \$4,073	105 \$161,686	58 \$36,607	60 \$107,184	51 \$51,872	19 \$54,027	14 \$13,818	43 \$87,222	5 \$6,763	243 \$708,013	96 \$92,094	305 \$234,776	14 \$11,438	14 \$80,609	1,243 \$1,707,091
	2	Medical Office (720)	80,000 sq. ft.	% Trips at Intersection Trips	8.3% 78	0.7% 52	0.7% 37	0.6% 36	6.6% 85	2.3% 19	2.6% 20	3.0% 17	3.5% 18	2.8% 18	8.5% 81	0.0%	12.9% 283	15.0% 105	0.3%	0.9% 18	0.0% 0	2.7% 871
				Cost per Development	\$39,378 0.6%	\$9,525 0.1%	\$5,114	\$3,859 0.1%	\$130,889 0.7%	\$11,992	\$35,728	\$17,291 0.4%	\$51,183 0.4%	\$17,766 0.3%	\$164,302 0.7%	\$0	\$824,559	\$100,728 1.1%	\$3,348	\$14,705 0.0%	\$0 0.0%	\$1,430,368
		Multi-Family Housing (220)	45 Units	% Trips at Intersection Trips Continuous Development	6	5	0.1%	3	9	0.3%	0.3%	2	2	2	7	0	1.2% 27	8	0.1%	0.0%	0.0%	0.2% 80
_ <b> </b>				Cost per Development % Trips at Intersection	\$3,029	\$916 1.4%	0.3%	0.9%	\$13,859 4.8%	\$1,723 5.9%	\$3,573 6.4%	\$2,380	\$5,687 1.0%	\$1,974 6.6%	\$14,199 4.6%	0.0%	\$78,668 8.9%	\$7,674 14.3%	\$500 15.6%	2.2%	77.0%	\$134,919
	o	Park and Ride	460 spaces	Trips Cost per Development	21 \$10,602	97 \$17,768	14 \$1,935	52 \$5,574	61 \$93,932	49 \$30,927	49 \$87,534	22 \$22,376	5 \$14,218	43 \$42,441	44 \$89,251	0 \$0	195 \$568,159	100 \$95,931	200 \$153,952	43 \$35,130	57 \$328,193	1,052 \$1,597,921
;	3a, 3b	Hotel/Restaurant (310, 932)	120 Rooms	% Trips at Intersection	4.9%	0.4%	0.1%	0.2%	6.6%	1.7%	1.8%	2.4%	1.4%	1.9%	1.0%	0.0%	3.1%	2.7%	5.3%	0.6%	2.7%	1.3%
		Thotel/Hesiauran (510, 932)	5,000 sq. ft.	Cost per Development	\$23,223	\$4,946	\$1,106	\$1,393	\$129,349	\$8,836	\$25,010	\$14,239	\$19,905	\$11,844	\$20,284	\$0	\$198,127	\$18,227	\$52,344	\$9,804	\$11,516	\$550,152
		Service Mix - Retail (820)	175,000 sq. ft.	% Trips at Intersection Trips	16.2% 153	1.9% 131	1.7% 92	1.1% 66	19.8% 254	13.3% 110	14.2% 109	15.6% 90	20.7% 105	16.2% 105	14.8% 142	0.0%	22.5% 492	11.6% 81	0.0%	5.4% 105	0.0% 0	6.3% 2,036
	4			Cost per Development	\$77,242 3.1%	\$24,064 0.3%	\$12,717 0.3%	\$7,087 0.2%	\$391,127 2.6%	\$69,187 2.0%	\$194,718	\$91,142	\$299,336 3.3%	\$103,903 2.6%	\$288,036 2.6%	\$0	\$1,433,509 3.5%	\$77,704 2.3%	\$0	\$86,002 0.9%	\$0 0.0%	\$3,155,774 1.0%
		General Office (710)	70,000 sq. ft	% Trips at Intersection Trips Cost per Development	29 \$14,641	18 \$3,297	14 \$1,923	11 \$1,179	33 \$50,816	16 \$10,338	2.2% 17 \$30,369	2.3% 13 \$13,619	17 \$48,340	17 \$16,779	25 \$50,711	0.0%	77 \$224,350	16 \$15,349	0.0%	17 \$13,888	0.0%	321 \$495,598
				% Trips at Intersection	1.8%	0.3%	0.3%	0.3%	2.4%	0.5%	0.9%	1.0%	2.4%	2.5%	8.6%	0.2%	5.9%	2.3%	0.0%	0.8%	0.0%	1.2%
