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Community/Location	Measure	85th Percentile Speed (mph)			Volumes (vehicles/day)			Comments
		Before	After	% Change	Before	After	% Change	
Austin, TX								
Richcreek Rd	12' humps	37	30	-19	503	543	8	Average or sum of two directions - speed data collected between humps - in most cases, before data 3 to 9 weeks before installation - after data collected from 2 weeks to 24 months after installation
Pasadena Dr	12' humps	36	31	-14	523	535	20	
Aspen Creek Pkwy	12' humps	38	26	-32	561	388	-31	
Woodland Ave	12' humps	40	28	-30	7,611	7,018	-8	
Roundup Tr	12' humps	39	31	-22	734	469	-36	
Cedar St	22' tables	35	28	-20	468	383	-18	
Broad Oaks Dr	22' tables	40	31	-23	357	290	-19	
Sunstrip Dr	22' tables	37	28	-24	932	952	2	
Rockpoint Dr	22' tables	36	30	-17	421	460	9	
Pack Saddle Pass	Diagonal diverter	N/A			3,600	1,400	-61	Data collected two blocks away - temporary diverter removed - traffic diverted to neighboring streets
Frontier Trail	Diagonal diverter	N/A			800	500	-38	Data collected one block away
Morrow St	Forced turn island and turn restriction	N/A			8,420	3,763	-55	Data collected four blocks away - Blocks westbound movement on Morrow St at Lamar Blvd
Davis St	Half closure	25	23	-8	2,233	568	-75	Data collected same block as half closure
Rainey St (70 blk)	Circle	33	35	6	389	269	-31	Part of neighborhood traffic calming treatment involving half closures, speed cushions, traffic circle, and neckdowns (temporary installations)
Rainey St (80 blk)	Speed cushions	35	28	-20	3,323	2,321	-30	
Rainey St (90 blk)	Speed cushions and neckdown	28	22	-21	835	1,869	124	
River St (600 blk)	Circle	N/A			610	590	-3	
River St (700 blk)	Circle	26	27	4	3,152	2,033	-36	

Note. In Appendix A, the 20 communities featured in this report are listed first, alphabetically. Data for several other communities follow.

Community/Location	Measure	85th Percentile Speed (mph)			Volumes (vehicles/day)			Comments
		Before	After	% Change	Before	After	% Change	
Bellevue, WA								
Somerset Dr	12' humps	39	27	-31	795	746	-6	Between humps - only alternate route consists of circuitous local streets - speeds at humps = 12-15 mph at 4" humps; 23-26 mph at 3" humps that replaced 4" humps
Highland Dr	12' humps	36	25	-31	1,702	1,934	14	No parallel route available - after measurement soon after installation
128th Ave NE (S of NE 2nd)	12' humps	33	27	-18	1,305	1,022	-22	
162nd Ave SE	12' humps	37	27	-27	1,472	1,071	-27	Good alternate route on parallel collector (161st Ave SE) - after measurement soon after installation - also report 2 years after
SE 63rd St	12' humps with chokers	36	25	-31	2,456	2,593	6	No parallel route available (Forest Dr would seem to provide good alternate) - also report speeds at humps
NE 39th St	12' humps with chokers	39	25	-35	3,685	2,931	-20	Good alternate route available on collector road (NE Northrup Way) - also report speeds at humps
108th St SE (location A)	22' tables	35	29	-17	2,540	1,942	-24	Speeds measured between tables - good alternate routes available on collector roads (Bellevue Way and 112th Ave, SE)
108th St SE (location B)	22' tables	34	31	-9	2,223	1,809	-19	
108th St SE (location C)	22' tables	35	31	-11	2,346	1,885	-20	
128th Ave NE (N of NE 5th St)	Half closure	N/A			770	442	-43	Data collected same block 20% violation rate
128th Ave NE (N of NE 5th St)	One-lane angled choker	31	28	-10	770	331	-57	Replaced half closure that was frequently violated
SE 46th Way	Circle with neckdowns	34	28	-18	N/A			
Berkeley, CA								
Acton St	12' humps	29	22	-24	N/A			Also report speeds at humps and range of speeds between and at humps - smaller range of speeds after than before installation
Berkeley Way	12' humps	31	22	-29	N/A			
Bonar St	12' humps	32	21	-34	N/A			
Capistrano Ave	12' humps	32	24	-25	N/A			
Catalina Ave	12' humps	25	22	-12	N/A			
Cornell Ave	12' humps	30	25	-17	N/A			
Curtis St	12' humps	34	28	-18	N/A			
El Camino Real St	12' humps	28	23	-18	N/A			

Community/Location	Measure	85th Percentile Speed (mph)			Volumes (vehicles/day)			Comments
		Before	After	% Change	Before	After	% Change	
Berkeley, CA (continued)								
Masonic St	12' humps	30	24	-20	N/A			Also report speeds at humps and range of speeds between and at humps - smaller range of speeds after than before installation
Oxford St	12' humps	33	26	-21	N/A			
Peralta Ave	12' humps	36	25	-31	N/A			
Tacoma Ave	12' humps	33	27	-18	N/A			
Tyler Ave	12' humps	26	20	-23	N/A			
Santa Fe Ave	22' tables	31	25	-19	N/A			
Derby St	12' humps	31	22	-29	3,600	1,800	-50	Significant diversion to other residential streets
Boulder, CO								
Mapleton Ave	12' humps	28	25	-11	1,710	1,490	-13	
North St	12' humps	33	25	-24	1,050	760	-28	
Floral Dr	12' humps	31	25	-19	900	670	-26	
Moorhead Ave (3100 blk)	46' tables	34	31	-9	4,590	4,460	-3	Five tables removed due to emergency response concerns
Moorhead Ave (4300 blk)	46' tables	34	31	-9	2,810	2,620	-7	
Edgewood Dr	46' tables	36	28	-22	11,140	9,690	-13	Modest diversion to neighboring streets - two tables removed due to emergency concerns
55th St	46' tables and raised intersection	42	37	-12	12,400	9,400	-24	September 1995 before - September 1997 after
N 9th St	Circle	33	23	-30	3,360	1,970	-41	Midblock speeds
Arapahoe Ave	Circle	33	28	-15	2,010	1,940	-3	
Balsam Ave	Circle	38	25	-34	10,910	8,280	-24	Significant diversion to neighboring streets but no increase in speeds
Pine St	Circle	33	31	-6	8,660	7,280	-16	
Charlotte, NC								
Barklay Downs Dr	22' tables	40	37	-8	13,000	10,300	-21	85th percentile speeds averaged for two directions
Carolyn Dr	22' tables	40	31	-23	600	500	-17	
Dalecrest Dr	22' tables	38	34	-11	3,000	2,500	-17	
Lancer Dr	22' tables	31	30	-3	1,600	1,400	-13	
Laurel Ave	22' tables	33	28	-15	5,000	4,700	-6	
Marlbrook Dr	22' tables	37	32	-14	3,800	4,000	5	
Park Crossing Dr	22' tables	41	37	-10	2,700	2,000	-26	
Tipperary Pl	22' tables	34	34	0	5,200	4,400	-15	

Community/Location	Measure	85th Percentile Speed (mph)			Volumes (vehicles/day)			Comments
		Before	After	% Change	Before	After	% Change	
Charlotte, NC (continued)								
Westfield Rd	22' tables	32	27	-16	1,000	900	-10	85th percentile speeds averaged for two directions
Sherwood Ave (S of Queens Rd W)	One-lane chicane	37	31	-16	3,200	2,400	-25	
Eighth St	Circle	25	23	-8	561	583	4	
Dayton, OH Part of neighborhood-wide plan involving humps, street closures, and all-way stops								
Five Oaks Ave (between Bellevue Ave and closure)	Closure	N/A			1,340	53	-96	Same block as closure - one block from another closure
Five Oaks Ave (between Richmond and Old Orchard Ave)	12' humps	34	25	-26	N/A			Closure at one end and stop sign at other closure
Grafton Ave (between Kenilworth Ave and closure)	Closure	N/A			947	768	-19	Same block as closure - two blocks from another closure
Grafton Ave (between Neal Ave and closure)	Closure	N/A			1,525	130	-91	Same block as closure - one block from another closure
Harvard Blvd	12' humps	N/A			864	1,906	121	
Homewood Ave (between Old Orchard Ave and Forest Ave)	12' humps	32	32	0	2,351	1,269	-46	Two blocks from closure
Homewood Ave (between Rockwood and Old Orchard Ave)	Closure	N/A			1,815	641	-65	One block from closure
Kenilworth Ave (between Redfern Ave and closure)	Closure	N/A			1,076	95	-91	Same block as closure - one block from another
Kenilworth Ave (between Grafton Ave and Old Orchard Ave)	Closure	N/A			656	333	-49	One block from closure
Kenwood Ave	Closure	N/A			477	644	35	One block from closure
Richmond Ave (between Harvard Blvd and Manhattan Ave)	12' humps	N/A			2,428	2,433	0	One block from closure
Richmond Ave (between North Ave and Neal Ave)	Closure	N/A			1,901	1,171	-38	One block from closure
Eugene, OR								
Friendly St (N of 26th Ave)	14' humps	34	27	-21	3,995	2,340	-41	1996 before, 1998 after - 1/3 of the volume reduction diverted to parallel residential street
Friendly St (S of 21st Ave)	14' humps	32	27	-16	2,185	1,255	-43	

