

TEDS Manual Update

Summary of Major Changes

August 24, 2023

This document provides a summary of the major changes that were made to the Grand Junction Transportation Engineering Design Standards (TEDS) Manual as part of the 2023 Update.

Summary of Major Changes to TEDS Manual Chapters:

- Reflect current design guidance from CDOT, AASHTO, ITE, NACTO, and other state and national sources.
- Update the standard street cross sections primarily to:
 - Incorporate low stress bicycle and pedestrian facilities in alignment with the Pedestrian and Bicycle Plan,
 - To reflect current city design practices, and
 - To be consistent with the current Fire Department Access standards.
- Include new requirements for transportation Impact Studies (TIS) to:
 - Document bicycle and pedestrian impacts (does not need to be completed by a transportation engineer), and
 - Require a Traffic Assessment for mid-size developments (generating 10 to 99 peak hour trips) in alignment with current CDOT practice to assess need for turn lanes, sight distance, and pedestrian and bicycle impacts.
- Add requirements for inter-parcel connectivity between developments to:
 - Mitigate traffic impacts on streets,
 - Improve mobility and access for people walking and biking to and through developments, and
 - To provide access to transit by providing more direct connections between developments and transit stops on the adjacent street network.
- Reduced driveway width requirement on commercial/industrial and major streets
- Made driveway spacing and offset requirements simpler and consistent with intersection spacing requirements.
- Updated block length requirement to reference Zoning and Development Code.
- Reduced the design speed of local streets from 25 mph to 20 mph to be consistent with current practice and updated design speed of other streets to be consistent with update street section and current practice.
- Updated traffic calming requirements on local streets to support slower design speeds and provided new example graphics.
- Removed the Fire Department Access Document and only reference it in TEDS. TEDS Exceptions are only allowed for alternative streets.

- Modified “effective” turn radii requirements to account for streets with bike lanes and on-street parking to encourage slower design turning speeds to mitigate intersection conflicts with pedestrians and bicyclists.
- Added illuminance requirements for bike and pedestrian facilities.
- Updated signing and striping requirements and signal design to match current city practice.
- Updated pedestrian and bicycle design standards to match the vision and guidance in the Pedestrian & Bicycle Plan and to reflect current national best practices.
- Added design guidance on pedestrian and bicycle crossings.
- Chapters removed or with new external references:
 - 29.24 Fire Department Access: modified to refer to the *Grand Junction Fire Department Access* standards and the locally adopted fire code
 - 29.44 Traffic Signals and Construction Zones: Article II Traffic Signal Specifications was updated and removed from TEDS and now includes a reference to the Traffic Signal Specifications as an external City document.
 - 29.52 Transit Design Standards and Guidelines: This chapter of TEDS was removed and Chapter 29.48 now includes a reference to the Mesa County *Transit Design Standards and Guidelines*.
 - 29.60 Private Streets, Shared Driveways, and Loop Lane: This chapter was removed from TEDS as it is addressed in the Zoning and Development Code.
 - The previously developed document titled *Grand Junction Pedestrian Crossing Treatment Installation Guidelines* is now referenced in TEDS as a tool when considering pedestrian crossing treatments in different contexts, and will be made available online.

Summary of Major Changes to the Standard Street Sections:

- Lane widths were updated to 11’ on arterial and collector streets.
- Sidewalk widths were updated to 6’ on local and collector streets with posted speeds <35 mph, and to 8’ on arterial and collector streets with posted speed >35 mph.
 - An Exception Request can be considered for sidewalks under 6’ ft within a constrained environment or with very low volumes of vehicle traffic.
- Detached sidewalks are standard on all arterial and major collector streets and options for detached sidewalks are included on local and minor collector street standards.
- Low-stress bicycle facilities are included on all arterial and major collector street standards consistent with the Pedestrian and Bicycle Plan.
- Narrower street cross-section options (with and without parking on one or both sides as well as sections with attached or detached sidewalks) are included for local residential streets that meet requirements in the Fire Department Access standards.
 - Requirements for off-street parking and a fire site plan are included for narrow streets standards in alignment with the Fire Department Access standards.
- The Multipurpose Easement was updated to 10’ on street sections with a detached sidewalk, which is consistent with existing practice on major arterial streets (14’ width was preserved on streets sections with attached sidewalks).

- The Rural streets section was removed.
- All streets are required to have a sidewalk on both sides of the street unless there is a public walkway on the other side of houses/businesses.
- A 5' sight zone has been added behind the walk to the local street sections.
- Right-of-Way width was increased on the following street sections to accommodate pedestrian and bicycle infrastructure:
 - Major Arterial – remains at 110'
 - Minor Arterial – increases from 80' to 100'
 - Major Collector – increases from 60' to 78' or 70' depending on posted speed
 - Minor Collector/Commercial – increases from 52' to 64'
 - Industrial – increases from 48' to 55'
 - Local Residential Street – standard with attached sidewalk increases from 44' to 46' (other options are provided that vary in ROW width from 38' to 63').
- G Road section was updated to include bicycle and pedestrian infrastructure with minimal changes to Right-of-Way
- Shared-Use Path name was changed to a Trail and a Pathway section was added that includes a 6' path for connections at the end of cul-de-sacs that are not a part of the Active Transportation Corridors.
- Notes were added to street sections where the sidewalk buffer (between the sidewalk and curb) may be less than 7' that the minimum sidewalk buffer width is 7 feet for planting trees.
- The following note was added to street sections with trails: "A trail is considered multi-use for wheeled traffic and pedestrians."