We Make Lives Better Through Connections.

Vision Zero at RTD

A Proven, Ethics-Based Approach to Fostering a True Safety Culture

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bit.ly/RTDVisionZeroDocs

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Agenda

- **What is Vision Zero?**

- **Core Elements of Vision Zero Communities**

- **Stakeholder Engagement - RTD Vision Zero Coalition**

  - Background

  - For Action

  - For Consideration

- **Comments or Questions?**

Vision Zero

Traffic deaths and severe injuries are <u>never</u> acceptable.

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What is Vision Zero?

Vision Zero is a strategy to eliminate traffic fatalities and severe injuries on the principle that traffic deaths and severe injuries are *never* acceptable.

TRADITIONAL APPROACH
Traffic deaths are INEVITABLE
Requires PERFECT human behavior
Should prevent COLLISIONS
Focus on INDIVIDUAL responsibility
Saving lives is EXPENSIVE

VISION ZERO
Traffic deaths are PREVENTABLE
Integrates HUMAN BEHAVIOR into approach
Prevent FATAL & SEVERE CRASHES
Takes a SYSTEMS approach
Saving lives is NOT EXPENSIVE

Vision Zero utilizes a **Safe Systems** approach, which is endorsed by the FHWA (Federal Highway Administration) and the Institute of Transportation Engineers (ITE).

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Safe Systems in Transportation

- Our transportation system should be designed and operated to <mark>accommodate human mistakes</mark>

- Human bodies have limits for tolerating crash forces - so we should <mark>design and operate our transportation system</mark> to avoid death and severe injuries.

- Safe Systems Approach places an ethical emphasis on those who have <mark>the authority and responsibility for the design and management of transportation systems</mark> – such as elected officials, agencies, engineers, planners, etc.