Community/Location	Measure	85th Percentile Speed (mph)			Volumes (vehicles/day)			Comments
		Before	After	% Change	Before	After	% Change	
Ft. Lauderdale, FL								
NE 14th Ave	12' humps	35	25	-29	3,000	2,100	-30	Some diversion to NE 15th Ave - a parallel route
SE 7th St	22' tables	36	32	-11	N/A			Average of 85th percentile bi-directional speeds - part of a neighborhood-wide treatment involving one-lane angled chokers and speed tables
SE 9th St	22' tables	36	31	-14	N/A			
SE 11th St	22' tables	38	29	-24	N/A			
SE 11th Ct (E of SE 9th Ave)	22' tables	37	33	-11	N/A			
SE 11th Ct (W of SE 9th Ave)	22' tables	36	31	-14	N/A			
Cordova Rd (S of SE 12th St)	One-lane angled chokers	34	31	-9	4,192	4,278	2	Measurement taken 3 months after installation midway (300') from chokers - later replaced by speed humps
Cordova Rd (N of SE 11th St)	One-lane angled chokers	35	30	-14	2,606	2,548	-2	
Gainesville, FL								
NW 26th Tr	Circle	38	36	-5	2,024	1,959	-3	
NW 22nd St (1800 blk)	Circle	35	31	-11	1,507	1,417	-6	
NW 22nd St (2100 blk)	Circle	39	34	-13	970	825	-15	
NE 10th Ave	Circle	N/A			1,599	1,285	-20	Report cut-through volumes
NW 19th St	Circle	39	34	-13	2,837	2,752	-3	47% cut-through before - 38+% after
NW 14th Ave	Circle	34	30	-12	1,409	1,093	-22	
30th Ave (1200 blk)	Half closure one block away	36	29	-19	1,056	362	-66	Part of neighborhood-wide treatment involving half closures and an all-way stop treatment redesigned after test
30th Ave (1100 blk)	Half closure same block	N/A			923	170	-82	
30th Ave (600 blk)	Half closure two blocks away	N/A			929	382	-59	
31st Ave (1200 blk)	Half closure one block away	35	28	-20	816	312	-62	
31st Ave (1100 blk)	Half closure same block	N/A			803	180	-78	
31st Ave (600 blk)	Half closure two blocks away	N/A			896	698	-22	
NW 31st Tr	Half closure same block	N/A			621	536	-14	67% cut-through - volumes should have declined more
NW 7th Ave	Closure same block	N/A			425	160	-62	Report cut-through volumes

Community/Location	Measure	85th Percentile Speed (mph)			Volumes (vehicles/day)			Comments
		Before	After	% Change	Before	After	% Change	
Gwinnett County, GA								
Winn Dr (W of Gloster Rd)	4' humps, 22' tables	39	30	-23	N/A			4" high - experimental installation - later removed
Winn Dr (W of Adams Mill Dr)	4' humps	44	25	-43	N/A			
Rocky Rd	22' tables	36	30	-17	466	428	-8	
Wakefield St	22' tables	38	29	-24	718	658	-8	
Gwinn Oaks Dr	22' tables	35	26	-26	N/A			
Simpson Mill Ln	22' tables	36	30	-17	798	522	-35	
Deshong Dr	22' tables	38	30	-21	1,130	856	-24	
Oak Leaf Tr	22' tables	37	27	-27	704	364	-48	
Trotters Ridge	22' tables	40	34	-15	362	458	27	
Valley Rd	22' tables	38	26	-32	198	242	22	
Grandeus Ln	22' tables	38	30	-21	880	775	-12	
Rocky Hill Dr	22' tables	47	33	-30	800	421	-47	
Rosedale Rd	22' tables	38	29	-24	858	695	-19	
Hillcrest Dr	22' tables	37	30	-19	2,102	2,061	-2	
Waterford Park Dr	22' tables	38	28	-26	599	743	24	
Jane Rd	22' tables	36	28	-22	711	536	-25	
Fitzpatrick Way	22' tables	39	30	-23	1,136	992	-13	
Weston Dr	22' tables	37	27	-27	747	791	6	
Clearwater Dr	22' tables	41	30	-27	780	751	-4	
Howard County, MD								
Baltimore Ave	12' humps	38	28	-26	N/A			Report speed at humps
Dogwood Dr	12' humps	40	28	-30	N/A			Report 24% drop in volume
Shaker Dr	22' tables	43	29	-33	N/A			
Eliots Oak Rd (S of Celestial)	22' tables	38	32	-16	N/A			Part of areawide treatment using tables and a raised intersection
Eliots Oak Rd (S of Evangeline)	22' tables	35	28	-20	4,560	3,710	-19	
Eliots Oak Rd (S of Fall River Row)	22' tables	35	35	0	7,480	6,660	-11	
Eliots Oak Rd (S of Hesperus Dr)	Raised intersection	37	35	-5	4,060	3,860	-5	
Hesperus Dr (S of Windmill Ln)	22' tables	36	31	-11	2,380	1,855	-22	
Hesperus Dr (S of Open Window)	22' tables	37	33	-11	2,460	1,960	-20	
Durham Rd W (E of Dover Ct)	22' tables	36	32	-11	1,635	1,070	-35	
Durham Rd W (N of Castle Moore)	22' tables	36	28	-22	N/A			

Community/Location	Measure	85th Percentile Speed (mph)			Volumes (vehicles/day)			Comments
		Before	After	% Change	Before	After	% Change	
Howard County, MD (continued)								
Country Ln	22' tables	36	30	-17	N/A			Part of areawide treatment using tables and a raised intersection
Michaels Way (W of Ramblewood)	22' tables	39	33	-15	N/A			
Michaels Way (W of Greenway Dr)	22' tables	35	32	-9	N/A			
Joey Dr	22' tables	35	35	0	N/A			
Hearthstone Rd (S of Crabapple)	22' tables	38	33	-13	N/A			
Hearthstone Rd (S of Joey Dr)	Raised intersection	36	40	11	N/A			
Greenway Dr (S of St. Johns Lane)	22' tables	40	36	-10	N/A			
Greenway Dr (S of Joey Dr)	22' tables	40	35	-13	N/A			
N Chatham Rd	22' tables	40	32	-20	N/A			
Rockburn Dr	Circle	35	30	-14	1,592	1,428	-10	At T-intersections - extreme deflection in one direction and no deflection in other - treatment using circles and a center island narrowing
Shaker Dr (E of Roveout Ln)	Circle	38	36	-5	N/A			Part of a section-long treatment involving circles, tables, and a choker
Shaker Dr (E of Wayover Ln)	Circle	37	35	-5	N/A			
Montgomery County, MD (Volumes are based on hourly counts, assuming a peak-to-daily ratio of 0.10.)								
Notley Rd	12' humps	39	32	-18	1,420	900	-37	Speed measurement not taken immediately after installation
Aberdeen Rd	12' humps	36	27	-25	1,350	760	-44	
Durbin Rd	12' humps	33	25	-24	810	500	-38	
Shorefield Rd	12' humps	35	29	-17	1,240	1,530	23	
Counselman Rd	12' humps	34	31	-9	970	560	-42	
Westbard Ave	12' humps	35	28	-20	990	920	-7	
Thayer Ave	12' humps	35	29	-17	860	780	-9	
Burdette Rd	12' humps	40	34	-15	1,330	1,110	-17	
Great Oak Rd	12' humps	37	32	-14	410	320	-22	
McKnew Rd	12' humps	39	29	-26	850	1,090	28	
Rock Run Dr	12' humps	38	29	-24	350	290	-17	
Lilly Stone Dr	12' humps	36	29	-19	1,130	700	-38	
Fraley Farm Rd	12' humps	39	30	-23	730	770	5	
Northwest Dr	12' humps	34	30	-12	1,140	320	-72	
Stapleford Hall Dr	12' humps	39	31	-21	1,090	860	-21	
Cherry Grove Dr	12' humps	38	33	-13	980	870	-11	