	5	General Office (710) 105,000 sq. ft.	Trips Cost per Development	17 \$8,582	22 \$4,030	14 \$1,935	19 \$2,037	31 \$47,736	4 \$2,525	7 \$12,505	6 \$6,103	12 \$34,122	16 \$15,792	82 \$166,331	3 \$4,058	130 \$378,773	16 \$15,349	0 \$0	16 \$13,071	0 \$0	395 \$712,948	
			% Trips at Intersection	0.8%	0.1%	0.0%	0.0%	0.5%	0.1%	0.4%	0.5%	0.6%	0.5%	2.0%	0.1%	1.7%	1.1%	0.0%	0.2%	0.0%	0.3%	
	8	General Office (710)	40,000 sq. ft.	Trips  Cost per Development	\$4,039	4 \$733	2 \$276	1 \$124	6 \$9,824	\$732	3 \$5,181	3 \$3,051	3 \$8,246	3 \$3,435	19 \$38,540	\$2 \$2,354	38 \$110,718	8 \$7,674	0 \$0	3 \$2,843	0 \$0	105 \$197,771
	· ·	Multi-Family Housing (220)	70 Units	% Trips at Intersection Trips	0.2%	0.0%	0.0%	0.0%	0.5%	0.1%	0.3%	0.3%	0.6%	0.4%	1.1%	0.2%	1.0%	0.3%	0.0%	0.1%	0.0%	0.2% 63
				Cost per Development	\$1,010	\$462	\$232	\$90	\$9,239	\$530	\$3,751	\$1,709	\$8,531	\$2,487	\$22,313	\$2,705	\$64,100	\$1,919	\$0	\$2,059	\$0	\$121,136
				% Trips at Intersection	0.3%	0.2%	0.1%	0.1%	0.7%	0.0%	0.3%	0.2%	1.0%	0.8%	1.5%	0.2%	0.4%	0.0%	0.0%	0.3%	0.0%	0.2%
	6	Hi-Tech Office (710)	105,000 sq. ft.	Trips Cost per Development	3 \$1,515	11 \$2,015	6 \$829	6 \$643	9 \$13,859	0 \$0	2 \$3,573	1 \$1,017	5 \$14,218	5 \$4,935	14 \$28,398	2 \$2,705	8 \$23,309	0 \$0	0 \$0	5 \$4,085	0 \$0	77 \$101,100
_		Hi-Tech Office (710)	100,000 sq. ft.	% Trips at Intersection	0.2%	0.2%	0.1%	0.1%	0.9%	0.0%	0.4%	0.3%	0.6%	0.5%	1.0%	0.2%	0.3%	0.0%	0.0%	0.2%	0.0%	0.2%
	7	ni-lecti Olice (710)	100,000 Sq. 1t.	Cost per Development	\$1,010	12 \$2,198	\$553	\$536	11 \$16,939	\$0	3 \$5,359	\$2,034	\$8,531	\$2,961	10 \$20,284	\$4,058	\$20,395	\$0 \$0	\$0	\$2,451	\$0	68 \$87,309
		Service Mix - Retail (820)	135,000 sq. ft.	% Trips at Intersection Trips	4.3%	1.5% 104	1.4% 74	0.9% 51	1.4%	0.2%	10.6% 81	12.2% 70	30.1% 153	23.6% 153	16.7% 160	6.1% 79	0.3% 7	0.0%	0.0%	7.9% 153	0.0%	3.6% 1,146
II				Cost per Development  % Trips at Intersection	\$20,699	\$19,050	\$10,229	\$5,467 0.5%	\$27,718	\$1,262 0.3%	\$144,699	\$71,197	\$435,057 4.6%	\$151,013	9.0%	\$106,857	\$20,395	0.0%	0.0%	\$124,996	0.0%	\$1,463,185
		Hi-Tech Office (710)	215,000 sq. ft.	Trips Cost per Development	31 \$15,792	60 \$10,961	31 \$4,230	31 \$3,280	46 \$71,204	3 \$1,717	13	12 \$11,758	23 \$65,742	22 \$22,149	86 \$173,795	10 \$13,797	46 \$134,726	0 \$0	0 \$0	23	0	437 \$571,118
	9	General Office (710)	95,000 sq. ft.	% Trips at Intersection	1.6%	0.4%	0.3%	0.2%	1.7%	0.2%	0.8%	0.9%	2.1%	1.6%	4.2%	0.4%	1.0%	0.0%	0.0%	0.6%	0.0%	0.6%
		General Office (710)	95,000 Sq. It.	Cost per Development	15 \$7,431	28 \$5,158	14 \$1,990	14 \$1,544	\$33,508	\$808	6 \$10,861	5 \$5,533	11 \$30,937	11 \$10,423	40 \$81,786	5 \$6,493	\$63,401	\$0	\$0	11 \$8,889	\$0	205 \$268,761
