



**Project: Jefferson Avenue Bikeway**  
**Subject: Test Refuge at Cleveland**

**AADT Data**

Data Acquisition Date	School status	Finn Street		Juliet Avenue		Kenneth Street		Wellestey Avenue		Jefferson Avenue		
		Wellestey to Jefferson ①	Jefferson to Juliet ②	Kenneth to Cleveland ③	Cleveland to Finn ④	Wellestey to Jefferson ⑤	Jefferson to Juliet ⑥	Kenneth to Cleveland ⑦	Cleveland to Finn ⑧	Cleveland to Kenneth ⑨	Finn to Cleveland ⑩	
9/17/08 - 9/20/08	SPPS & Nativity in-session										456	360
6/8/10 - 6/10/10	SPPS in-session; Nativity out-of-session	197	234	218	243	387	398	302	246			
6/14/10 - 6/16/10	SPPS & Nativity out-of-session	187	217	184	240	373	371	293	273			
8/24/10 - 8/26/10	SPPS & Nativity out-of-session	263	258	304	273	405	389	400	356	299	226	
9/21/10 - 9/23/10	SPPS & Nativity in-session	274	260	280	262	437	455	416	409	281	194	
11/1/10 - 11/3/10	SPPS & Nativity in-session	247	235	243	275	392	407	389	347	472	390	

**Note**

Median installed first week of August 2010 and removed 10/15/10.  
 Data taken when refuge was in place is indicated with blue highlighted

	DESIGNED	DLK	I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. Date: _____ Lic. No. _____	PREPARED BY: TRAFFIC ENGINEERING DIVISION FOR: THE CITY OF ST. PAUL, DEPARTMENT OF PUBLIC WORKS <b>JEFFERSON BIKEWAY</b> CLEVELAND PED/BIKE REFUGE	PROJECT NO. P-1343	STATE PROJECT NUMBER:
	DRAWN	DLK			DRAWN:	DATE: JUNE 2010
APPROVED	DLK	Signature: _____	Date: _____			



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Street On	Acquisition Date	From	To	NB 85% Speed (mph)	NB Average Speed (mph)	SB 85% Speed (mph)	SB Average Speed (mph)	WB 85% Speed (mph)	WB Average Speed (mph)	EB 85% Speed (mph)	EB Average Speed (mph)
Cleveland Avenue <sub>1</sub>	7/16/2010	Jefferson	Wellesley	35	31	35	31				
Cleveland Avenue <sub>2,4</sub>	8/20/2010	Jefferson	Wellesley	34	29	34	30				
Cleveland Avenue <sub>2,4</sub>	8/24/2010	Jefferson	Wellesley	34	29	34	30				
Cleveland Avenue <sub>3,4</sub>	9/27/2010	Jefferson	Wellesley	34	29	34	29				
Cleveland Avenue <sub>3,5</sub>	10/13/2010	Jefferson	Wellesley	33	28						
Cleveland Avenue <sub>6</sub>	11/3/2010	Jefferson	Wellesley	35	30	35	31				
Cleveland Avenue <sub>2,4</sub>	8/20/2010	Jefferson	Juliet	33	29	34	29				
Cleveland Avenue <sub>2,4</sub>	8/24/2010	Jefferson	Juliet	34	29	34	29				
Cleveland Avenue <sub>3,4</sub>	9/27/2010	Jefferson	Juliet	34	29	35	31				
Cleveland Avenue <sub>3,5</sub>	10/13/2010	Jefferson	Juliet			34	29				
Cleveland Avenue <sub>6</sub>	11/3/2010	Jefferson	Juliet	35	31	35	32				
Jefferson Avenue <sub>6</sub>	11/2/2010	Kenneth	Cleveland					29	24	29	23
Jefferson Avenue <sub>6</sub>	11/2/2010	Finn	Cleveland					29	24	29	24

1. Test conducted prior to test refuge installation.
2. Test conducted post installation of refuge and prior to school being in session.
3. Test conducted post refuge installation and after the beginning of school.
4. Test location was approximately 100' in advance of the refuge.
5. Test location was at the refuge.
6. Test conducted post refuge removal