Community/Location	Measure	85th Percentile Speed (mph)			Volumes (vehicles/day)			Comments
		Before	After	% Change	Before	After	% Change	
Montgomery County, MD (continued)								
Briardale Rd	12' humps	36	30	-17	950	840	-12	Speed measurement not taken immediately after installation
Democracy Ln	12' humps	39	31	-21	990	680	-31	
George Washington Dr	12' humps	36	30	-17	710	800	13	
Mill Creek Dr	12' humps	32	29	-9	800	430	-46	
Wayfarer Rd	12' humps	38	27	-29	1,120	540	-52	
Hermitage Rd	12' humps	40	28	-30	630	410	-35	
Overlea Dr	12' humps	43	37	-14	1,020	450	-56	
Venice Dr	12' humps	38	29	-24	1,190	750	-37	
Wilmett Rd	12' humps and 22' tables	32	29	-9	730	540	-26	
Beech Ave	12' humps and 22' tables	34	31	-9	1,310	1,560	19	
Galway Dr	22' tables	36	30	-17	2,070	1,230	-41	
Bel Pre Rd	22' tables	40	34	-15	14,500	14,400	-1	
Schuylkill Rd	22' tables	37	29	-22	1,420	2,080	46	
Morningwood Dr	22' tables	33	32	-3	1,210	880	-27	
Brickyard Rd	Circle	48	43	-10	2,110	1,290	-39	
Notley Rd	Circles	47	39	-17	1,500	2,140	43	
Cherry Valley Dr	Circle	42	39	-7	890	450	-49	
Dorset Ave	Half closure	N/A			1,100	575	-48	
Brookside Dr	Half closure	N/A			1,350	650	-52	
Kennedy Dr	Half closure	N/A			450	250	-44	
Woodlawn Ave	Half closure	N/A			250	100	-60	
Sugarbush Ln	Humps, circle, chokers, and center islands	37	30	-19	810	720	-11	
Huntington Pkwy	Chicanes and humps	34	30	-12	1,500	1,390	-7	
Omaha, NE								
33rd St	12' humps	36	32	-11	N/A			2/84 before - 12/86 after
50th St	12' humps	36	36	0	N/A			11/83 before - 1/84 after
55th St (between Pine and Hickory)	12' humps	34	32	-6	N/A			9/83 before - 12/86 after
55th St (between Hickory and Walnut)	12' humps	36	34	-6	N/A			12/82 before - 9/83 after
56th St	12' humps	35	33	-6	N/A			4/85 before - 1/87 after
76th St (between Burt and Webster)	12' humps	39	33	-15	N/A			3/85 before - 12/86 after

Community/Location	Measure	85th Percentile Speed (mph)			Volumes (vehicles/day)			Comments
		Before	After	% Change	Before	After	% Change	
Omaha, NE (continued)								
76th St (between Burt and Iazard St)	12' humps	36	33	-8	N/A			4/85 before - 12/86 after
126th St	12' humps	37	36	-3	N/A			9/83 before - 1/84 after
Nina St	12' humps	45	34	-24	N/A			11/83 before - 11/86 after
Parkview Dr (between Grand Ave and Saratoga St)	12' humps	37	35	-5	N/A			10/82 before - 11/82 after
Parkview Dr (at Larimore Ave)	12' humps	37	27	-27	N/A			10/82 before - 11/82 after
Parkview Dr (between Sahler and Sprague Sts)	12' humps	36	36	0	N/A			10/83 before - 12/86 after
Redick Ave	12' humps	39	37	-5	N/A			2/85 before - 12/86 after
Phoenix, AZ								
* Mean speeds								
Via Estrella	Diagonal diverter	N/A			1,625	1,148	-29	One block away - part of neighborhood-wide treatment
Meadowbrook Ave (W of 14th Pl)	Diagonal diverter	36	29	-19	1,354	177	-87	Same block; spot treatment
Meadowbrook Ave (E of 13th Pl)	Diagonal diverter	35	34	-3	1,569	574	-63	
Edgemont Ave	Half closure	N/A			2,238	718	-68	Same block - separate eastbound & westbound counts (eastbound down slightly)
20th Ave	Half closure	N/A			770	168	-78	Same block
Culver St	Half closure	N/A			206	133	-35	Same block - built with freeway mitigation money
Vogel Ave	Diagonal diverter three blocks away	26	23	-12	2,057	325	-84	Part of neighborhood-wide treatment using a diagonal diverter and a half closure
6th Ave	Diagonal diverter same block	N/A			2,157	214	-90	
Oregon Ave (E of Central Ave)	Diagonal diverter	25*	18	-28	521	353	-32	Part of Windsor Square Neighborhood Plan G using diagonal diverters and half closures - data collected same block as closures
Oregon Ave (W of 7th St)	Diagonal diverter	26*	24	-8	598	224	-63	
Colter St (E of Central Ave)	Half closures at both end	27*	19	-30	879	328	-63	
Colter St (W of 7th St)	Half closures at both ends	29*	22	-24	1,233	533	-57	
Orange Dr	Half closure	25*	18	-28	220	151	-31	

Community/Location	Measure	85th Percentile Speed (mph)			Volumes (vehicles/day)			Comments
		Before	After	% Change	Before	After	% Change	
Phoenix, AZ (continued)		* Mean speeds						
Oregon Ave (E of Central Ave)	Diagonal diverter one block away	25*	30	20	474	474	0	Part of Windsor Square Neighborhood Plan I using a diagonal diverter, half closures, and a turn restriction
Oregon Ave (W of 7th St)	Diagonal diverter same block	26*	30	15	522	425	-19	
Colter St (E of Central Ave)	Half closures at both ends	27*	21	-22	776	314	-60	
Colter St (W of 7th St)	Half closures at both ends	29*	19	-34	1,048	474	-55	
Orangewood Ave	Circle	38	37	-3	892	834	-7	Temporary circle removed and replaced with 4-way stop
Clarendon Ave	12' humps	29*	20	-31	1,150	680	-41	Six humps spaced an average of 375' apart; 10/97 - 4/98
Belmont Ave	12' hump	N/A			699	596	-15	Single hump in spot treatment
Portland, OR								
30th Ave	Median barrier	N/A			330	430	30	Two blocks away
28th Ave	Forced turn island	N/A			2,010	600	-70	One block away
27th Ave	Half closure	N/A			280	500	79	One block from
26th Ave	Half closure	N/A			300	310	3	One block away
25th Ave	Half closure	N/A			180	390	117	One block away
Weidler St	Half closure	N/A			680	220	-68	Same block
Halsey St	Closure	N/A			820	500	-39	Three blocks away
SE Harold St	22' tables plus neckdowns	38	32	-16	4,200	2,600	-38	Neckdowns at five intersections
NW Cornell Rd	22' tables + center island narrowing	36	30	-17	6,500	6,400	-2	
NE 15th Ave	22' tables + center island narrowing	38	28	-26	8,440	6,780	-20	
SE 76th Ave	14' humps	34	27	-21	3,637	2,591	-29	
SE 119th Ave	14' humps	36	26	-28	1,292	930	-28	
SE 67th Ave	14' humps	29	24	-17	1,240	1,480	19	
N Bryant St	14' humps	32	24	-25	940	750	-20	
SE 52nd Ave	14' humps	33	30	-9	1,020	357	-65	
NE 87th Ave	14' humps	37	28	-24	765	504	-34	Speeds averaged over several locations
N Macrum Ave	14' humps	33	23	-30	480	370	-23	
NE Pacific St	14' humps	34	24	-29	600	600	0	
NE 108th Ave	14' humps	32	23	-28	770	700	-9	
SE 55th Ave	14' humps	32	23	-28	2,300	1,900	-17	

Community/Location	Measure	85th Percentile Speed (mph)			Volumes (vehicles/day)			Comments
		Before	After	% Change	Before	After	% Change	
Portland, OR (continued)								
SW Boones Ferry Rd	14' humps	32	25	-22	4,000	1,500	-62	
N Smith St	Neckdowns, center island narrowings, and bike lanes	39	37	-5	4,000	3,500	-13	Previous reduction in speed limit had no effect
N Ida Ave	14' humps, choker, neckdown, and bike lanes	34	26	-24	2,870	2,740	-5	Speeds averaged over several locations
NE 7th Ave	Circles	38	32	-16	6,500	5,500	-15	
SE Clinton St (#1)	Circles	37	33	-11	2,400	2,000	-17	
SE Clinton St (#2)	Circles	36	32	-11	1,200	680	-43	
NE Holman St	Circles	33	33	0	1,400	1,100	-21	
NE 21st Ave	Circles	34	30	-12	5,600	5,600	0	
NE 24th Ave	Circles	36	29	-19	3,500	3,200	-9	
NW 25th Ave	Circles	33	28	-15	7,800	6,500	-17	
NW Raleigh St	Circles	30	26	-13	2,100	1,500	-29	
NE Multnomah St and Imperial Ave	Circle	29	27	-7	550	500	-9	Midblock speeds
NE 37th Ave and Thompson St	Circle	33	27	-18	2,000	1,700	-15	Midblock speeds
SE Lincoln St and SE 58th Ave	Circle	34	31	-9	3,400	2,800	-18	Midblock speeds
NE 47th Ave and Brazee St	Circle	34	28	-18	3,700	3,000	-19	Midblock speeds
SE Market St	22' split tables (28' offset)	37	26	-30	N/A			Speed measured between halves of split tables
SE 17th Ave	22' split tables (50' offset)	38	32	-16	6,900	4,800	-30	
Sacramento, CA (Part of an areawide treatment involving half closures, circles, neckdowns, and split medians)								
C St (E of 22nd St)	Split median	38	33	-13	2,700	5,400	100	
C St (W of 21st St)	Neckdown	20	29	45	2,800	5,660	102	
D St (E of 25th St)	Circle	N/A			490	1,850	278	
E St (E of 28th St)	Half closure	N/A			5,630	8,860	57	One block away
E St (E of 25th St)	Circle	N/A			7,660	2,140	-72	Two blocks from half closure
E St (W of 23rd St)	Split median	N/A			6,400	2,450	-62	Two blocks from half closure
E St (W of 20th St)	Half closure	N/A			5,830	3,760	-36	One block away
F St (E of 28th St)	Neckdown	37	33	-11	4,700	4,660	-1	Four blocks from half closure
F St (E of 25th St)	Half closure	N/A			4,740	4,410	-7	One block away
F St (W of 23rd St)	Split median	39	32	-18	4,240	4,590	8	
F St (W of 20th St)	Half closure	N/A			4,970	2,680	-46	Three blocks away