	10	Multi-Family Housing (220)	295 Units	% Trips at Intersection Trips	3.1% 29	0.5% 38	0.1% 8	0.1% 6	2.7% 35	0.6% 5	2.7% 21	3.1% 18	4.5% 23	3.5% 23	11.0% 105	1.2% 15	2.4% 52	2.1% 15	0.3%	1.4% 27	0.0% 0	1.3% 424
				Cost per Development	\$14,641	\$6,961	\$1,106	\$643	\$53,895	\$3,156	\$37,515	\$18,308	\$65,401	\$22,701	\$212,984	\$20,289	\$151,509	\$14,390	\$3,079	\$22,058	\$0	\$648,635
				% Trips at Intersection																		
	11	Multi-Family Housing (220)	125 Units	Trips Cost per Development																		
		Conoral Office (740)	005 000 7	% Trips at Intersection	14.2%	0.9%	0.3%	0.8%	11.5%	24.0%	17.3%	14.1%	9.1%	4.3%	1.9%	3.6%	1.3%	1.6%	2.3%	1.4%	0.0%	3.3%
	12	General Office (710)	285,000 sq. ft.	Trips Cost per Development	134 \$67,650	64 \$11,723	18 \$2,488	46 \$4,931	148 \$227,901	198 \$124,968	132 \$235,805	81 \$82,385	46 \$130,801	28 \$27,636	18 \$36,512	47 \$63,573	29 \$84,495	\$10,552	29 \$22,323	28 \$22,875	\$0 \$0	1,057 \$1,156,620
		Multi-Family Housing (220)	130 Units	% Trips at Intersection Trips	3.2%	0.1%	0.1%	0.1%	3.6% 46	6.6% 54	2.5% 19	2.1% 12	1.0% 5	0.3%	0.2%	0.4%	0.2%	0.4%	0.4%	0.1%	0.0%	0.6% 205
				Cost per Development	\$15,146	\$1,649	\$415	\$322	\$70,834	\$34,082	\$33,942	\$12,205	\$14,218	\$1,974	\$4,057	\$6,763	\$14,568	\$2,878	\$3,849	\$1,634	\$0	\$218,534
				% Trips at Intersection	0.0%	86.7%	88.8%	89.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	82.9%	0.0%	0.0%	0.0%	74.9%	0.0%	57.6%
N/A	N/A	Year 2030 Background Traffic	N/A	Trips Cost per Development	0 \$0	6044 \$1,107,101	4771 \$659,472	5180 \$555,249	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	1071 \$1,448,651	0 \$0	0 \$0	0 \$0	1454 \$1,187,867	0 \$0	18,520 \$4,958,341
N/A	N/A	Northwestern College	N/A	% Trips at Intersection Trips			2.1% 111	2.3% 133						25.3% 164								1.3% 408
				Cost per Development			\$15,343	\$14,256						\$161,870								\$191,469
		TOTAL		% Trips Trips	100% 944	100% 6970	100% 5371	100% 5819	100% 1282	100% 824	100% 765	100% 575	100% 508	100% 648	100% 957	100% 1292	100% 2188	100% 698	100% 1283	100% 1941	100% 74	100% 32139
				Cost per Dev elopment	\$476,580	\$1,276,700	\$742,350	\$623,750	\$1,974,700	\$519,900	\$1,366,600	\$584,850	\$1,443,450	\$639,850	\$1,941,200	\$1,747,850	\$6,375,034	\$669,600	\$987,600	\$1,585,950	\$426,075	\$23,382,039



- The costs associated with the two roundabouts along Twin Lakes Parkway are included in the Twin Lakes Parkway Cost
- The developments included in this scenario include all known developments as of August 2008. Parcels undeveloped were assumed to include developments identified for Scenario C. Any information regarding driveway locations or access that was received after February 2008 is included in this analysis.
