TRAFFIC POLICY #1

PEDESTRIAN CROSSWALKS

(Excluding school crosswalks and signalized intersections)

1.1_ Purpose

The purpose of a marked crosswalk is to indicate to the pedestrian a preferred route of travel to cross either a street or a complex intersection. The purpose of this policy is to establish minimum criteria for the installation of marked crosswalks so that they may provide the greatest possible benefit to both pedestrians and motorists.

1.2 General

In general, marked crosswalks have some of the following advantages and disadvantages:

a) Advantages:

- 1. May help pedestrians orient themselves and find their way across complex intersections.
- 2. May help show pedestrians the shortest route across traffic.
- 3. May help position pedestrians where they can be seen best by oncoming traffic.
- 4. May help utilize the presence of luminaries to improve pedestrian nighttime safety.
- 5. May help channelize and limit pedestrian traffic to specific locations.

b) Disadvantages:

- 1. May give pedestrians a false sense of security.
- 2. May lead pedestrians to believe that motorists can and will stop in all cases.
- 3. May cause an increase in rear-end and associated collisions due to pedestrians not waiting for gaps in traffic.

1.3 <u>Point System</u>

a) Pedestrian Volume:

		<u>Criterion</u>		Point Ass	Point Assignment		
				Pedestriar	Pedestrian Total Points		
		The total number of pedestrians crossing the street under study during the peak pedestrian hour. This includes pedestrians on both sides of an intersection. Crosswalks will not be installed where The ped. volume (peak ped. hr.) is 10 or less.		11 31 61 91 >1	10 0 -30 2 -60 4 -90 6 -1008 100 10 aximum 10		
ł	o)	General Conditions					
		1.	Will clarify and define pedestrian reacross complex intersections.	outes	2		
		 Will channelize pedestrians into a significantly shorter path. Will position pedestrians to be seen better by motorists. 		path. 2			
				s. 2			
		4.	Will expose pedestrian to fewer veh	icles.	2		
		5.	Engineering judgment, unusual con-		aximum $\frac{2}{10}$		
(c)	Gap Time (see worksheet)					
		Criteri	<u>ion</u>	Point Ass Average Number Gaps per 5-Minu	of <u>Poi</u>	<u>ints</u>	
		gaps e pedest	umber of unimpeded vehicle time equal to or exceeding the required crian crossing time in an average ninute period during peak vehicle hou	0-0.99 1-1.99 2-2.99 r. 3-3.99 4-4.99 5+ Maximum	1 10	8 6 4 2 0 0	

1.4 Policy

In order to be considered for a crosswalk, a location must rate at least 16 points on the Point System (Section 1.3). The location must also meet the following basic conditions:

- a) Crosswalks will not be installed where the pedestrian volume is less than 10 pedestrians per hour during peak pedestrian hours.
- b) If approved by the City Engineer, crosswalks installed on roadways where the 85th percentile speed exceeds 40 m.p.h. must have in-pavement flasher lights, raised medians, and other substantial safety improvements.
- c) Crosswalks will not be installed unless the motorist has an unrestricted view of all pedestrians at the proposed crosswalk location, for a distance not less than 200 feet approaching from each direction. Locations with restrictive views will require special attention.

TRAFFIC POLICY #2

SPEED LIMIT REGULATIONS

1.1_ Purpose

The intent of proper speed zoning is to reflect the behavior of the norm of the population and to control that segment of the population which behaves in an unreasonable manner. Generally, 85 percent of the motorists drive in a manner safe for prevailing road conditions. The intent of a speed zone will be to control that 15 percent of the motorists who drive unsafely for roadway conditions.

1.2 General

The City Traffic Engineer may post prima-facie 25 m.p.h. speed limit signs in low volume residential areas upon identification of speed related problems. On streets carrying an excess of 2000 vehicles per day, including arterial roads, collector streets, and residential collector streets, realistic speed limits must be established by action of the City Council following a Traffic Engineering Survey. The Traffic Engineering Survey shall include a review of roadway characteristics such as alignment, grade, and roadside development; existing traffic controls; prevailing vehicle speeds, pedestrian movements, and traffic volumes; and accident history. Generally the speed limit shall be established as close as practicable to the critical speed (85th percentile) at which motorists are using the roadway.

1.3 Policy

Streets which carry less than 2000 vehicles per day are adequately covered by the Nevada Motor Vehicle Law 484.361 "Basic Rule," which states: "It is unlawful for any person to drive or operate a vehicle of any kind or character at:

a) A rate of speed greater than is reasonable or proper, having due regard for the traffic, surface, and width of the highway.

- b) Such a rate of speed as to endanger the life, limb, or property of any person.
- c) A rate of speed greater than that posted by a public authority for the particular portion of highway being traversed.
- d) A rate of speed greater than the national maximum speed limit specified in section 114 of P.L. 93-643 (23 U.S.C.§ 154)."

Streets which carry less than 2000 vehicles per day shall not be speed zoned unless a special condition exists. On low volume streets, generally each motorist will determine the safe speed for the given condition and will not be hindered by other roadway traffic.