Community/Location	Measure	85th Percentile Speed (mph)			Volumes (vehicles/day)			Comments
		Before	After	% Change	Before	After	% Change	
Sacramento, CA (continued)								
F St (W of 16th St)	Half closure	29	32	10	5,510	4,080	-26	One block away
G St (E of 28th St)	Half closure and split median	38	30	-21	10,320	1,120	-89	Same block
G St (E of 27th St)	Half closure/split medians (both ends)	40	29	-27	10,160	2,120	-79	One block away
G St (E of 25th St)	Half closure	N/A			9,800	3,730	-62	Three blocks away
G St (W of 23rd St)	Split median	41	34	-17	9,250	4,010	-57	
G St (W of 20th St)	Half closure	N/A			9,260	3,280	-65	Same block
G St (W of 17th St)	Neckdown	29	28	-3	8,110	5,100	-37	Three blocks from half closure
H St (E of 28th St)	Half closure	36	27	-25	9,540	9,180	-4	Two blocks away
H St (E of 25th St)	Split medians (both ends)	N/A			8,780	3,450	-61	One block from half closure
H St (W of 23rd St)	Circle	39	34	-13	8,460	3,760	-56	Four blocks from half closure
H St (W of 20th St)	Half closure	N/A			7,610	3,030	-60	Three blocks away
H St (W of 17th St)	Half closure	35	28	-20	8,400	730	-91	Same block
I St (E of 27th St)	Split medians	N/A			2,400	3,300	38	Both ends
I St (E of 25th St)	Circles	25	31	24	N/A			
San Diego, CA								
Marlborough Dr	Center island narrowing	33	29	-12	3,500	2,800	-20	
Armour St	12' humps	N/A			525	350	-33	Part of neighborhood treatment using humps on five streets - two experienced reduced traffic volumes, three increases - overall, traffic fell from 3,295 to 2,850 vehicles per day
Caledonia St	12' humps	N/A			215	240	12	
Dellwood St	12' humps	N/A			1,065	1,260	18	
Kirkcaldy Dr	12' humps	N/A			1,350	820	-39	
Lochlomond St	12' humps	N/A			140	180	29	
Aquarius Dr	12' humps and turn restrictions	38	25	-34	5,939	3,254	-45	Humps may be removed due to traffic diversion to local streets - prompted moratorium
Avenida Del Gato	12' humps	38	25	-34	2,956	1,248	-58	
Bootes St	12' humps	36	30	-17	5,714	4,659	-18	
Capicorn Way (Camino Ruiz and Orion Way)	12' humps	34	25	-26	6,866	6,864	0	No good alternate route
Capicorn Way (between Orion Way and Black Mountain Rd)	12' humps	36	25	-31	11,544	11,043	-4	No good alternate route
Libra Dr	12' humps	38	27	-29	5,578	2,656	-52	

Community/Location	Measure	85th Percentile Speed (mph)			Volumes (vehicles/day)			Comments
		Before	After	% Change	Before	After	% Change	
San Diego, CA (continued)								
Twain Ave/50th St	12' humps	38	26	-32	3,700	1,310	-65	Diversion to local streets - replaced with all-way stops
Linda Rosa	12' humps	N/A			3,600	1,700	-53	Removed due to diversion to local streets
San Jose, CA								
San Fernando St	Half closure and forced turn island	N/A			3,870	2,570	-34	Part of a neighborhood-wide treatment using diverters, median chokers, and all-way stops
San Carlos St	Median chokers	N/A			2,150	2,160	0	
William St	Median chokers	34	32	-6	6,150	5,040	-18	
17th St	Diverter/closure	N/A			5,300	1,200	-77	
Dana Ave	Median choker and 3-way stop	N/A			5,290	4,140	-22	Part of a neighborhood-wide treatment using chokers, circles, a closure, 3- and 4-way stops, and turn restrictions
Hanchett Ave	Median barrier	N/A			2,770	1,490	-46	
Martin Ave (E of Park Ave)	Circle and 4-way stop	N/A			800	800	0	
Martin Ave (W of Alameda)	Median choker and circle	N/A			850	880	4	
Shasta Ave	Median choker	N/A			7,220	6,210	-14	
Cinderella Ln	12' humps	32	22	-31	N/A			
El Cajon Dr	12' humps	36	26	-28	N/A			
Miami Dr	12' humps	33	20	-39	N/A			
Sarasota, FL								
Bahia Vista St.	12' humps	N/A			4,780	3,256	-32	Spot treatments
Prospect St	12' humps	29	21	-27	521	316	-39	Spot treatments
Arlington St	12' humps	33	25	-24	502	422	-16	Spot treatments
Waldemere St	12' humps	34	25	-26	640	579	-10	Spot treatments
Floyd St	12' humps	31	24	-22	525	428	-18	Spot treatments
McClellan Pk	22' tables	42	25	-41	9,147	7,216	-21	Spot treatments
N. Adams Dr	12' humps	35	28	-20	1,312	647	-51	Spot treatments
N. Washington Dr	12' humps	30	25	-17	3,891	1,473	-62	Spot treatments
Irving St	Semi-diverter	38	23	-39	224	92	-59	Spot treatments same block
Seattle, WA								
E. Prospect St	Diagonal diverter	N/A			970	270	-72	Subarea treatment with circles same block
E. Prospect St	Diagonal diverter	N/A			1,000	140	-86	Two blocks away
16th Ave E	Diagonal diverter	N/A			860	360	-58	Same block
16th Ave E	Diagonal diverter	N/A			360	310	-14	One block away

Community/Location	Measure	85th Percentile Speed (mph)			Volumes (vehicles/day)			Comments
		Before	After	% Change	Before	After	% Change	
Seattle, WA (continued)								
E. Highland St	Diagonal diverter	N/A			840	390	-54	Two blocks away
E. Highland St	Diagonal diverter	N/A			500	180	-64	Same block
18th Ave E	Diagonal diverter	N/A			500	280	-44	One block away
18th Ave E	Diagonal diverter	N/A			530	320	-40	Same block
17th Ave E (N of E. Aloha St)	Half closure	N/A			560	380	-32	Same block
17th Ave E (S of E. Galer St)	Half closure	N/A			290	200	-31	Same block
Fairview Ave E	Closure	16	13	-19	1,980	850	-57	Temporary closure removed - same block
Fairview Ave E	Closure	20	17	-15	1,540	1,080	-30	Temporary closure removed - two blocks away
28th Ave E	Closure	N/A			4,490	1,250	-72	Four blocks away - temporary closure made permanent - combined with turn restrictions
NE 98th St	Half closure same block	N/A			1,030	390	-62	Neighborhood-wide treatment across from Northgate Mall
NE 98th St	Half closure	N/A			1,000	650	-35	One block away
NE 100th St	Half closure	N/A			660	390	-41	Same block
NE 100th St	Half closure	N/A			320	470	47	One block away
NE 102nd St	Closure	N/A			490	140	-71	Same block
NE 102nd St	Closure	N/A			360	400	11	One block away
NE 103rd St	Half closure	N/A			3,770	1,830	-51	Same block
NE 103rd St	Half closure	N/A			570	260	-54	One block away
E. Republican St (E of 15th Ave)	Diagonal diverter	N/A			1,576	1,248	-21	Part of subarea treatment one block away
E. Republican St (W of 19th Ave)	Diagonal diverter	N/A			881	377	-57	One block away
17th Ave E	Diagonal diverter	N/A			255	488	91	Two blocks away
17th Ave E	Diagonal diverter	N/A			554	542	-2	One block away
E. Mercer St	Closure	N/A			898	894	0	Two blocks away
E. Mercer St	Closure	N/A			467	312	-33	One block away
E. Harrison St	Star diverter	N/A			1,135	1,113	-2	Same block
16th Ave E	Star diverter	N/A			1,112	1,090	-2	Same block
E. Roy St	Star diverter	N/A			422	310	-27	Same block
18th Ave E	Star diverter	N/A			611	581	-5	Same block