- Background traffic was removed from specific improvements at the request of City Staff.

Indicates an improvement at the intersection

Indicates a segment of roadway that is being improved

2030 \	Neeko	day PM Peak Hour - Land Use B	reakdown - l	Jpdated Cost Allo	ocation																	March-10
Sub Area	Block	Land Use Type (ITE Land-Use Code)	Land Use Size	Improvement Location	CountyRoad C	CountyRoad C	Snelling Avenue and CountyRoad	Snelling Avenue	Cleveland Avenue and I-35W	Cleveland Avenue	Cleveland Avenue and County Road	CountyRoad D and I-35W	CountyRoad D and Fairview	Fairview Avenue	Fairview Avenue	CountyRoad D (Three-Lane	Twin Lakes Parkway	Prior Avenue (South of Twin	Prior Avenue (North of Twin	Fairview Avenue (Three-Lane	lona Lane	TOTAL
					Avenue	Avenue	C2	and Lydia Avenue	Northbound Ramps	C2	D	Northbound Ramps	Avenue	and Lydia Avenue	and Terrace Drive	Section)		Lakes Parkway)	Lakes Parkway)	Section)	10114	
				Improvement #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
				tal Cost of improvements ost remaining to Allocate		\$1,276,700 \$1,276,700	\$742,350 \$742,350	\$623,750 \$623,750	\$1,974,700 \$1,974,700	\$519,900 \$519,900	\$1,366,600 \$1,366,600	\$584,850 \$584,850	\$1,443,450 \$1,443,450	\$639,850 \$639,850	\$1,941,200 \$1,941,200	\$1,747,850 \$1,747,850	\$8,397,756 \$7,829,597	\$669,600 \$669,600	\$1,239,923 \$1,085,972	\$1,585,950 \$1,585,950	\$426,075 \$97,882	\$25,657,084 <b>\$24,606,781</b>
		Medical Office (720)	140,000 sq. ft.	% Trips at Intersection Trips	16.6% 157	1.9% 134	1.5% 80	1.3% 78	16.2% 208	23.6% 194	17.0% 130	16.3% 94	6.2% 31	0.0%	4.2% 40	2.4% 31	15.0% 299	20.1% 140	40.0% 433	0.0% 0	0.0%	6.4% 2,050
	1a			Cost per Development % Trips at Intersection	\$79,262 1.0%	\$24,545 0.1%	\$11,058	\$8,354 0.0%	\$320,293 1.4%	\$122,444 1.3%	\$232,233 1.2%	\$95,607	\$89,457 0.4%	\$0 0.0%	\$81,137 0.2%	\$42,553 0.2%	\$1,174,636 1.1%	\$134,304 1.3%	\$434,188 3.4%	\$0 0.0%	0.0%	\$2,850,070 0.4%
		Multi-FamilyHousing (220)	70 Units	Trips Cost per Development	9 \$4,544	6 \$1,099	2 \$276	1 \$107	18 \$27,718	11 \$6,943	9 \$16,078	6 \$6,103	2 \$5,687	0 \$0	2 \$4,057	2 \$2,705	22 \$86,428	9 \$8,634	37 \$37,102	0 \$0	0 \$0	136 \$207,479
	41-	Ui Took Office (740)	440,000 on 64	% Trips at Intersection	5.5%	0.6%	0.4%	0.4%	3.7%	9.8%	8.6%	9.4%	2.8%	0.6%	1.7%	0.8%	5.8%	9.9%	18.2%	0.2%	5.9%	2.6%
