



Complete Streets Initiative

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U.S. Department
of Transportation

**Federal Highway
Administration**

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Early estimate of 2021 traffic fatalities

42,915 fatalities

- 10.5% increase over 2020
- Highest number since 2005
- Fatality rate of 1.33 per 100 million



What are Complete Streets?

- ✦ “A complete street is safe, and feels safe, for everyone using the street.” - FHWA Deputy Administrator Stephanie Pollack
- ✦ FHWA is focused on supporting transportation agencies to plan, develop and operate equitable streets and networks that prioritize safety, comfort, and connectivity to destinations for all people who use the street network.
- ✦ A full transition to a Complete Streets design model requires leadership, identification and elimination of barriers, and development of new policies, rules, and procedures to prioritize safety.





Bipartisan Infrastructure Law

Increasing Safe and Accessible Transportation Options (§11206)

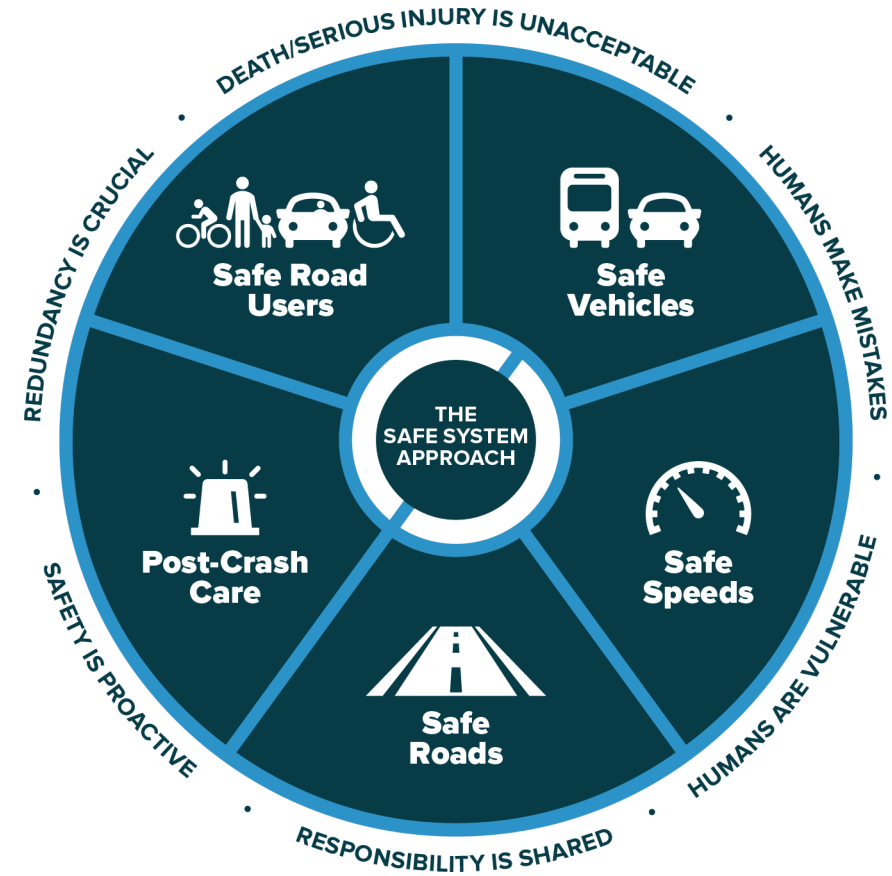
- ✦ “The term ‘Complete Streets standards or policies’ means standards or policies that ensure the safe and adequate accommodation of all users of the transportation system, including pedestrians, bicyclists, public transportation users, children, older individuals, individuals with disabilities, motorists, and freight vehicles.” ¹

¹Congress.gov. "H.R.3684 - 117th Congress (2021-2022): Infrastructure Investment and Jobs Act." November 15, 2021. www.congress.gov/bills/117/congress/house-bills/3684.