The **Safe System Approach** requires **a culture that places safety first and foremost** in road system investment decisions.
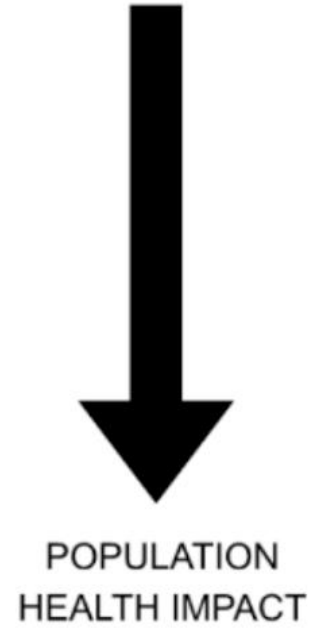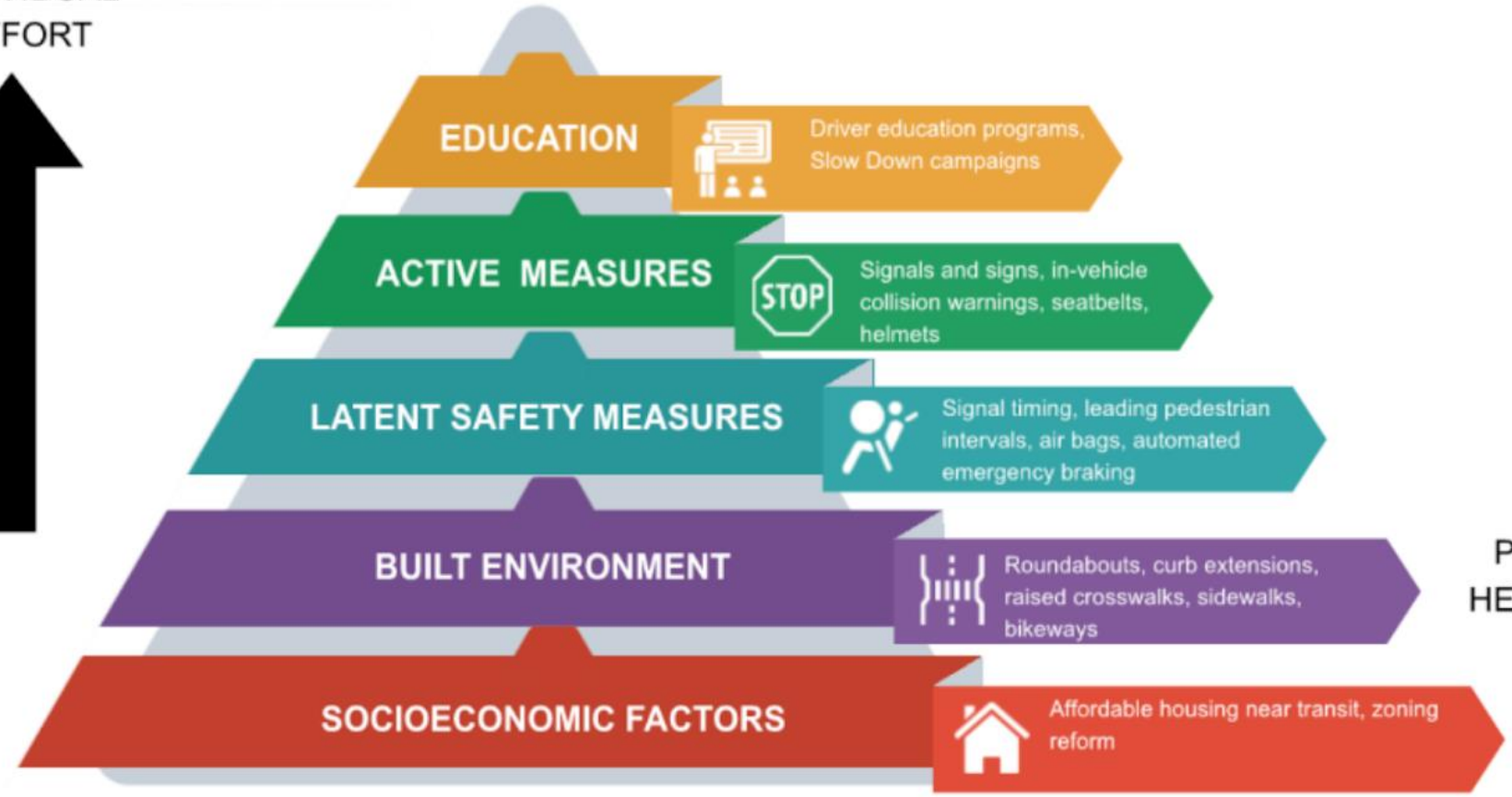
Federal Highway Administration

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Vision Zero as Public Health Policy

Source: Vision Zero Network

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Vision Zero Agency Partners

- 'Moving Towards Zero Deaths' is in **CDOT**'s Strategic Highway Safety Plan

- **DRCOG** adopted a Regional Vision Zero plan recognized by the VZN Network - and works with local governments to achieve Vision Zero goals

- **Denver**, **Boulder**, **Westminster**, and **Thornton** adopted Vision Zero

- Federal funds are available to advance Vision Zero plans and infrastructure upgrades. Ex:

  - Safe Streets and Roads for All (SS4A)

  - SMART - Strengthening Mobility and Revolutionizing Transportation

"Traffic-related deaths and severe injuries are a critical and preventable public health epidemic and social equity issue in the metropolitan Denver area. **DRCOG, its member governments** and its **partner agencies are responsible** for reducing crashes through safe systems."

Taking Action on Regional Vision Zero

Why RTD Should Adopt a Vision Zero Action Plan

- <mark>Public transportation is a key tool in achieving Vision Zero</mark>
  - Traffic fatality rates can decrease by 10%-40% by prioritizing transit and accessible pedestrian-friendly infrastructure (via APTA)
- <mark>Public transportation is part of the traffic network</mark>
  - Be it a dedicated ROW or a bus stop, those who use interact with RTD are impacted by our decisions
- <mark>Communities need us!</mark>
  - Partner agencies can't be successful in their Vision Zero Plans if we aren't active partners in the effort.
- <mark>We have an ethical responsibility to take advantage of our unique role in local transit</mark>
  - As an independent transit agency, we are poised to lead the nation (and industry) in Vision Zero!