	1b	Hi-Tech Office (710)	140,000 sq. ft.	Cost per Development	52 \$26,252	43 \$7,876	\$3,317	25 \$2,680	47 \$72,374	\$1 \$51,123	66 \$117,903	54 \$54,923	14 \$39,809	\$3,948	16 \$32,455	10 \$13,526	116 \$455,712	69 \$66,193	197 \$197,541	4 \$3,268	\$5,758	823 \$1,154,658
		General Office (710)	215,000 sq. ft.	% Trips at Intersection Trips	8.6% 81	0.8% 58	0.7% 39	0.7% 38	8.2% 105	7.0% 58	7.8% 60	8.9% 51	3.7% 19	2.2% 14	4.5% 43	0.4% 5	12.2% 243	13.8% 96	28.2% 305	0.7% 14	82.4% 14	3.9% 1,243
				Cost per Development % Trips at Intersection	\$40,893 8.3%	\$10,624 0.7%	\$5,391 0.7%	\$4,073 0.6%	\$161,686 6.6%	\$36,607 2.3%	\$107,184 2.6%	\$51,872 3.0%	\$54,027 3.5%	\$13,818 2.8%	\$87,222 8.5%	\$6,763 0.0%	\$954,637 14.2%	\$92,094 15.0%	\$305,837 0.4%	\$11,438 0.9%	\$80,609	\$2,024,775
	2	Medical Office (720)	80,000 sq. ft.	Trips Cost per Development	78 \$39,378	52 \$9,525	37 \$5,114	36 \$3,859	85 \$130,889	19 \$11,992	20 \$35,728	17 \$17,291	18 \$51,183	18 \$17,766	81 \$164,302	0	283 \$1,111,779	105 \$100,728	4 \$4,362	18 \$14,705	0	871 \$1,718,602
		Multi-FamilyHousing (220)	45 Units	% Trips at Intersection	0.6%	0.1%	0.1%	0.1%	0.7%	0.3%	0.3%	0.4%	0.4%	0.3%	0.7%	0.0%	1.4%	1.1%	0.1%	0.0%	0.0%	0.2%
		Main-1 anniy 10using (220)	45 Units	Cost per Development	\$3,029	\$916	\$415	\$322	\$13,859	\$1,723	\$3,573	\$2,380	\$5,687	\$1,974	\$14,199	\$0	\$106,071	\$7,674	\$652	\$0	\$0	\$162,473
		Park and Ride	460 spaces	% Trips at Intersection Trips	2.2% 21	1.4% 97	0.3%	0.9% 52	4.8% 61	5.9% 49	6.4% 49	3.8%	1.0% 5	6.6% 43	4.6% 44	0.0%	8.9% 195	14.3% 100	15.6% 200	2.2% 43	77.0% 57	3.3% 1,052
	2-			Cost per Development  % Trips at Intersection	\$10,602 2.8%	\$17,768 0.2%	\$1,935 0.1%	\$5,574 0.1%	\$93,932 3.7%	\$30,927 1.0%	\$87,534 1.2%	\$22,376 1.6%	\$14,218 0.8%	\$42,441 1.1%	\$89,251 0.6%	\$0	\$568,159 2.0%	\$95,931 1.6%	\$153,952 3.6%	\$35,130 0.4%	\$328,193 5.9%	\$1,597,921 0.8%
	3a, 3b	Hotel (310)	120 Rooms	Trips Cost per Development	26 \$13,126	16 \$2,931	5 \$691	8 \$858	48 \$73,914	8 \$5,049	9 \$16,078	9 \$9,154	4 \$11,374	7 \$6,909	6 \$12,171	0 \$0	39 \$153,213	11 \$10,552	39 \$39,107	7 \$5,719	1 \$5,758	243 \$366,603
		Restaurant (932)	5,000 sq. ft.	% Trips at Intersection	2.1%	0.2%	0.1%	0.1%	2.8%	0.7%	0.7%	0.9%	0.6%	0.8%	0.4%	0.0%	1.5%	1.1%	2.7%	0.3%	5.9%	0.5% 175
		Restaurant (332)	5,000 sq. 11.	Cost per Development	\$10,097	\$2,015	\$415	\$536	\$55,435	\$3,787	\$8,932	\$5,085	\$8,531	\$4,935	\$8,114	\$0	\$113,928	\$7,674	\$29,080	\$4,085	\$5,758	\$268,406
