

13. SPEED TABLES AND RAISED CROSSWALKS

<p>Speed tables and raised crosswalks are a gradual rise and fall in the pavement—typically to a maximum height of three inches over a distance of 22 feet in the direction of travel. The central 10-foot section of the table is flat. They may be used singly for a raised crosswalk, or in a series of two or more for the purpose of speed reduction. When used as a raised crosswalk, the table should extend all the way to the curb, possibly requiring new storm drainage construction, thus increasing cost considerably. Speed tables and humps usually taper down to street grade at the gutter, thus leaving the gutter open for normal drainage. The long length of speed tables allows long wheelbase vehicles to cross with substantially less jolting than with the 12-foot humps, permitting higher speeds. Their longer profile results in higher speeds across and between the devices compared to speed humps. Thus these devices may be used on collector streets where speeds are usually higher, and which may also be emergency vehicle and bus routes. Usually, speed tables and raised crosswalks are placed midblock, but a raised crosswalk may be permitted at an intersection under certain circumstances. Local examples: Terman Drive, Bryant Court (Palo Alto); Campus Drive between Quarry Road and Ross Way (Stanford); Stanford Avenue east of Junipero Serra (Stanford); Bay and Van Buren Roads between Willow Road and Ringwood Avenue (Menlo Park).</p>	
Traffic Volume	Because speed tables do not reduce speeds as much as speed humps, volume reduction (due to discomfort) and slower travel times are less. A series of speed tables will typically reduce volumes by about 10 percent. This minimal traffic diversion to other streets makes tables acceptable for use on collector streets.
Speed	Speed reduction depends on the spacing of tables. At the closest spacing of 200 feet, 85 th percentile speeds average about 30–33 mph between tables. 85 th percentile speeds at the tables themselves is reduced to about 25–30 mph. The less abrupt speed reduction of tables makes them acceptable for use on collector streets, where speeds are generally higher.
Noise, Air Quality, Energy Consumption	Slower speeds result in lower noise levels between tables. Noise levels at the tables themselves may increase due to braking, accelerating and bouncing of cargo in trucks. Minimal change in air quality and energy consumption.
Traffic Safety, Emergency Response	Speed tables have not caused safety problems or liability claims. Long wheelbase vehicles can more easily cross 22-foot tables than 12-foot humps, making them acceptable for use on collector streets. If speed tables were to proliferate on collector streets, this could eventually create a cumulative negative impact on emergency response times, restricting their further installation.
Aesthetics	Speed tables have nearly the same negative aesthetic impacts as speed humps, except that the flat portion of the table may be constructed with pavers or textured concrete. The choice of acceptable materials may be limited by the need to withstand the heavy vehicle loading that occurs due to the vertical deflection and heavier traffic loads on collector streets.
Maintenance	Every traffic calming device requires maintenance. In addition, speed tables interfere with street resurfacing and may have to be removed and replaced for such projects. Any special pavement treatment on top of speed tables may require more frequent and expensive maintenance than asphalt.
Approximate Cost	About \$5,000-\$8,000 per table when constructed of asphalt. Special textured pavement treatments on top of the table and/or the ramps can approximately double this cost. For raised crosswalks that extend across the gutters, an additional \$5000-\$10,000 per location would be required, depending on the extent of new storm sewer connections.
Other	The use of raised traffic calming measures on collector streets should be done with restraint, due to impacts on the response times of fire and paramedic services. The Fire Department may not permit the use of too many such measures because collector streets are part of the emergency response street network. Parking is allowed on and next to speed tables. Parking may be removed in advance of raised crosswalks for visibility purposes.

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