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TRAFFIC POLICY #3

CURB USE

1.1_ Purpose

The purpose of establishing curb use is to indicate to the motorist proper use of a curb zone. The purpose of this policy is to establish minimum criteria for curb zones so that they may provide the greatest possible benefit to both pedestrians and motorists.

1.2 General

In general, curb use shall be zoned based on parking occupancy and duration studies. Loading zones, bus/taxi zones, disabled zones, and time zones shall be determined based on the criteria outlined in this policy.

1.3 Policy

The following zones shall be established for curb use:

- a) Time Zones (1 hour 10 hours)
 - Time zones must be justified by a parking occupancy and duration study which indicates parking in the area is utilized 70 percent of the time, the duration exceeds the requested time limit by at least one hour, and the time zone can be shown to benefit the area.
- b) 30 Minute Zones
 - 30 minute zones are not intended to replace loading zones and shall be limited to locations adjacent to businesses which meet one of the following requirements:
 - 1. No off-street parking,
 - 2. The business demonstrates a demand for short term, high turnover parking,
 - 3. A traffic engineering parking study indicates the street parking approaches full utilization with a duration exceeding one hour.

c) Disabled Zones

Disabled parking shall be provided adjacent to public buildings and within all public parking facilities. The number of disabled spaces provided shall be as stated in the Reno Municipal Code Section 18.06.340(g)(2) and (3).

d) Hotel Zones

New valet services on public streets will not be permitted. Hotel zones shall be limited to the main hotel entrance and shall be of sufficient length to meet loading and unloading requirements, subject to approval of the Traffic Engineer.

e) Bus Zones

- 1. Bus zones are provided adjacent to hotels and casinos to meet the needs for passenger loading and unloading.
- 2. When properly marked, bus zones may be shared with taxis and/or commercial delivery vehicles. When the zones are shared, the priority use of the zones shall be as follows:

4:00 a.m 9:00 a.m.	Commercial Delivery
9:00 a.m 4:00 a.m.	Tour Buses (charter)

- 3. Taxis must vacate these zones until the loading activities are completed.
- 4. Bus zone requirements shall be determined by the Traffic Engineer based on weekly peak day bus arrivals, data provided by the applicant. The number of bus zones shall be determined from the following table:

Bus Arrivals	
(24 hours)*	Bus Zones
1 - 4	1
5 - 8	2
9 - 16	3
17 - 22	4
23 - 31	5
32 - 37	6
38 - 43	7

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44 - 51 8

* Inbound bus to disembark passengers, the return trip to pick passengers up included in the formula used to derive these bus zone requirements.

f) Loading Zones

- 1. Loading zones are provided to meet the needs of adjacent land uses to receive good and supplies. Whenever possible, loading zones shall be provided off-street.
- 2. The need for and number of loading zones provided at any location shall be determined by the Traffic Engineer.

TRAFFIC POLICY #4

TAXI ZONES

1.1_ Purpose

The purpose of this policy is to establish minimum criteria for taxi zones so that they may provide the greatest possible benefit to both pedestrians and motorists.

1.2 General

In general, taxi zones shall be established based on the minimum criteria defined in this policy.

1.3 Policy

The following criteria shall be used in establishing taxi zones:

- 1) Curb spaces shall be available for joint use by taxi and bus or commercial delivery vehicle loading whenever possible.
- 2) The priority of use for zones shared by taxis and buses or commercial vehicles shall be granted to buses or commercial vehicles. Taxis must vacate these zones until the loading activities are completed.
- 3) All zones available for taxi use are non-exclusive and shall be shared by all legally licensed taxi companies on a first arrival basis.
- 4) The number and location of taxi zones shall be determined by the city manager or his designated representative based on consideration of the interests of the taxi companies, adjacent land use, curb availability, and usage characteristics.

TRAFFIC POLICY #5

MEDIAN OPENINGS

1.1 General

The following warrants for median openings are established to facilitate traffic movement and promote traffic safety. Medians (center dividing strips) shall be constructed of physical substance, such as curbs, jiggle bars, or plant mix berms. Painted medians, median openings, and related left turn storage and acceleration lanes are not considered adequate.

1.2 <u>Major Streets</u>

Median openings will normally be permitted at all intersections with dedicated City streets except where such an opening will impair traffic movements. Midblock median openings or other openings with turns permitted into adjacent property will not normally be permitted unless all following conditions exist:

- The property to be served is a major traffic generator and has a continuing frontage of 1,200 feet or more along the major street between streets which intersect the major street from the side occupied by the property.
- 2) The median opening is not less than 600 feet from an intersection with an arterial or collector street.
- 3) The median opening is not less than 400 feet from an intersection with a local street.
- 4) The median opening is not less than 600 feet from any other existing or proposed midblock median opening.
- All costs such as base material, surfacing, safety lighting, traffic signals, reconstruction or utility relocation required by a midblock opening will be borne by the requesting party. The design of median openings shall be subject to the requirements and approval of the City Engineer and City Traffic Engineer.