		Service Mix - Retail (820)	175,000 sq. ft.	% Trips at Intersection Trips	16.2% 153	1.9% 131	1.7% 92	1.1% 66	19.8% 254	13.3% 110	14.2% 109	15.6% 90	20.7% 105	16.2% 105	14.8% 142	0.0%	24.7% 492	11.6% 81	0.0%	5.4% 105	0.0%	6.3% 2,036
	4			Cost per Development % Trips at Intersection	\$77,242 3.1%	\$24,064 0.3%	\$12,717	\$7,087 0.2%	\$391,127	\$69,187	\$194,718	\$91,142	\$299,336 3.3%	\$103,903	\$288,036	0.0%	\$1,932,846	\$77,704	0.0%	\$86,002 0.9%	0.0%	\$3,655,111 1.0%
		General Office (710)	70,000 sq. ft	Trips Cost per Development	29 \$14,641	18 \$3,297	14 \$1,923	11 \$1,179	33 \$50,816	16 \$10,338	17 \$30,369	13 \$13,619	17 \$48,340	17 \$16,779	25 \$50,711	0 \$0	77 \$302,498	16 \$15,349	0 \$0	17 \$13,888	0 \$0	321 \$573,746
	_			% Trips at Intersection	1.8%	0.3%	0.3%	0.3%	2.4%	0.5%	0.9%	1.0%	2.4%	2.5%	8.6%	0.2%	6.5%	2.3%	0.0%	0.8%	0.0%	1.2%
	5	General Office (710)	105,000 sq. ft.	Cost per Development	17 \$8,582	\$4,030	\$1,935	19 \$2,037	\$47,736	\$2,525	\$12,505	6 \$6,103	12 \$34,122	16 \$15,792	82 \$166,331	\$4,058	130 \$510,711	16 \$15,349	0 \$0	16 \$13,071	\$0	395 \$844,887
		General Office (710)	40,000 sq. ft.	% Trips at Intersection Trips	0.8% 8	0.1% 4	0.0%	0.0%	0.5% 6	0.1%	0.4% 3	0.5% 3	0.6%	0.5% 3	2.0% 19	0.1% 2	1.9% 38	1.1% 8	0.0%	0.2% 3	0.0%	0.3% 105
	8			Cost per Development  % Trips at Intersection	\$4,039 0.2%	\$733 0.0%	\$276 0.0%	\$124 0.0%	\$9,824 0.5%	\$732 0.1%	\$5,181 0.3%	\$3,051 0.3%	\$8,246 0.6%	\$3,435 0.4%	\$38,540 1.1%	\$2,354 0.2%	\$149,285 1.1%	\$7,674 0.3%	\$0 0.0%	\$2,843 0.1%	\$0 0.0%	\$236,338 0.2%
		Multi-FamilyHousing (220)	70 Units	Trips Cost per Development	2 \$1,010	3 \$462	2 \$232	1 \$90	6 \$9,239	1 \$530	2 \$3,751	2 \$1,709	3 \$8,531	3 \$2,487	11 \$22,313	2 \$2,705	22 \$86,428	2 \$1,919	0 \$0	3 \$2,059	0	63 \$143,464
	6	Hi-Tech Office (710)	105,000 sq. ft.	% Trips at Intersection Trips	0.3%	0.2%	0.1%	0.1% 6	0.7% 9	0.0%	0.3% 2	0.2% 1	1.0% 5	0.8% 5	1.5% 14	0.2%	0.4%	0.0%	0.0%	0.3% 5	0.0%	0.2% 77
		· ·		Cost per Development	\$1,515	\$2,015	\$829	\$643	\$13,859	\$0	\$3,573	\$1,017	\$14,218	\$4,935	\$28,398	\$2,705	\$31,428	\$0	\$0	\$4,085	\$0	\$109,220
		Hi-Tech Office (710)	100,000 sq. ft.	% Trips at Intersection Trips	0.2%	0.2%	0.1%	0.1% 5	0.9%	0.0%	0.4% 3	0.3%	0.6% 3	0.5% 3	1.0%	0.2% 3 \$4,058	0.4% 7	0.0%	0.0%	0.2% 3	0.0%	0.2% 68