Remember: A third of RTD customers begin their transit journey as pedestrians!
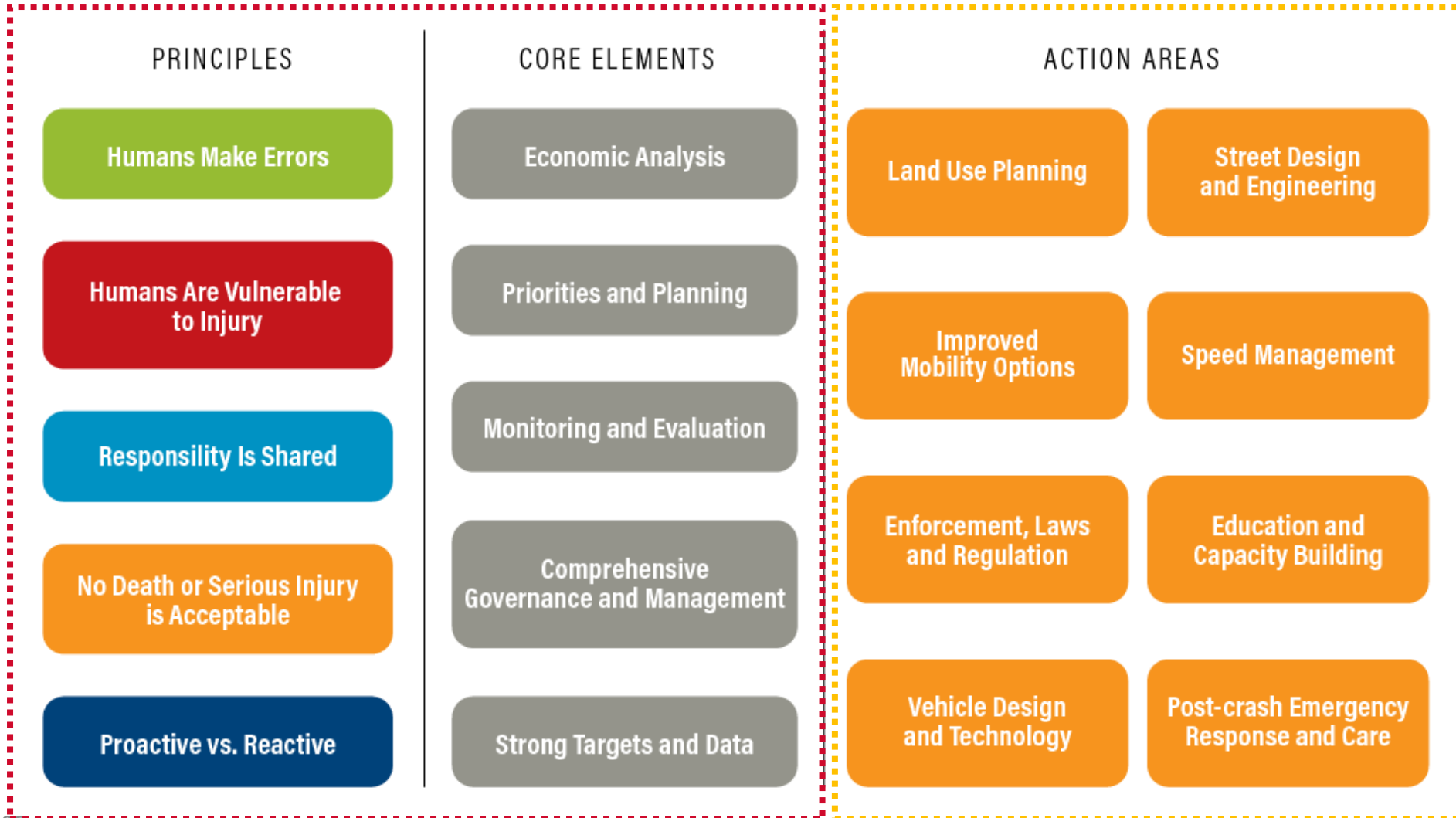
Core Elements of Vision Zero Communities