Community/Location	Measure	85th Percentile Speed (mph)			Volumes (vehicles/day)			Comments
		Before	After	% Change	Before	After	% Change	
Seattle, WA (continued)								
E. Jefferson (E of 28th Ave)	Diagonal diverter	N/A			430	417	-3	Part of subarea treatment using two diagonal diverters and four traffic circles - data collected one block away (illustrates the odd results one can get with an areawide treatment)
E. Jefferson (W of 32nd Ave)	Diagonal diverter	N/A			165	186	13	
30th Ave	Diagonal diverter	N/A			500	279	-44	
E. Adler St	Diagonal diverter same block	N/A			80	150	88	
NW 55th St	One-lane chicane	31	27	-13	1,900	1,300	-32	Speed outside chicane; 85th percentile inside = 19 mph
NW 56th St	One-lane chicane	30	24	-20	1,380	790	-43	Speed outside chicane; 85th percentile inside = 20 mph
NW 52nd St	Circle	N/A			330	380	15	Neighborhood treatment one block away
Palmer Dr NW	Half closure	N/A			300	150	-50	Same block
Tucson, AZ								
San Carlos Rd (#1)	12' humps	34	28	-18	381	354	-7	Measurements at midblock locations
San Carlos Rd (#2)	12' humps	40	26	-35	278	195	-30	
San Carlos Rd (#3)	12' humps	30	26	-13	48	46	-4	
Gollob Rd	12' humps	39	27	-31	1,237	1,001	-19	
Vista Del Rio	12' humps	N/A			2,071	1,954	-6	
Desert Arbors St	12' humps	39	29	-26	N/A			
Pantano Rd	12' humps	39	33	-15	883	876	-1	
Camino-Miramonte (#1)	12' humps	33	21	-36	1,032	899	-13	
Camino-Miramonte (#2)	12' humps	30	23	-23	475	511	8	
Sahuara Ave (N of Grant)	12' humps	45	29	-36	2,550	1,882	-26	
Copper St	12' humps	30	29	-3	615	700	14	
Water St	12' humps	35	24	-31	891	756	-15	
Chantilly Dr	12' humps	32	26	-19	1,172	1,130	-4	
North St	12' humps	33	24	-27	600	525	-13	
Cottonwood Ln	12' humps	35	23	-34	550	654	19	
Wilshire Dr (N)	12' humps	30	27	-10	796	649	-18	
Wilshire Dr (S)	12' humps	36	23	-36	327	254	-22	
Golob/Fifth St (#1)	12' humps	35	27	-23	1,273	1,544	21	
Golob/Fifth St (#2)	12' humps	36	25	-31	1,136	968	-15	
Booium St	12' humps	26	20	-23	367	171	-53	

Community/Location	Measure	85th Percentile Speed (mph)			Volumes (vehicles/day)			Comments
		Before	After	% Change	Before	After	% Change	
Tucson, AZ (continued)								
Alamo Pl	12' humps	35	28	-20	783	435	-44	Measurements at midblock locations
Jones Blvd	12' humps	36	25	-31	1,972	1,687	-14	
Avenida Ricardo Small	12' humps	36	27	-25	899	504	-44	
Hampton St	12' humps	35	22	-37	343	224	-35	
Pima St	12' humps	37	27	-27	1,859	1,648	-11	
Fremming Ave	12' humps	32	27	-16	843	750	-11	
Koralee/Langley/Cooper (#1)	12' humps	33	24	-27	1,886	1,686	-11	
Koralee/Langley/Cooper (#2)	12' humps	30	22	-27	1,075	548	-49	
Sahuara Ave (between Pima & Grant)	12' humps	39	28	-28	1,021	838	-18	
Calle Mecedora	12' humps	33	27	-18	604	758	26	
18th St	12' humps	37	28	-24	859	829	-4	
La Jolla Circle	12' humps	33	28	-15	960	829	-14	
W Fort Lowell Rd	12' humps	36	27	-25	1,314	1,009	-23	
Emily Dr	12' humps	32	25	-22	1,459	1,165	-20	
Stella Rd	12' humps	32	25	-22	638	514	-19	
Giovanna Dr	12' humps	27	25	-7	572	496	-13	
Langley Ave-Kingston Dr (#1)	12' humps	33	24	-27	1,668	1,554	-7	
Langley Ave-Kingston Dr (#2)	12' humps	30	27	-10	2,008	1,876	-7	
Langley Ave-Kingston Dr (#3)	12' humps	30	21	-30	926	996	8	
Terra Del Sol (#1)	12' humps	36	27	-25	1,132	936	-17	
Terra Del Sol (#2)	12' humps	31	27	-13	1,693	1,277	-25	
Terra Del Sol (#3)	12' humps	35	26	-26	1,498	1,489	-1	
Terra Del Sol (#4)	12' humps	32	23	-28	932	1,039	12	
Grady Ave	12' humps	40	29	-27	2,969	2,239	-25	
Campbell Ave (between 31st and 34th)	12' humps	38	24	-37	4,208	2,577	-39	
E 7th St	12' humps	33	19	-42	485	494	2	
Dogwood Ave	12' humps	32	20	-38	1,369	620	-55	
Whittier St	12' humps	26	27	4	731	725	-1	
Van Buren Ave	12' humps	33	27	-18	891	823	-8	
Rosemont West (#1)	12' humps	32	21	-34	325	340	5	
Rosemont West (#2)	12' humps	34	27	-21	895	760	-15	

Community/Location	Measure	85th Percentile Speed (mph)			Volumes (vehicles/day)			Comments
		Before	After	% Change	Before	After	% Change	
Tucson, AZ (continued)								
Seneca St	12' humps	32	27	-16	821	879	7	
Copper St	12' humps	32	27	-16	399	290	-27	
San Fernando Ave	12' humps	28	20	-29	274	175	-36	
Corona Rd	12' humps	32	27	-17	1,619	976	-40	
Eric St	12' humps	31	27	-16	1,524	1,078	-29	
Jessica Ave	12' humps	31	23	-26	1,022	883	-14	
Calle Altar	12' humps	N/A			522	511	-2	
Fontana Ave (#1)	Circle	35	27	-23	2,211	1,837	-17	
Fontana Ave (#2)	Circle	30	27	-10	1,168	1,193	2	
Estrella Ave (#1)	Circle	33	25	-24	861	817	-5	
Estrella Ave (#2)	Circle	27	27	0	546	604	11	
Blacklidge Dr (#1)	Circle	35	32	-9	1,069	865	-19	
Blacklidge Dr (#2)	Circles	33	32	-3	1,070	882	-18	
Kelso St (#1)	Circles	29	27	-7	706	605	-14	
Kelso St (#2)	Circles	32	29	-9	884	972	10	
Cooper St	Circle	30	26	-13	343	551	61	
Longfellow St	Circle	33	28	-15	240	278	16	
Elm St	Raised crosswalk, chokers, and center islands	N/A			4,258	4,535	7	
Camino del Norte (#1)	Circles	N/A			717	668	-7	
Camino del Norte (#2)	12' humps and circles	N/A			750	546	-27	
Beaverton, OR								
SW 155th Ave (S of SW Nightingale Ct)	12' humps 22' table	37	27	-27				Also had center islands
SW 155th Ave (N of Sexton Mountain Dr)	30' speed hump, raised intersections	40	34	-15				Also had curb extensions and center islands
Hart Rd (at 142nd Ave)	22' speed tables with chokers	33	28	-15				
Hart Rd (at Hart Pl)	22' speed tables with chokers	32	29	-9				
Hart Rd (W of 130th Ave)	22' speed tables with chokers	34	30	-12				
Boca Raton, FL								
NW 3rd Ave	Circle and midblock deflector islands	39	34	-13	1,850	1,300	-30	Part of temporary neighborhood treatment also involving humps

Community/Location	Measure	85th Percentile Speed (mph)			Volumes (vehicles/day)			Comments
		Before	After	% Change	Before	After	% Change	
Boca Raton, FL (continued)								
NW 3rd Ave (N of Spanish River)	12' humps	39	35	-10	1,850	1,300	-30	Part of permanent neighborhood treatment involving humps, circles, and center islands
NW 3rd Ave (S of Yamato Rd)	12' humps	N/A			1,500	1,350	-10	
NW 5th Ave	12' humps	34	31	-9	1,300	750	-42	
NW 4th Ave	Half closure	N/A			1,800	300	-83	
NW 45th St	Circle	N/A			600	600	0	
Cambridge, MA								
Berkshire St	Raised intersection, raised crosswalk, chicane, and neckdowns	30	21	-30	N/A			Also report speed at slow points - part of subarea treatment involving two intersecting streets
Kirkland, WA								
126th Ave NE	12' humps	34	26	-24	950	845	-11	
NE 112th St (W of 132nd Ave)	12' humps	32	24	-25	440	436	-1	
NE 113th St	12' humps	34	24	-30	1,500	1,200	-20	
NE 104th St	12' humps	35	27	-23	1,200	600	-50	
111th Ave NE	12' humps	33	24	-27	770	714	-7	
Slater St	12' humps	32	25	-22	300	314	5	
128th Ave NE	14' humps	35	28	-20	1,400	1,313	-6	
NE 90th St	14' humps	34	25	-26	423	528	25	
NE 112th St (E of 112th Ave)	22' tables	35	27	-23	2,117	2,007	-5	
NE 73rd St	Circles	33	27	-18	400	275	-31	
Las Vegas, NV*								
Langtry Dr	12' humps	29	23	-21	238	191	-20%	
Clarice Ave	12' humps	38	26	-32	3,047	3,316	9%	
Campbell Dr	12' humps	N/A			4,521	2,283	-50%	
Bonanza Rd	12' humps	34	27	-21	3,006	3,150	5%	
Avalon Ave	12' humps	38	22	-42	3,455	2,040	-41%	
Pyramid Dr	12' humps	29	23	-21	N/A			
Minneapolis, MN								
Douglas Ave	32' tables	33	29	-12	2,886	3,476	20	Between Fremont and Girard
Douglas Ave	32' tables	31	31	0	1,283	1,960	53	Between James and Knox
Vincent Ave (S and W 43rd St)	Circle	N/A			2,722	2,245	-18	

* S. Datta and T.K. Datta, "Humps—A Speed Reduction Strategy in Local Streets," in *Transportation and Sustainable Communities* (Resource Papers for the 1997 ITE International Conference, Tampa, FL), Institute of Transportation Engineers, Washington, DC, 1997, pp. 91–95.