The Safe System Approach (SSA)

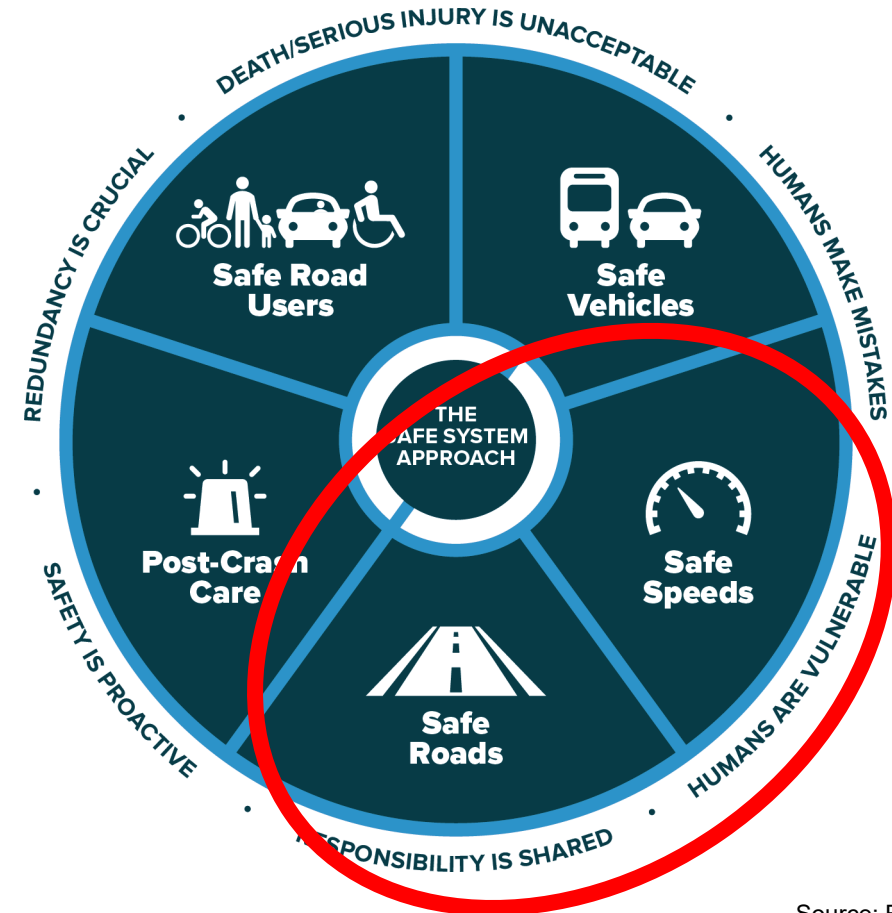
- ▶ Death/serious injury is unacceptable.
- ▶ Humans make mistakes.
- ▶ Humans are vulnerable.
- ▶ Responsibility is shared.
- ▶ Safety is proactive.
- ▶ Redundancy is crucial.



Complete Streets: An Implementation Strategy of the SSA



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- ▶ Redundancy is crucial.



Moving to a Complete Streets Design Model:

A Report to Congress on Opportunities and Challenges

- ✦ Reviewed FHWA policies, rules and procedures for impact on safety for all road users.
- ✦ Identified:
 - 5 Opportunity Areas and 10 underlying challenges
 - relevant documents
 - potential solutions for each area
- ✦ Link: highways.dot.gov/sites/fhwa.dot.gov/files/2022-03/Complete%20Streets%20Report%20to%20Congress.pdf

Moving to a Complete Streets Design Model

A. Improve Data Collection and Analysis to advance safety for all road users - Challenges

- ✦ Data to support a data-driven project selection process needs to be improved
- ✦ Measures of performance to support decision makers in addressing all transportation modes should be improved



CS Safety Analysis

- ✦ Leverage ongoing FHWA and National Cooperative Highway Research Program projects developing crash modification factor (CMF) expressions for the *Highway Safety Manual*.⁵
- ✦ Assess the available CMFs, availability of data, and design potential approaches for conducting the safety assessment.

⁵American Association of State Highway and Transportation Officials. n.d. "Highway Safety Manual" (web page). www.highwaysafetymanual.org/Pages/default.aspx, last accessed November 19, 2021.