VISION ZERO CORE ELEMENTS

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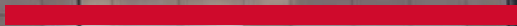
Vision Zero & Strategic Planning

Attachment: VisionZero-OSS-6.12.24 Presentation (5009 : Resolution in Support of RTD

Transfer of Vision Zero Principles & Core Elements would be the same at RTD

Application may be unique, but Safe Systems still apply

PRINCIPLES

- Humans Make Errors
- Humans Are Vulnerable to Injury
- Responsibility Is Shared
- No Death or Serious Injury is Acceptable
- Proactive vs. Reactive

CORE ELEMENTS

- Economic Analysis
- Priorities and Planning
- Monitoring and Evaluation
- Comprehensive Governance and Management
- Strong Targets and Data

ACTION AREAS

- Land Use Planning
- Street Design and Engineering
- Improved Mobility Options
- Speed Management
- Enforcement, Laws and Regulation
- Education and Capacity Building
- Vehicle Design and Technology
- Post-crash Emergency Response and Care

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Packet Pg. 830

Leadership and Commitment

Public, High-Level, and Ongoing Commitment	Key elected officials & agencies (including transportation) publicly commit to a goal of eliminating traffic fatalities and serious injuries. Partners continually engage via cross-agency/jurisdictional collaboration.
Authentic Engagement	Meaningful and accessible community engagement toward Vision Zero strategy and implementation is employed—with a focus on equity.
Strategic Planning	A Vision Zero Action Plan is developed, with explicit goals and measurable strategies with clear timelines. It also identifies responsible stakeholders.
Project Delivery	Decision-makers and system designers advance projects and policies for safe, equitable multimodal travel by securing funding and implementing projects, prioritizing roadways with the most pressing safety issues.

VISION ZERO CORE ELEMENTS

Safe Roadways and Safe Speeds

bit.ly/RTDVisionZeroDocs

Complete Streets for All	Complete streets are streets designed and operated to enable safe use and support mobility for all users—such as bike lanes, sidewalks, bus-only lanes, etc. These concepts are integrated into planning.
Context-Appropriate Speeds	Travel speeds are set and managed to achieve safe conditions for the specific roadway context and to protect all roadway users, particularly those most at-risk in crashes. Proven speed management policies and practices are prioritized to reach this goal.

Vision Zero prioritizes safe travel of people over expeditious travel of motor vehicles.

VISION ZERO CORE ELEMENTS

Data-driven Approach, Transparency, & Accountability

Equity-Focused Analysis and Programs	Commitment is made to an ==equitable approach and outcomes==, including prioritizing engagement & investments in under-served communities.
Proactive, Systemic Planning	A ==proactive, systems-based approach== to safety is used to identify and address top risk factors and mitigate potential crashes and crash severity.
Responsive, Hot Spot Planning	A map of the community's fatal and serious injury crash locations is developed, regularly updated, and ==used to guide priority actions and funding==.
Comprehensive Evaluation and Adjustments	==Routine evaluation of the performance of all safety interventions is made public== and shared with decision makers to ==inform priorities, budgets, and updates== to the Vision Zero Action Plan.