Community/Location	Measure	85th Percentile Speed (mph)			Volumes (vehicles/day)			Comments
		Before	After	% Change	Before	After	% Change	
Naples, FL								
7th Ave N	Circles	33	26	-21	N/A			30% initial volume reduction considered unrepresentative of long-term impact
Orlando, FL								
Briarcliff Dr (E of Delaney Ave)	107' table	36	36	0	9,901	4,250	-57	Part of street-long treatment using 11 speed tables - average of eastbound and westbound speeds - February 1992 before, August 1994 after
Briarcliff Dr (at Summerlin)	61' and 81' tables	34	32	-6	8,329	4,747	-43	
Briarcliff Dr (at Mills)	61' and 97' tables	33	31	-6	9,703	5,444	-44	
Briarcliff Dr (W of Ferncreek)	62' and 102' tables	35	30	-14	9,916	4,904	-51	
Tampa, FL								
Oklahoma Ave	12' humps	40	32	-20	2,900	1,650	-43	
Manhattan Ave	12' humps	38	30	-21	2,360	1,930	-18	
Parkland Blvd	12' humps	40	28	-30	1,960	1,320	-33	
Azeele St	12' humps	42	33	-21	3,260	2,650	-19	
Cleveland St	12' humps	40	34	-15	1,890	1,220	-35	
Palm Dr	Closure one block away	N/A			1,962	1,116	-43	Temporary closure removed due to diversion
Thousand Oaks, CA*								
Kelly Rd	12' humps	43	32	-26	N/A			4" high hump
Silas Ave (initial)	12' humps	38	34	-11	N/A			3" high hump
Silas Ave (final)	12' humps	38	27	-29	N/A			3" high hump
Cindy Ave	12' humps	27	23	-15	N/A			3" high hump

* J.P. Clement, "Speed Humps and the Thousand Oaks Experience," *ITE Journal*, Vol. 53, January 1983, pp. 35-39.

Community/Location	Measure	Spacing (feet)	Before Speed (mph)	After Speed at Midpoint (mph)
Austin, TX				
Richcreek Rd	12' humps	431	37	30
Pasadena Dr	12' humps	334	36	31
Aspen Creek Pkwy	12' humps	257	38	26
Woodland Ave	12' humps	238	40	28
Roundup Tr	12' humps	365	39	31
Cedar St or Ave	22' tables (parabolic)	445	35	28
Broad Oaks Dr	22' tables (parabolic)	405	40	31
Sunstrip Dr	22' tables (parabolic)	290	37	28
Rockpoint Dr	22' tables (parabolic)	272	36	30
Beaverton, OR				
Hart Rd (at 142nd Ave)	22' tables (parabolic)	500	33	28
Hart Rd (at Hart Pl)	22' tables (parabolic)	390	32	29
Hart Rd (W of 130th Ave)	22' tables (parabolic)	435	34	30
Bellevue, WA				
Somerset (#1-#2)	12' humps	340	37-40 (37 shown)	28
Highland (#1-#2)	12' humps	923	30-36	27
Highland (#2-#3)	12' humps	218	36	27
SE 63rd (#1-#2)	12' humps	578	32-34	26
SE 63rd (#2-#3)	12' humps	509	36	30
166th/162nd SE (#1-#2)	12' humps	613	34-37 (37 shown)	27
166th/162nd SE (#2-#3)	12' humps	960	34-37 (37 shown)	27-32
166th/162nd SE (#3-#4)	12' humps	584	34-37 (37 shown)	29
NE 39th Ave (#1-#2)	12' humps	404	39	25
108th Ave SE (#1-#2)	22' tables (parabolic)	930	35	29
108th Ave SE (#2-#3)	22' tables (parabolic)	1,410	34	31
108th Ave SE (#3-#4)	22' tables (parabolic)	1,040	35	31
Ft. Lauderdale, FL				
SE 7th St	22' tables (parabolic)	625	36	32
SE 9th St	22' tables (parabolic)	538	36	31
SE 11th St	22' tables (parabolic)	437	38	29
SE 11th Ct (E of SE 9th Ave)	22' tables (parabolic)	626	37	33
SE 11th Ct (W of SE 9th Ave)	22' tables (parabolic)	372	36	31

Community/Location	Measure	Spacing (feet)	Before Speed (mph)	After Speed at Midpoint (mph)
Gwinnett County, GA				
Rocky Rd	22' tables (trapezoidal)	619	36	30
Wakefield St	22' tables (trapezoidal)	439	38	29
Gwinn Oaks Dr	22' tables (trapezoidal)	483	35	26
Simpson Mill Ln	22' tables (trapezoidal)	451	36	30
Oak Leaf Tr	22' tables (trapezoidal)	447	37	27
Trotters Ridge	22' tables (trapezoidal)	704	40	34
Valley Rd	22' tables (trapezoidal)	517	38	26
Grandeus Ln	22' tables (trapezoidal)	453	38	30
Rosedale Rd	22' tables (trapezoidal)	364	38	29
Hillcrest Dr	22' tables (trapezoidal)	472	37	30
Waterford Park Dr	22' tables (trapezoidal)	294	38	28
Jane Rd	22' tables (trapezoidal)	387	36	28
Fitzpatrick Way	22' tables (trapezoidal)	412	39	30
Weston Dr	22' tables (trapezoidal)	395	37	27
Clearwater Dr	22' tables (trapezoidal)	594	41	30
Howard County, MD				
Baltimore Ave	22' tables (trapezoidal)	450	38	28
Kirkland, WA				
128th Ave NE	14' humps	373	36	28
NE 90th St	14' humps	356	34	25
NE 112th St	22' tables (parabolic)	290	35	27
Montgomery County, MD				
Durbin Rd	12' humps	265	33	25
Phoenix, AZ				
Clarendon Ave	12' hump	375	35	26
Portland, OR				
NW Cornell Rd	22' tables (parabolic)	310	34	30
SE 67th Ave	14' humps	432-375	29	24
N Bryant St	14' humps	400	32	24
Tampa, FL				
Oklahoma	12' humps	700	40	32
Manhattan	12' humps	300	38	30
Parkland	12' humps	560	40	28
Azeele	12' humps	590	42	33
Cleveland	12' humps	680	40	34

Community/Location	Measures	Accidents			Volume	Comments
		Before	After	% Change	% Change	
Boulder, CO						
Arapahoe Ave	Circles	0	1	+ undefined	-4	Intersection accidents only - 1994 vs. 1996
Maxwell and 6th St	Circle	1	0	-100		Intersection accidents only - 1994 vs. 1996
Evergreen and 9th St	Circles	2	0	-100	-41	Intersection accidents only - 1992/1993 vs. 1995/1996
Balsam Ave	Circles	2	0	-100	-24	Intersection accidents only - 1994 vs. 1996
Pine St	Circles	6	12	100	-16	Intersection accidents only - 1994 vs. 1996
Dayton, OH						
Five Oaks Ave (between Richmond & Old Orchard)	12' humps	4	2	-50		Closure at one end and STOP sign at other
Harvard Blvd	12' humps	8	10	25	-12	Annualized based on half of 1992 compared to half of 1993
Homewood Ave (between Old Orchard & Forest Ave)	12' hump	0	0	0	-46	
Richmond Ave (between Five Oaks & Delaware Ave)	12' humps	10	0	-100		Closure at one end and STOP sign at other
Howard County, MD						
Baltimore Ave	12' humps	2.4	.4	-83		Average Annual based on 8 years before installation and 8 years after installation
Eliots Oak Rd	22' tables	5.7	1.7	-70	-5, -19	Average Annual (3 years before and after)
Herperus Dr	22' tables	3.7	1	-73	-20, -22	Over 3 years
Montgomery County, MD						
Notley Rd	12' humps	0	0	0	-37	One year before installation compared to most recent 12 months
Aberdeen Rd	12' humps	0	0	0	-44	
Shorefield Rd	12' humps	3	2	-33	-23	
Westbard Ave	12' humps	0	1	+ undefined	-7	
Thayer Ave	12' humps	5	4	-20	-9	
Burdette Rd	12' humps	1	1	0	-17	
Lilly Stone Dr	12' humps	0	0	0	-38	
Northwest Dr	12' humps	0	0	0	-72	