Source: FHWA.⁶



Source: FHWA.⁷

⁶Federal Highway Administration. n.d. "Roadway Safety Data Program" (web page). safety.fhwa.dot.gov/rsdp/ddsa.aspx, last accessed November 24, 2021.

⁷Federal Highway Administration. n.d. "Local Safety Road Plans" (web page). safety.fhwa.dot.gov/provencountermeasures/local_roads.cfm, last accessed November 24, 2021.



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Streets Design Model

B. Support rigorous safety assessment across all project types - Challenges

- ✦ The safety and environmental benefits of Complete Streets need to be properly weighted in projects designed to reduce congestion.
 - Many Federal transportation funding programs do not include requirements to conduct specific safety analyses.

Support Rigorous Safety Assessment— Solutions

- ✦ Find ways to increase the assessment of safety outcomes across all types of Federal-aid projects to improve safety performance:
 - Consult with partners on next steps.
 - Establish operations primer (FHWA Office of Operations).
 - Conduct policy impact research (Policy-FY23).
- ✦ Provide additional technical assistance and guidance that supports CS implementation—operations primer (Office of Operations).





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Streets Design Model

C. Accelerate adoption of standards and guidance that promote safety and innovation - Challenges

- ✦ Federally recognized standards should enable more context-sensitive design solutions for safety.
- ✦ Design document updates do not always keep pace with innovative practices
- ✦ Federal standards should be updated to improve accessibility for pedestrians with disabilities.



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C. Accelerate adoption of standards and guidance that promote safety and innovation - Solutions

- ✦ Consider updates to FHWA products to better consider safety for all users.
- ✦ Expedite DOT adoption of final accessibility guidelines published by the U.S. Access Board for pedestrian facilities in the public right-of-way.
- ✦ Enhance stewardship and oversight activities to address accessibility issues more directly.
- ✦ Partner with universities and related organizations to develop education and training programs that provide accurate and complete information on roadway design standards and practices



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D. Reinforce the primacy of safety for all users in interpretation of standards, guidelines, & review - Challenges

- ✦ Different interpretations of FHWA rules can lead to inconsistency or missed opportunities in addressing safety for all users.
- ✦ On-road transit and access to it should be better integrated into roadway safety planning, design, and operation.



Moving to a Complete Streets Design Model

D. Reinforce the primacy of safety for all users in interpretation of standards, guidelines, & review - Solutions

- ✦ Encourage planning for complete and connected multimodal networks at the Statewide and regional level.
- ✦ Provide professional capacity building and training to FHWA personnel and other practitioners on the imperative to provide safety for all users.
- ✦ Increase interagency coordination on Complete Streets.

CS Costs Case Studies (In Progress)

Goal: Document the construction costs of a diverse group of CS projects located on:

- ▶ Urban and suburban *arterials* (nonfreeway) within the boundaries of MPOs and with posted speed limits less than 55 mph.
- ▶ Rural *arterials* that serve as main streets in smaller communities.

Deliverables:

- ▶ Information to support State and local agencies on the development of their own case studies.
- ▶ Case studies (up to 12)



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E. Make Complete Streets FHWA's default approach for funding and designing non-access-controlled roadways - Challenges

- ✦ Current DOT guidance provides insufficient detail on statutory requirements to consider all modes.
- ✦ Agencies should systematically change policies, rules, and procedures to fully implement a Complete Streets design model.

National CS Assessment (NCSA)

Key project activities:

- ▶ National NCSA webinar—provides an overview of the NCSA project, highlights notable practices, and provides a description of the survey for the States.
- ▶ NCSA survey—contacts 52 State DOTs to define the national baseline of CS practice.
- ▶ National Complete Streets Baseline Report—internal FHWA report.
- ▶ At-a-Glance NCSA Report—a public-facing report on general findings of NCSA.