	7			Cost per Development % Trips at Intersection	\$1,010 4.3%	\$2,198 1.5%	\$553 1.4%	\$536 0.9%	\$16,939 1.4%	\$0 0.2%	\$5,359 10.6%	\$2,034 12.2%	\$8,531 30.1%	\$2,961 23.6%	\$20,284 16.7%	6.1%	\$27,500 0.4%	\$0 0.0%	\$0 0.0%	\$2,451 7.9%	0.0%	\$94,413 3.6%
		Service Mix - Retail (820)	135,000 sq. ft.	Trips Cost per Development	41 \$20,699	104 \$19,050	74 \$10,229	51 \$5,467	18 \$27,718	\$1,262	81 \$144,699	70 \$71,197	153 \$435,057	153 \$151,013	160 \$324,548	79 \$106,857	7 \$27,500	0 \$0	0 \$0	153 \$124,996	0 \$0	1,146 \$1,470,289
		Hi-Tech Office (710)	215,000 sq. ft.	% Trips at Intersection Trips	3.3%	0.9%	0.6%	0.5% 31	3.6% 46	0.3%	1.7% 13	2.0% 12	4.6%	3.5% 22	9.0% 86	0.8% 10	2.3% 46	0.0%	0.0%	1.2% 23	0.0%	1.4% 437
	9		210,000 sq. ft.	Cost per Development	\$15,792	\$10,961	\$4,230	\$3,280	\$71,204	\$1,717	\$23,080	\$11,758	\$65,742	\$22,149	\$173,795	\$13,797	\$181,656	\$0	\$0	\$18,888	\$0	\$618,048 0.6%
		General Office (710)	95,000 sq. ft.	% Trips at Intersection Trips Cost per Development	1.6% 15 \$7,431	0.4% 28 \$5,158	0.3% 14 \$1,990	0.2% 14 \$1,544	1.7% 22 \$33,508	0.2% 1 \$808	0.8% 6 \$10,861	0.9% 5 \$5,533	2.1% 11 \$30,937	1.6% 11 \$10,423	4.2% 40 \$81,786	0.4% 5 \$6,493	1.1% 22 \$85,485	0.0% 0 \$0	0.0% 0 \$0	0.6% 11 \$8,889	0.0% 0 \$0	205 \$290,846
				% Trips at Intersection	3.1%	0.5%	0.1%	0.1%	2.7%	0.6%	2.7%	3.1%	4.5%	3.5%	11.0%	1.2%	2.6%	2.1%	0.4%	1.4%	0.0%	1.3%
	10	Multi-FamilyHousing (220)	295 Units	Trips Cost per Development	29 \$14,641	38 \$6,961	8 \$1,106	6 \$643	35 \$53,895	5 \$3,156	21 \$37,515	18 \$18,308	23 \$65,401	23 \$22,701	105 \$212,984	15 \$20,289	52 \$204,285	15 \$14,390	4 \$4,011	27 \$22,058	0 \$0	424 \$702,342
	11	Multi-FamilyHousing (220)	125 Units	% Trips at Intersection Trips																		
				Cost per Development  % Trips at Intersection	14.2%	0.9%	0.3%	0.8%	11.5%	24.0%	17.3%	14.1%	9.1%	4.3%	1.9%	3.6%	1.5%	1.6%	2.7%	1.4%	0.0%	3.3%
		General Office (710)	285,000 sq. ft.	Trips Cost per Development	134 \$67,650	64 \$11,723	18 \$2,488	46 \$4,931	148 \$227,901	198 \$124,968	17.3% 132 \$235,805	81 \$82,385	9.1% 46 \$130,801	4.3% 28 \$27,636	1.9% 18 \$36,512	3.6% 47 \$63,573	29 \$113,928	11.6% 11 \$10,552	2.7% 29 \$29,080	1.4% 28 \$22,875	0 \$0	1,057 \$1,192,809
	12	Multi-Family Housing (220)	130 Units	% Trips at Intersection	3.2%	0.1%	0.1%	0.1%	3.6%	6.6%	2.5%	2.1% 12	1.0%	0.3%	0.2%	0.4%	0.3%	0.4%	0.5%	0.1%	0.0%	0.6%