Community/Location	Measures	Accidents			Volume	Comments
		Before	After	% Change	% Change	
Montgomery County, MD (continued)						
Stapleford Hall Dr	12' humps	1	0	-100	-21	
Briardale Rd	12' humps	1	0	-100	-12	
George Washington Dr	12' humps	0	0	0	-13	
Mill Creek Dr	12' humps	1	0	-100	-46	
Wayfarer Rd	12' humps	1	0	-100	-52	
Hermitage Rd	12' humps	2	0	-100	-35	
Overlea Dr	12' humps	0	1	+	-56	
				undefined		
Bel Pre Rd	22' tables	6	4	-33	1	
Morningwood Dr	22' tables	3	0	-100	-27	
Brickyard Rd	Circle	4	2	-50	-39	
Sugarbush Ln	Circle	1	0	-100	-11	
Notley Rd	Circle	6	4	-33	-43	
Cherry Valley Dr	Circle	4	2	-50	-49	
Omaha, NE						
32nd St	12' humps	3	6	100		Midblock accidents - same number of months before and after installation
Erskine St	12' humps	6	11	83		
Burke St (between 121st and 122nd St)	12' humps	7	4	-43		
Burke St (between 122nd and 123rd St)	12' humps	8	1	-88		
33rd St (between Mason and Pacific St)	12' humps	0	3	+		
				undefined		
33rd St (between Pacific St and Poppleton Ave)	12' humps	1	3	200		
50th St	12' humps	1	3	200		
55th St (between Pine and Hickory St)	12' humps	0	0	0		
55th St (between Hickory and Walnut Sts)	12' humps	0	0	0		
56th St (between Charles and Hamilton Sts)	12' humps	0	0	0		
56th St (between Franklin and Seward Sts)	12' humps	0	0	0		
76th St (between Burt and Webster Sts)	12' humps	0	1	+		
				undefined		
76th St (between Burt and Iazard Sts)	12' humps	0	0	0		
126th St	12' humps	0	1	+		
				undefined		
Nina St	12' humps	3	2	-33		

Community/Location	Measures	Accidents			Volume	Comments
		Before	After	% Change	% Change	
Omaha, NE (continued)						
Parkview Dr (between Grand Ave and Saratoga St)	12' humps	0	1	+		
Parkview Dr (at Larimore Ave)	12' humps	0	0	0		
Parkview Dr (between Sahler and Sprague Sts)	12' humps	1	1	0		
Redick Ave (between Minne Lusa Blvd and 28th Ave)	12' humps	0	3	+		
Portland, OR						
NE 7th Ave	Circles	18.3	10	-45	-15	Average Annual (36 months before and after)
SE Clinton St (#1)	Circles	33.5	26.8	-20	-17	Average Annual (52 months before and after)
SE Clinton St (#2)	Circles	8.1	4.6	-43	-43	Average annual based on 52 months
NE Holman St	Circles	4.9	4.7	-4	-21	Average annual based on 74 months
NE 1st Ave	Circles	1.8	1.6	-11	0	Average annual based on 61 months
NE 24th Ave	Circles	3.7	1.2	-68	-9	Average annual based on 61 months
NW 25th Ave	Circles	3.9	1.9	-51	-17	Average annual based on 76 months
NW Raleigh St	Circles	0	.2	+	-29	Average annual based on 76 months
NW Cornell Rd	22' tables	.4	.8	100	-1	Average annual based on 29 months
NE 15th Ave (#1)	22' tables	12.8	6.4	-50	-20	Average annual based on 15 months
NE 15th Ave (#2)	22' tables	12.5	7.4	-41	-20	Average annual based on 26 months
SE Harold St	22' tables	9.6	8	-17	-39	Average annual based on 15 months
N Macrum St	14' humps	1.2	.9	-25	-23	Average annual based on 41 months
NE Pacific St	14' humps	2.9	3.2	10	0	Average annual based on 41 months
NE 108th Ave	14' humps	1.5	.9	-40	-9	Average annual based on 41 months
SE 55th Ave	14' humps	3.8	1.2	-68	-17	Average annual based on 41 months
SW Boones Ferry Rd	14' humps	12.4	6.9	-44	-62	Average annual based on 28 months
San Diego, CA						
Aquarius Dr	12' humps	1	0	-100	-45	Injury accidents - 1994 compared to 1995 - comparisons also on a million vehicle-mile basis
Avenida Del Gato	12' humps	2	0	-100	-58	
Bootes St	12' humps	2	0	-100	-18	
Capicorn Way	12' humps	13	8	-38		
Libra Dr	12' humps	0	1	+	-52	
San Jose, CA						
Cinderella Ln	12' humps	2.3	1.5	-35		Average annual based on 16 months
Seattle, WA						
1st Ave (76th and 77th Sts. NW)	Circle	3	1	-100		Intersection accidents only - calendar year before treatment compared to calendar year after treatment
11th Ave and 58th St NW	Circle	2	0	-100		
14th Ave E and Olive St	Circle	1	0	-100		
16th Ave and 55th St NE	Circle	1	0	-100		

Community/Location	Measures	Accidents			Volume	Comments
		Before	After	% Change	% Change	
Seattle, WA (continued)						
17th Ave and Trenton St SW	Circle	1	0	-100		Intersection accidents only - calendar year before treatment compared to calendar year after treatment
18th Ave and 87th St NW	Circle	0	0	0		
18th Ave and Brandon St SW	Circle	2	0	-100		
22nd Ave and 75th St NW	Circle	4	0	-100		
27th Ave E and Fir St	Circle	1	0	-100		
27th Ave E and Pike St	Circle	0	1	undefined		
32nd Ave and Othello St SW	Circle	2	0	-100		
35th Ave and 140th St NE	Circle	1	0	-100		
39th Ave and Lucile St S	Circle	2	0	-100		
39th Ave and Charlestown St SW	Circle	1	0	-100		
40th Ave and Dawson St SW	Circle	2	0	-100		
46th Ave and Alaska St S	Circle	1	0	-100		
49th Ave and Oregon St S	Circle	1	0	-100		
56th Ave and 58th St NE	Circle	0	0	0		
9th Ave and 56th St NW	Circle	0	0	0		
Densmore Ave and 47th St N	Circle	4	0	-100		
Keystone Pl and 51st St N	Circle	3	1	-100		
Linden Ave and 87 St N	Circle	1	1	0		
Minor Ave and Union St	Circle	1	0	-100		
North Park Ave & 109 St N	Circle	1	0	-100		
Phinney Ave and 112 St N	Circle	0	0	0		
Phinney Ave and 42 St N	Circle	2	0	-100		
Sunnyside Ave and 42nd St	Circle	1	0	-100		
Whitman Ave and 47th St	Circle	2	0	-100		
1st Ave and 127th St NW	Circle	2	0	-100		
1st Ave and 95th St NW	Circle	1	0	-100		
12th Ave and 90th St NW	Circle	3	0	-100		
12th Ave & Cloverdale St SW	Circle	1	0	-100		
14th Ave and 90th St NW	Circle	1	0	-100		
16th Ave and Howell St E	Circle	3	2	-33		
17th Ave and Harrison St E	Circle	0	0	0		
17th Ave and 60th St NW	Circle	1	0	-100		
17th Ave and 83rd St NW	Circle	1	0	-100		
19th Ave and 107th St NE	Circle	1	0	-100		
30th Ave & Henderson St SW	Circle	4	0	-100		
34th Ave and 57th St NW	Circle	0	0	0		
37th Ave and Dakota St S	Circle	4	0	-100		
37th Ave and Dakota St SW	Circle	1	0	-100		
38th Ave and 88th St NE	Circle	2	0	-100		

Community/Location	Measures	Accidents			Volume	Comments
		Before	After	% Change	% Change	
Seattle, WA (continued)						
4th Ave and 122nd St NW	Circle	1	0	-100		Intersection accidents only - calendar year before treatment compared to calendar year after treatment
41st Ave and Findlay St SW	Circle	1	0	-100		
44th Ave and Hinds St SW	Circle	7	0	-100		
5th Ave and Prospect St N	Circle	4	0	-100		
5th Ave and 70th St NW	Circle	2	0	-100		
6th Ave and 73rd St NW	Circle	2	0	-100		
6th Ave (81st & 82nd St NW)	Circles	4	0	-100		
8th Ave and 115th NE	Circle	0	0	0		
Ashworth Ave & 107th St N	Circle	2	0	-100		
Dayton Ave and 78th St N	Circle	2	0	-100		
Densmore Ave 103rd St N	Circle	3	0	-100		
Densmore Ave and 46th St N	Circle	2	0	-100		
Fremont Ave and 78th St N	Circle	1	0	-100		
Greenwood Ave & 45th St N	Circle	1	0	-100		
Interlake Ave and 107th St N	Circle	3	0	-100		
1st Ave and 52nd St NE	Circle	0	0	-100		Intersection accidents only - calendar year before treatment (1991) compared to calendar year after treatment
10th Ave and Rose St S	Circle	0	0	0		
11th Ave and Armour St W	Circle	0	0	0		
13th Ave and 90th St NW	Circle	1	0	-100		
14th Ave and Hanford St S	Circle	1	0	-100		
17th Ave and 107th St NE	Circle	0	0	-100		
17th Ave and 75th St NW	Circle	2	1	-50		
2nd Ave and 67th St NW	Circle	4	0	-100		
20th Ave and Fir St E	Circle	1	0	-100		
29th Ave & Washington St S	Circle	1	0	-100		
30th Ave and 94th St NE	Circle	1	0	-100		
30th Ave and Walker St S	Circle	1	0	-100		
36th Ave & Cambridge St SW	Circle	1	0	-100		
4th Ave and 44th St NE	Circle	0	0	0		
4th Ave and 62nd St NW	Circle	2	0	-100		
40th Ave and 120th St NE	Circle	2	0	-100		
41st Ave and Juneau St SW	Circle	1	0	-100		
44th Ave and Dakota St SW	Circle	2	0	-100		
46th Ave and Dawson St S	Circle	1	0	-100		
Ashworth Ave & 135th St N	Circle	1	0	-100		
Ashworth Ave & 36th St N	Circle	0	0	0		
Densmore Ave & 44th St N	Circle	1	0	-100		
Evanston Ave and 107th St N	Circle	2	0	-100		
Evanston Ave and 115th St N	Circle	1	0	-100		
Evanston Ave and 92nd St N	Circle	2	0	-100		
Fremont Ave and 67th St N	Circle	1	1	0		
Stone Ave and 103rd St N	Circle	5	0	-100		
Wallingford Ave & 51st St N	Circle	1	0	-100		