Our Scope

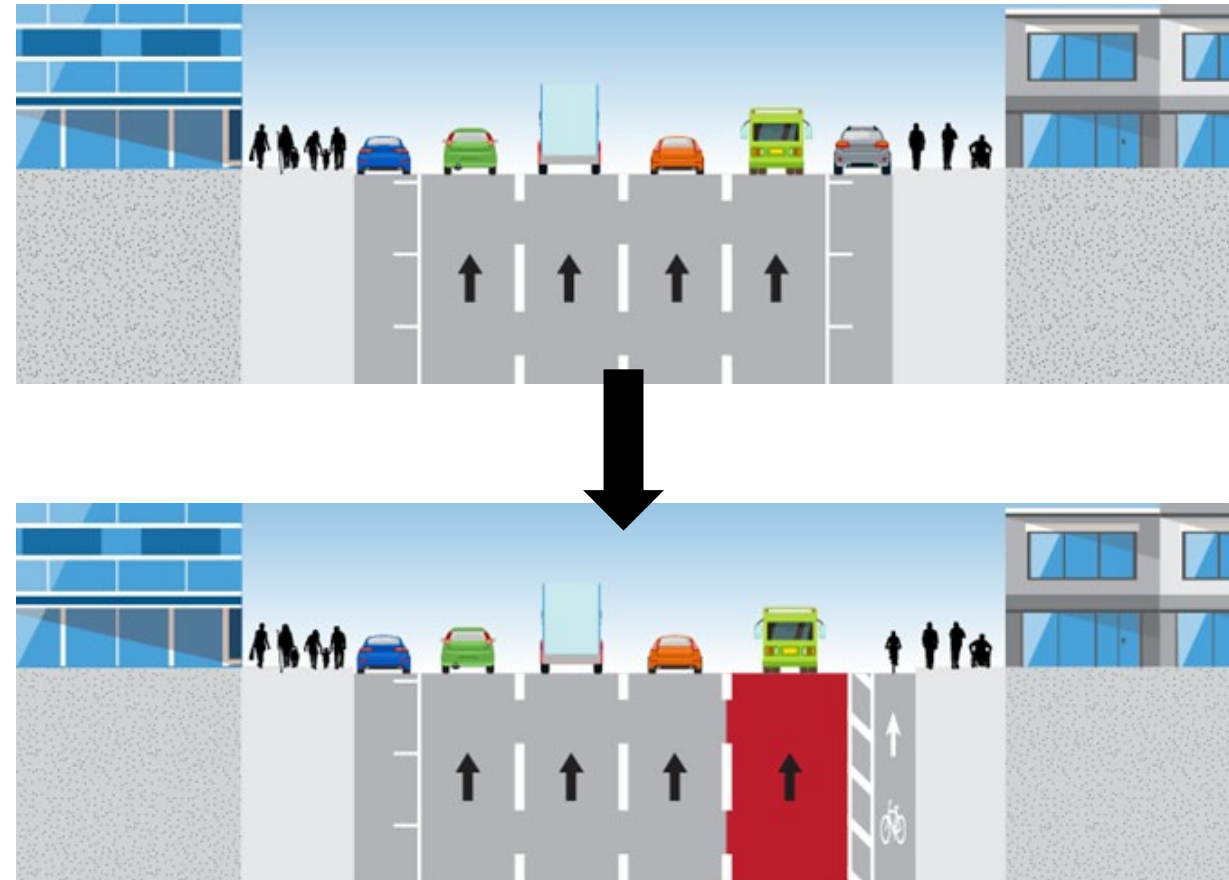
Focus

Nonfreeway arterial:

- ▶ Speed limits <55 mph.
- ▶ Within MPO boundaries.
- ▶ Small-town main arterial street.

Emphasis

- ▶ Complete pedestrian networks.
- ▶ Complete cycle networks.
- ▶ Accessible transit.





Additional Resources

Managing Speed

[Road Diets](#)

[Pedestrian Hybrid Beacon](#)

[Speed Safety Cameras](#)

[Raised Crosswalks](#)

[Appropriate Speed Limits⁸](#)

Improving Lighting

[Lighting](#)

Separating Users in Time and Space

[Road Diets](#)

[Bike Lanes](#)

[Pedestrian Medians](#)

[Rectangular Rapid Flashing Beacon](#)

Intersections

[Safe System Intersections](#)

Complete Streets Website

Public facing web-portal to:

- Publish all Complete Streets products, including Complete Streets Transformations Document
- Link to Complete Streets resources across FHWA program offices and other stakeholders
- Visit: highways.dot.gov/complete-streets





Thank you