1.3 <u>Divided Collector Street and Split Level Local Streets</u>

Median openings will normally be permitted at all intersections with dedicated City streets. Normally the spacing between median openings should be no more than 1,200 feet. Midblock median openings or other openings with turns permitted into adjacent property will not normally be permitted unless all the following conditions exist:

- a) The median opening is not less than 400 feet from an intersection with an arterial or collector street.
- b) The median opening is not less than 250 feet from any other intersecting street.
- c) The median opening is not less than 400 feet from any other existing or proposed midblock median opening.
- d) All costs of constructing the opening shall be borne by the developer or the petitioner. The design of median openings shall be subject to the requirements and approval of the City Engineer and the City Traffic Engineer.

1.4 Freeways and Expressways

- a) There shall be no median openings except as designed by the responsible governmental agency.
- b) There shall be no access to any existing or proposed ramp.



CITY OF RENO Policy of Traffic Calming

A. Introduction

Speeding violations are the number one complaint to the Reno Police Department. A primary goal at the City of Reno (City) is "to attain the highest quality of life possible for each resident." Accordingly, this policy defines the proper use of traffic calming alternatives on residential streets.

Residents concerned about speeding frequently request stop signs. However, the Federal Highway Administration developed warrants for the Manual on Uniform Traffic Control Devices (MUTCD) regarding stop signs. Studies show unwarranted stop signs cause accidents they are designed to prevent, breed contempt for other necessary stop signs, are responsible for millions of gallons of wasted fuel annually, create added noise and air pollution, and increase rather than decrease speeds between intersections. As a result, the City does not install stop signs for speed control purposes.

The existing City of Reno policy on traffic calming has been one way to address speeding in residential areas. However, speed humps cause damage to emergency equipment and increase emergency response times. Many residential streets are considered primary emergency vehicle routes (PEVR) by the fire department and speed humps cannot be utilized.

B. Statement of Purpose

This policy establishes traffic calming alternatives for reduction in vehicular speed without adversely affecting emergency vehicles. An approval procedure and evaluation methodology is included in this policy.

C. Request and Approval Procedures

- 1. City staff will determine if the street meets the City of Reno's basic criteria.
- 2. Petition for traffic calming (forms provided by the City), with signatures from at least 2/3 of residents with addresses on the street where traffic calming is desired must be submitted.
- 3. After receipt and verification of petition, staff will gather traffic data to determine if traffic calming is needed.
- 4. Fire Department approval of a traffic calming device shall be obtained by staff in writing prior to installation.
- 5. Staff will prioritize qualified streets for funding based on the ranking system described below. If residents wish to fund the traffic calming alternative, they must submit full payment on estimated cost before contract is sent out for bid.
- 6. Temporary devices approximating proposed traffic calming shall be installed and evaluated by staff for 3-4 months before permanent installation. Speed hump installation would be permanent.



CITY OF RENO Policy of Traffic Calming

D. Location Evaluation and Prioritization

1) Basic Criteria

- a. Street is classified as a minor collector or local street.
- b. 2/3 of the street frontage must be residential, park, and/or school.
- c. The posted speed limit is 30 mph or less.
- d. The longitudinal grade of the street does not adversely affect the motorist in going through the traffic calming device.

2) Operational Criteria

- a. Street is at least 1,000 feet long between all-way stop or traffic controlled intersections.
- b. Minimum 85th percentile speeds are 22 mph on a 15 mph street, 32 mph on a 25 mph street and 37 mph on a 30 mph speed limit street.
- c. Average daily traffic (ADT) of 4,000 vehicles a day or less.
- Priority ranking will be done annually on all petitions received (including previous years) using a point system. Streets under consideration will be investigated and data accumulated. Data collection includes a traffic count, speed survey, and measurement of street frontage by houses, schools, parks, playground, or multi-family dwellings.

Points will be awarded in the following manner:

- a. One point for every 50 vehicles traveling the street in a 24 hour study period.
- b. One point for each percentage point of traffic exceeding the posted speed limit and one-half point for each mile per hour speed differential between the posted speed limit and the 85th percentile speed.
- c. Two points for every residential unit fronting the street.
- d. One point for each 50 feet of school, park, playground, or apartment frontage.

E. Location Guidelines

- 1. The minimum distance from an intersection to a traffic calming device shall range from 0 to 200 feet.
- 2. Any traffic calming treatment shall be visible to oncoming traffic for at least the minimum safe stopping sight distance based on the 85th percentile speed.
- 3. Traffic calming shall take into account existing drainage features and bicycle facilities.
- 4. Where possible, devices shall be located to minimize impacts to on-street parking.
- 5. The following should apply where feasible:
 - a. Devices should be placed near street lights.
 - b. Related signage should be placed on property lines.
- 6. Diverters shall not be installed where traffic is likely to be rerouted to other residential streets.

Please call Traffic Engineering at 334-2264 with any questions for further explanation of the program.

Traffic Signal Controller Cabinet Specifications City of Reno

Contact Traffic Engineering, 334-2333, for the latest Traffic Signal Controller Cabinet Specifications.