Community/Location	Measures	Accidents			Volume	Comments
		Before	After	% Change	% Change	
Seattle, WA (continued)						
1st Ave and 51st St NE	Circle	2	0	-100		Intersection accidents only - calendar year before treatment compared to calendar year after treatment
1st Ave and 110th St NW	Circle	1	0	-100		
14th Ave and Forest St S	Circle	2	0	-100		
14th Ave and Winthrop St S	Circle	0	0	0		
17th Ave and 61st NW	Circle	1	1	0		
22nd Ave and 58th St NW	Circle	1	0	-100		
23rd Pl and 135th St NE	Circle	1	0	-100		
25th Ave and Fir St E	Circle	2	0	-100		
25th Ave and Newton St E	Circle	3	0	-100		
30th Ave and 58th St NW	Circle	2	0	-100		
34th Ave and Holly St SW	Circle	1	0	-100		
38th Ave and 86th St NE	Circle	1	0	-100		
41st Ave and Garfield St E	Circle	3	0	-100		
42nd Ave and Hudson St S	Circle	2	1	-50		
42nd Ave and Genesee St SW	Circle	2	1	-50		
8th Ave and 120th St NE	Circle	1	0	-100		
8th Ave and 47th St NE	Circle	5	0	-100		
9th Ave and 67th St NW	Circle	1	0	-100		
Ashworth Ave and 97th St N	Circle	0	0	0		
Corliss Ave (42nd & 43rd St N)	Circle	4	0	-100		
Dayton Ave and 84th St N	Circle	0	0	0		
Densmore Ave and 97th St N	Circle	5	0	-100		
Division Ave and 67th St NW	Circle	2	0	-100		
Fremont Ave and 84th St N	Circle	4	0	-100		
Warren Ave and Fulton St N	Circle	1	0	-100		
Meridian Ave and 43rd St N	Circle	1	0	-100		
Ravenna Ave and 77th St NE	Circle	2	0	-100		
Tampa, FL						
Oklahoma Ave	12' humps	7.4	8.4	14	-43	Average annual reported accidents - does not adjust for lower volumes after humps installed - accident increase understated
Manhattan Ave	12' humps	4.7	11.7	149	-18	
Parkland Blvd	12' humps	8.0	5.8	-27	-33	
Azeele St	12' humps	11.3	5.6	-50	-19	
Cleveland St	12' humps	9.7	11.0	13	-35	

Community/Location	Programs	85th Percentile Speed (mph)			Volumes (vehicles/day)			Comments
		Before	After	% Change	Before	After	% Change	
Austin, TX								
Mesa Dr (6500 blk)	Strict speed enforcement	38	40	5	N/A			Speed "after" treatment is actually during or after
Mesa Dr (7200 blk)		39	38	-3	N/A			
Highland Tr		38	34	-11	N/A			
Powell Ln		39	39	0	N/A			
Lightsey Rd		43	38	-12	N/A			
Circle S Rd		41	38	-7	N/A			
Webberville Rd (1200 blk)		39	39	0	N/A			
Webberville Rd (1900 blk)		40	38	-5	N/A			
Boulder, CO								
N 26th St (between Iris and Kalmia)	High-enforcement zone	34	37	9	N/A			4 weeks after enforcement - more impact 2 weeks after
N 26th St (between Norwood and Agate)		37	37	0	N/A			
Baseline (between 13th and 14th)		34	34	0	N/A			
Baseline (between Grant and 8th)		37	37	0	N/A			
Phoenix, AZ								
71st Ave	Neighborhood speed watch	36	36	0	1,016	737	-27	Speeds tend to return to earlier levels
Campbell Ave (E of 71st Ave)		39	39	0	878	861	-2	
Campbell Ave (W of 71st Ave)		36	33	-8	940	970	3	
Utopia Rd		32	33	3	993	872	-12	Most violators nonlocal
24th St		41	40	-2	8,403	9,189	9	
San Jose, CA								
Townsend	Photo-radar speed enforcement	36	34	-6	N/A			Minimal traffic diversion
Yerba Buena Ave		39	39	0	N/A			
Kingman Ave		40	34	-15	N/A			
Eden Ave		38	37	-3	N/A			
Serenity Wy		37	37	0	N/A			
Kammerer		34	32	-6	N/A			

Community/Location	Programs	85th Percentile Speed (mph)			Volume (vehicles/day)			Comments
		Before	After	% Change	Before	After	% Change	
Boulder, CO								
9th St (N of Evergreen)	All-way stops	23	28	0	N/A			Midblock speeds
9th St (N of University)	All-way stops	33	33	0	N/A			
13th St	All-way stops	33	28	-15	N/A			
9th St (Pine to Mapleton)	Speed limit signs Crosswalk striping	32	31	-3	N/A			
Charlotte, NC								
Charter Pl (between Thistle Ct and Sonata Pl)	All-way stops	42	37	-12	2,000	2,100	5	Unwarranted stops 700' - 900' apart - posted speed of 25 mph; measurement taken immediately after; longer term volume impacts appear greater
Charter Pl (at Weber Ct)	All-way stops	35	33	-6	1,900	1,800	-5	
Ft. Lauderdale, FL								
SW 7th St	All-way stops	N/A			3,450	3,428	-1	Signal timing also altered to make cut-through route less attractive
SW 9th Ave	All-way stops	N/A			5,553	4,314	-22	
Gwinnett County, GA								
Brentford Lane (E of Hollybrook)	All-way stops	34	30	-12	N/A			Around midblock speeds
Brentford Lane (E of Brentforde)	All-way stops	33	27	-18	N/A			
Brentford Lane (E of Baniff Ct)	All-way stops	31	28	-10	N/A			
Phoenix, AZ								
Orangewood Ave	All-way stops	38	36	-5	890	917	3	Midblock measurement
35th St	Turn restrictions (peak hours only)	N/A			175	60	-66	Two blocks from a.m. turn restriction
Mercer Lane	Turn restrictions (peak hours only)	N/A			178	41	-77	One block from a.m. turn restrictions
37th St (same block as turn restriction)	Turn restriction (p.m. peak only)	N/A			171	86	-50	Some volume reduction due to diagonal diverter a couple blocks away
Grenada Rd (same block as turn restriction)	Turn restriction (p.m. peak only)	N/A			56	27	-52	Part of neighborhood-wide treatment
Palm Ln (same block as turn restriction)	Turn restriction (p.m. peak only)	N/A			10	16	60	
Holly St (same block as turn restriction)	Turn restriction (p.m. peak only)	N/A						
San Jose, CA								
San Antonio St	All-way stop	N/A			19	23	21	Same block as all-way stop
Tucson, AZ								
Meyer Ave	One-way street	21	18	-14	368	164	-55	(Conversion from 2-way)

Community/Location	Programs	85th Percentile Speed (mph)			Volumes (vehicles/day)			Comments
		Before	After	% Change	Before	After	% Change	
Eugene, OR								
W 18th Ave	Transverse markings at decreasing intervals	37	35	-5	N/A			Installed on dangerous curve - accident reduction reported
Howard County, MD								
Mayfield Ave	Transverse markings at decreasing intervals	43	38	-12	N/A			
Sebring Dr	Centerline striping	36	36	0	N/A			Double yellow
Allview Dr	Centerline striping	40	42	5	N/A			Double yellow
Ducketts La	Edge line narrowing	38	40	5	N/A			
Wheatfield Wy	Edge line narrowing	30	33	10	N/A			From 38' to 22' - no centerline
Orlando, FL								
Plaza Tr	Edge line narrowing	32*	33	3	N/A			From 14' to 9' lane width
South Lake Orlando Pkwy	Edge line narrowing	35*	35	0	N/A			From 18' to 9' lane width
San Antonio, TX								
Independence Ave (location A)	Edge line narrowing	35	35	0	N/A			From 21' to 13' lane width
Independence Ave (location B)		33	34	3	N/A			
Independence Ave (location C)		33	33	0	N/A			
Independence Ave (location D)		36	36	0	N/A			
Independence Ave (location E)		40	39	-3	N/A			
Independence Ave (location F)		38	39	3	N/A			

* Mean speeds

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