

SAFE SYSTEM CASE STUDY

Adopting Safe System tenets in Santa Rosa, CA

KEY TAKEAWAY: Santa Rosa institutionalized serious injury and fatality prevention at scale by shifting from project-by-project safety fixes to embedding Safe System principles across capital planning, street design and development review.

SAFETY LEVERS



Santa Rosa used its Capital Improvement Program (CIP), street design standards, speed management practices and development review processes to shift from fragmented, vehicle-oriented decision-making toward a more institutionalized Safe System approach. Rather than relying on isolated safety projects or enforcement, the city embedded safety priorities — particularly within its High Injury Network (HIN) — into routine planning, design and maintenance processes. These changes reflect an evolution from reactive, project-by-project fixes to systemic, self-enforcing design and policy alignment that supports Vision Zero outcomes across agencies and programs.



City of Santa Rosa

Santa Rosa went from approving siloed projects ...

... to following a cohesive strategy

Old capital investment planning process

The Capital Improvement Program (CIP) functioned as a collection of General Plan, Specific Plan, and one-off projects with no central mission. Individual projects sometimes conflicted with adopted safety policies.

Improved planning process

The CIP was updated to prioritize pavement maintenance and safety projects, especially within the HIN and transit network. Projects that were not explicitly aligned with Vision Zero and community priorities for safer streets were canceled or updated.

Santa Rosa went from focusing on vehicle capacity ...

... to prioritizing safety and access for all

Old development review and design standards

- Traditional impact analysis in development review focused on congestion, vehicle delay and capacity, often incentivizing vehicle-oriented development and higher crash risks.
- Design standards prioritized vehicle throughput and operational efficiency, often producing street geometries that encouraged higher driving speeds.

Improved development review and design standards

- Development assessments focus on safety outcomes, multimodal access and complete-street compatibility. Level-of-service requirements have been removed, although they may be requested by staff.
- Updated design standards default to self-enforcing safety features such as narrower lanes, curb extensions and raised crossings. This creates consistency and ensures utility and third-party projects restore streets to safer designs. Design waivers require justification to make streets *less* safe instead of *more* safe.

Santa Rosa went from high speed limits with limited enforcement ...

... to lower speed limits bolstered by design changes

Santa Rosa went from no cohesive plans for active transportation and transit ...

... to preparing for the future needs of walkers, cyclists and transit riders

Santa Rosa went from making isolated fixes ...

... to making fast, scalable changes

Traditional speed management

The previous state-required practices for setting speed limits resulted in higher, less survivable speeds. Police resources for enforcement were limited, and there were no available speed safety cameras or other automated tools.

New approach to speed management

Speed limits were reduced through aggressive application of a new state law allowing an additional 5 mph reduction, particularly on the HIN. Physical design changes made the new limits self-enforcing. Core commercial areas are now signed at 20 mph, and will be regularly evaluated for further speed reductions as necessary.

One-off projects without prioritization

Long-term bicycle and pedestrian plans lacked prioritization and accountability. Projects were not network-based and often infeasible without drastic right-of-way acquisition. Transit upgrades were planned and funded separately.

Adopting an Active Transportation Plan and including dedicating transit funding in the CIP

The Active Transportation Plan prioritizes projects that are feasible and vetted for vehicle lane changes, transit network coordination, surrounding land uses and right-of-way impacts. CIP spending now includes dedicated funding for transit-supportive infrastructure and exclusively addresses safety and pavement maintenance.

Isolated improvements in response to crashes

Spot, permanent fixes treated individual segments and intersections with a history of fatal and serious injury crashes and caused concern for the city attorney by highlighting the need for fixes.

Frequent, quick safety enhancements

High-risk locations are improved via quick-build projects, pilot treatments and community-led engagement (e.g., “chalk the street”) to rapidly test, refine and scale improvements via a dedicated funding stream.

What levers did this intervention pull?

 **PRIMARY:** These changes reduced the **severity** of crashes by lowering vehicle speeds. The changes help keep speeds below 30 mph, the level at which the risk of serious injury to pedestrians and bicyclists increases rapidly.

 **SECONDARY:** These changes reduced **exposure** by shifting investment and development patterns toward safer corridors and modes, reducing vehicle miles traveled and high-speed interactions. Moving away from congestion-focused land use analysis discourages development that increases high-risk driving.

 **SECONDARY:** By prioritizing HIN corridors within the CIP and applying updated design standards by default, Santa Rosa reduced conflict points and created more forgiving street environments to reduce the **likelihood of a crash**.

State and local DOTs can reduce crash injuries by lowering one or more of the following

SAFETY LEVERS:

- | | | |
|---|------------------------------|---|
|  | EXPOSURE | how much people drive |
|  | SEVERITY | how fast vehicles travel and how heavy they are |
|  | LIKELIHOOD OF A CRASH | how often road users come into conflict |

What else can be done?

Rapid-deployment steps: Expand rapid deployment of temporary curb extensions, speed humps and protected crossings on additional high-risk corridors.

Policy/process trigger: Integrate Safe System criteria explicitly into maintenance schedules, CIP scoring and development review.

Continued data collection: Track operating speeds, serious injury crashes and quick-build-to-permanent project conversions on HIN streets to celebrate successes and calibrate future street changes.