VISION ZERO CORE ELEMENTS

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Stakeholder Engagement

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Community Engagement

- Over 36 participants

  - Met as a whole nine times between October 10th and January 30th, with other individual stakeholder meetings held as necessary

  - Over 60 hours of meetings were logged prior to submitting preliminary recommendations to RTD in February

- Additional engagement (including RTD advisory committees) will be done before any Actions are brought before the Board

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Summary of Principles

- As those who have authority to effectuate almost all areas of policy and planning, the <mark>Board and GM/CEO are jointly and primarily</mark> responsible for safety KPIs related to those interacting with RTD services, assets, or within our jurisdiction

  - Where RTD does not have jurisdictional authority but operates a service, RTD should work with said jurisdiction/s to reduce, mitigate, or eliminate safety risks

  - Systems Approach should be emphasized over assuming "human error" is a root cause of an incident or accident

- <mark>Vision Zero must be part of strategic planning</mark> (which includes short, medium, and long-term budgeting)

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Areas of Focus

bit.ly/RTDVisionZeroDocs

▪ **Track 1: Pedestrian Dignity & Multimodal Infrastructure**

- Bus stop access for people walking, rolling or cycling (including ADA, location, and amenities); pedestrian & bicycle infrastructure within a one-mile radius - including sidewalks/rollways, curb cuts/ramps and pedestrian signals; reducing car trips (modal shift), TOD, etc.

▪ **Track 2: Rail & Bus Safety**

- Rail stations, transit facility, Park-n-Ride and maintenance facility site design, preventing rail deaths and injuries (including death by suicide), operator training and support, accident / incident reporting, regulatory oversight, worker safety, etc.

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Drafting Guidelines

■ **Recommendations must <mark>meaningfully relate</mark> to Vision Zero Network principles**

■ **Recommendations are created through an <mark>intersectional lens</mark>**

- We center disability access, language justice, and racial justice

- The transit workforce is at the forefront of our efforts and is a key partner in all Vision Zero planning

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Drafting Guidelines

■ **Recommendations are ethics-based, but still actionable by RTD**

- Recognizes that RTD is also a systems designer and thus a responsible agency for traffic safety

- Offers solutions that can be implemented by RTD (or under joint jurisdiction)

  ▶ Compels both infrastructure and systems to prevent incidents that cause harm

- Validates that most people who use transit begin their journey as pedestrians

  ▶ Provides dignified solutions for all people who interact with the transit system

- Fosters an open and transparent safety culture that emphasizes innovation over compliance monitoring

  ▶ Respects the role of the Joint Labor Management Safety Committee (JLMSC)

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For Board Action: Leadership and Commitment

- **RTD makes a ==public commitment== to Vision Zero**

  - Plan prioritizes the safety of all riders - with a focus on disability access, language justice, and racial equity

  - *Identified Benchmark:* Hire a dedicated Director of Vision Zero to lead plan development and implementation

- **RTD ==defines roles and performance metrics== to track progress and stay accountable**

  - Vision Zero is incorporated to RTD's strategic plan/s, budgeting, and fiscal policy

  - *Identified Benchmark:* Obtain recognition from the Vision Zero Network as a Vision Zero Community

- **RTD engages in ==regular, transparent communication== and continuous collaboration**

  - Meaningful community engagement, with stakeholders informed of goals, achievements, and any challenges

For Action: Fostering Safety Culture

- **Foster a <mark>safety-first culture</mark> where employees feel empowered to report issues, learn from mistakes, and actively contribute to safety improvements**

  - Don't place blame on staff or the public - embrace smarter design, transparency, and systems redundancy instead

- **"Human error" is usually a causal factor - not the root cause**

  - Challenge everyone by asking, <mark>"What can I/we/you do to save lives/prevent serious injury?"</mark>

- **<mark>Proactively</mark> Collect Data, Identify the Risks, & Work on Solutions**

  - Do not wait for risks to rise to the level of CAPs and/or result in death or major injury before taking action.

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Vision Zero Plan: Recommendations

bit.ly/RTDVisionZeroDocs

- 40+ action items the agency could take to advance Vision Zero, either separately or in its own plan

- Recs are in the Report submitted to the Board and can be found at bit.ly/RTDVisionZeroDocs

- Does not take the place of community engagement that RTD needs to do (but it can be seen as a "running head start")

Preliminary Report to the RTD Board of Directors   June 2024

RECCOMENDATIONS FOR VISION ZERO PLANNING

Rail Safety & Grade Crossings

- **Conduct a comprehensive analysis for immediate action:** Identify all at-grade crossings and prioritize the top 20% with highest incident/accident rates and identify measures to mitigate, reduce, or eliminate risks.