**Jefferson Bikeway  
2009 TLC NTP  
October 2010**

**Temporary Refuge Comment Summary**

Comment Media	Number Received	Comment Type		Note: one comment stated both "for" and "against" position Note: two comments did not state "for" or "opposed" position Note: one comment did not state "for" or "opposed" position
		For	Against	
Email	385	182	202	
Phone call	61	2	57	
Newspaper editorial	6	2	3	
Complaint line/DSI	2	0	2	
<b>Total</b>	<b>454</b>	<b>186</b>	<b>264</b>	
<b>As percent of total comments</b>		<b>41.3%</b>	<b>58.7%</b>	

**Jefferson Bikeway  
2009 TLC NTP  
October 2010**

**Temporary Refuge Comment Distribution**

Comment	For	% of "For" comments	% of all comments	Against	% of "Against" comments	% of all comments
Increased safety for bike/peds crossing Cleveland	117	62.9%	25.8%			
Cleveland is already too narrow				107	40.5%	23.6%
Inconvenience				88	33.3%	19.4%
Snow removal concerns				76	28.8%	16.7%
Waste of taxes				68	25.8%	15.0%
Improves nonmotorized transportation	61	32.8%	13.4%			
Decreased traffic on Jefferson	63	33.9%	13.9%			
Decreased speeds on Cleveland	60	32.3%	13.2%			
Improved neighborhood/environment	37	19.9%	8.1%			
Decreased speeds on Jefferson	39	21.0%	8.6%			
Unsafe for bikes/peds crossing Cleveland				45	17.0%	9.9%
Increased traffic on adjacent streets				45	17.0%	9.9%
Increased safety for bike/peds on Jefferson	36	19.4%	7.9%			
Not used/needed by bike/peds crossing Cleveland				39	14.8%	8.6%
Unsafe for bikes on Cleveland				39	14.8%	8.6%
Increased congestion on Cleveland				31	11.7%	6.8%
Unsafe/unlawful practices by vehicles				22	8.3%	4.8%
No effect on speeds on Cleveland				12	4.5%	2.6%
Appearance				6	2.3%	1.3%
Decrease non-resident parking use	2	1.1%	0.4%			

**Jefferson Bikeway  
2009 TLC NTP  
December 2010**

**Temporary Refuge Comment Summary  
Comment Radius  $\leq$  1/2 mile**

Comment Media	Number Received	Comment Type	
		For	Against
Email	166	82	84
Phone call	36	2	34
Newspaper editorial	1	0	1
Complaint line/DSI	1	0	1
<b>Total</b>	<b>204</b>	<b>84</b>	<b>120</b>
<b>As percent of total comments</b>		<b>41.2%</b>	<b>58.8%</b>

**Jefferson Bikeway  
2009 TLC NTP  
December 2010**

**Temporary Refuge Comment Distribution  
Comment Radius  $\leq$  1/2 mile**

Comment	For	% of "For" comments	% of all comments	Against	% of "Against" comments	% of all comments
Increased safety for bike/peds crossing Cleveland	56	66.7%	27.5%			
Cleveland is already too narrow				46	38.3%	22.5%
Inconvenience				39	32.5%	19.1%
Decreased traffic on Jefferson	37	44.0%	18.1%			
Improves nonmotorized transportation	29	34.5%	14.2%			
Decreased speeds on Cleveland	28	33.3%	13.7%			
Snow removal concerns				27	22.5%	13.2%
Waste of taxes				27	22.5%	13.2%
Increased traffic on adjacent streets				23	19.2%	11.3%
Not used/needed by bike/peds crossing Cleveland				23	19.2%	11.3%
Improved neighborhood/environment	22	26.2%	10.8%			
Decreased speeds on Jefferson	21	25.0%	10.3%			
Increased safety for bike/peds on Jefferson	19	22.6%	9.3%			
Unsafe for bikes/peds crossing Cleveland				15	12.5%	7.4%
Increased congestion on Cleveland				14	11.7%	6.9%
Unsafe for bikes on Cleveland				12	10.0%	5.9%
Unsafe/unlawful practices by vehicles				12	10.0%	5.9%
No effect on speeds on Cleveland				6	5.0%	2.9%
Appearance				3	2.5%	1.5%
Decrease non-resident parking use	2	2.4%	1.0%			