		Multi-Family Housing (220)	130 Units	Trips Cost per Development	\$15,146	\$1,649	\$415	\$322	46 \$70,834	\$34,082	\$33,942	\$12,205	\$14,218	\$1,974	\$4,057	\$6,763	\$19,643	\$2,878	5 \$5,014	\$1,634	\$0	\$224,773
				% Tring at Interception	0.00/	86.7%	88.8%	89.0%	0.00/	0.00/	0.00/	0.00/	0.09/	0.00/	0.00/	92 00/	0.00/	0.00/	0.00/	74.9%	0.00/	57.6%
N/A	N/A	Year 2030 Background Traffic	N/A	% Trips at Intersection Trips Cost per Development	0.0% 0 \$0	86.7% 6044 \$1,107,101	88.8% 4771 \$659,472	89.0% 5180 \$555,249	0.0% 0 \$0	0.0% 0 \$0	0.0% 0 \$0	0.0% 0 \$0	0.0% 0 \$0	0.0% 0 \$0	0.0% 0 \$0	82.9% 1071 \$1,448,651	0.0% 0 \$0	0.0% 0 \$0	0.0% 0 \$0	74.9% 1454 \$1,187,867	0.0% 0 \$0	57.6% 18,520 \$4,958,341
				Occides Development	φυ	ψ1,107,101	ψυυσ,412	ψυυυ,249	φυ	φυ	φυ	φυ	φυ	φυ	φυ	ψ1, <del>440</del> ,001	φυ	φυ	ΨΟ	ψ1,107,007	φυ	ψ <del>τ,</del> 330,341
N/A	NI/A	Northwestern College	N/A	% Trips at Intersection			2.1%	2.3% 133						25.3% 164								1.3% <b>408</b>
14/A	IV/A		IN/A	Cost per Development			\$15,343	\$14,256						\$161,870								\$191,469
TOTAL			Total Network Tr	Total Network Trips ips Remaining to Allocate		6970 6970	5371 5371	5819 5819	1282 1282	824 824	765 765	575 575	508 508	648 648	957 957	1292 1292	2188 1993	698 698	1283 1083	1941 1941	74 17	32139 31687
				Cost per Development		\$1,276,700	\$742,350	\$623,750	\$1,974,700	\$519,900	\$1,366,600	\$584,850	\$1,443,450	\$639,850	\$1,941,200	\$1,747,850	\$8,397,756	\$669,600	\$1,239,923	\$1,585,950	\$426,075	\$25,657,084

Table originally developed by SRF, updated by Roseville Staff

- Development approved in 2009. Cost allocation assigned as a part of the approval. These items were adjusted to indicate the costs that were allocated at the time of development approval.

- The costs associated with the two roundabouts along Twin Lakes Parkway are included in the Twin Lakes Parkway Cost
- The developments included in this scenario include all known developments as of March 2010. Parcels undeveloped were assumed to include developments identified for Scenario C. Any information regarding driveway locations or access that was received after February 2008 is included in this analysis. - Background traffic was removed from specific improvements at the request of City Staff.

Indicates an improvement at the intersection

Indicates a segment of roadway that is being improved

Figure 21