- **Address conflicts at high-risk intersections:** Analyze crash data to identify and eliminate likely causes of intersection conflicts between light rail trains and turning vehicles, prioritizing high-risk areas like Stout Street and focusing on signaling, including the use of blank-out signs. (More than 1/3 of LRV crashes are on or at Stout and California Streets.[2])

- **Implement safety countermeasures for pedestrians:** Install mini-gate arms, flashing lights, and pavement markings at prioritized crossings to enhance pedestrian visibility and protection.

- **Advocate for safety improvements with local municipalities:** Collaborate on infrastructure improvements like raised crosswalks, protected turn lanes, and signal timing adjustments at high-risk intersections.

Enhanced Communication and Accessibility

- **Improve wayfinding across modes:** Collaborate with other transportation providers to create seamless, multi-modal wayfinding signage and information systems.

- **Upgrade automated stop announcements (ASAs):** Implement clear, high-quality voice recordings and integrate special announcements like elevator outages for improved passenger awareness.

- **Language Access:** Ensure all announcements, signage, and wayfinding information are available in English and Spanish *at minimum*, with plans to expand to additional languages as needed.

- **Develop SOPs for Equitable Access:** Create standardized operating procedures (SOPs) for clear and consistent communication across all stations, promoting equity and inclusivity.

- **Standardize pedestrian crossings and signage:** Implement consistent design and clear messaging across all stations, adhering to commuter rail standards and utilizing universally understood symbols.

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Stakeholder Reccomendations

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Recommendations – Examples – Rail Safety

- **Address <mark>conflicts at intersections</mark> between light rail trains and turning vehicles**

  - Analyze data and identify solutions, prioritizing known high-risk areas like Stout Street and Welton Corridor.

- **Implement safety countermeasures for <mark>pedestrians</mark> in the right—of-way**

  - Install mini-gate arms, flashing lights, and pavement markings at prioritized crossings to enhance pedestrian visibility and protection.

- **Invest in smart(er) technology** (including seeking funding)

  - Assess the feasibility and effectiveness of using <mark>LIDAR/RADAR, AI</mark>, or other technology at high-accident grade crossings, considering both general safety and suicide prevention implications.

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Recommendations – Examples – Communications

- **Invest in essential upgrades**

  - Upgrading automated announcements, ==ensuring multilingual signage and information==, standardizing pedestrian crossings, and ==conducting a comprehensive ADA review== will contribute to enhancing communication and accessibility for all riders.

- **Develop SOPs for Equitable Access**

  - Create standardized operating procedures (SOPs) for clear and consistent communication across all stations, promoting equity and inclusivity

Recommendations – Examples – Planning

- **Address local infrastructure gaps by partnering with municipalities.**

  - Improve pedestrian access to stations (particularly in areas adjacent to Peoria Station) - as well as station design itself - focusing on sidewalk connections, lighting, and signage.

- **Adopt DRCOG Vision Zero Guidelines, i.e.:**

  - For signalized intersections, place stops at the far side.

  - For non-signalized intersections, place bus stops and pedestrian crossings in close proximity ('co-locate') to allow people riding transit to cross the street safely

- **Create a fund for bus stop & pedestrian improvements, focusing on equity**

Recommendations – Examples – Planning

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Questions?

"Underlying the Vision Zero strategy is the Safe System – a **holistic safety approach that shifts responsibility** from the people using roads to the people designing them, integrating core management and action areas to create a safe mobility system forgiving of human error. **The structure of an effective Vision Zero strategy embodies the Safe System approach**. "

Vision Zero Challenge

visionzerochallenge.org

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Thank you.

rtd-denver.com