



How to Create a TDM Plan

This guidance document will:

- Provide an overview of Transportation Demand Management (TDM) plans and why they are important,
- Suggest questions to help your team conduct an initial brainstorm about the future of how people move around the space, and
- Walk through a step-by-step process of how to determine which TDM strategies will be most effective for your project and how to organize these into a TDM Plan.

What is Transportation Demand Management?

Transportation Demand Management (TDM) is the application of strategies and policies to reduce motor vehicle travel demand or to redistribute this demand in space or in time.

In its essence, TDM is about choice: how to encourage people to make alternative transportation choices rather than relying on additional infrastructure to counteract increasing numbers of commuters.

Why is a TDM Plan Important?

Traffic congestion is estimated to cost Colorado motorists over 100 million hours of lost time each year and over \$2 billion in excess travel costs. The state's population is growing rapidly, expecting 50 percent growth in less than three decades. As such, traffic congestion can be expected to become much worse in the near future. Colorado cannot build its way out of congestion and must look for cost-effective ways to get better use out of its existing infrastructure to address growing mobility problems. TDM has the potential to improve the quality of environment and safety for those using Colorado's transportation systems.

The State of Colorado Climate Action Plan to Reduce Pollution, directed by [Colorado House Bill 19-1261](#), sets goals to reduce Greenhouse Gas Emissions by 26% by the year 2025, by 50% by 2030, and by 90% by 2050 from levels that were emitted in 2005. Implementation of TDM strategies is one of the many ways that vehicle emission reduction can be achieved.

The [Statewide TDM Plan](#) can be found on the CDOT website.

Initial Brainstorm Questions

If people traveled this space in ways other than single occupant vehicles, what would that look like?

If people wanted to walk/bike/wheel/scoot in this area, would the current design prohibit them from doing so?

What will be the impact of a new influx of people to this area on the existing transportation infrastructure?



10 Steps to Create a TDM Plan:

A TDM Plan must, at a minimum, meet the requirements in relevant policy and procedural documents.

Below is a comprehensive outline of the contents of a TDM Plan.

References to existing transportation planning documentation are encouraged.

1 Describe Proposed Development, including

- a. Current and future land uses (within the development)
- b. Population (density and behaviors)
- c. Trip generation rates
- d. The transportation problem (use System Level Feasibility Study)
 - i. Why are people currently using the modes of transportation that they are? Are they limited to one mode?
 - ii. What kind of traffic volumes are targeted for change?
 - iii. Where does congestion occur and what time/day of week?
- e. Overall goals/solutions that these TDM Strategies will accomplish
- f. General performance targets (elaborate in Section 10: Evaluation Plan)
 - i. What are the mode split and/or trip reduction goals?
 - ii. What is the implementation timeline?

2 List Existing Land Use Plans and Conditions

- a. Existing master plans
 - i. Are there bike, pedestrian, TDM, and/or transportation master plans for the city or county?
- b. Existing or future transit plans
- c. Adjacent land use and context

3 Define Target Population

- a. Population density
 - i. What is the population density for the planned area?
 - ii. Note: Rural and urban communities need context-sensitive solutions.
- b. Demographics
 - i. Whose mobility behavior is being targeted (residents, employees, universities, schools, shift employees, game-day attendees, tourists, etc.)?
 - ii. Are there any groups with unique needs (students, veterans, seniors, etc.)?
 - iii. Who is living and working in this area?
- c. Current travel patterns
 - i. How are users getting around the area?



4 Plan Coordination with Local Authorities/Transportation Planners

- a. Local agency stakeholders
 - i. Who should be involved from the City and/or County (including elected officials)?
- b. Transportation Planning Region (TPR), Metropolitan Planning Organization (MPO), and/ or Transportation Management Association/Organization TMA/TMO
 - i. Are any groups doing work in the area and do they have TDM programs this plan should coordinate with?
- c. Transit agencies, other nonprofits, or private companies
- d. CDOT representatives
 - i. Have you discussed this plan with CDOT regional representatives and/or TDM-focused CDOT representatives?

5 Propose Solutions and Strategies

- a. TDM Strategy Selection
 - i. What options will address the transportation problems? Refer to the CDOT website on TDM, and Statewide TDM Plan for ideas.
 - iii. How will these strategies interact with existing and future infrastructure and influence human behavior?
 - iv. What new and emerging technologies (micromobility, autonomous shuttles, etc.) make sense in this area?
 - v. Do any TDM strategies need to be used during construction?
 - vi. Will there be any special events in this area that will need other TDM strategies?
 - vii. What TDM strategies will be implemented post-construction for long-term implementation?
- b. Context-Sensitivity
 - i. How will the proposed TDM strategies complement existing programs and infrastructure to ensure that the proposed improvements do not detract or replace existing strategies?
 - ii. If multiple strategies are employed, how will they function together?
 - iii. How will this TDM strategy interact with existing transit systems?
 - iv. How will this TDM strategy coordinate with any existing or future mobility hubs in the area?
- c. How does the plan meet the TDM “score card” requirement and/or how will the applicant meet the 3% VMT reduction goal?
 - i. Analysis of how the proposed TDM strategies will achieve the stated goal. This analysis can be performed through traffic modeling or a reasonable estimate developed by a traffic engineer.

6 Describe Costs and Funding Sources Secured to Implement Plan

- a. Startup capital and long-term maintenance costs
- b. Project funds
- c. Partnerships
 - i. What agency or organization will fund the TDM Plan?
 - ii. Will financial partnerships with a local transit agency or MPO be needed? Are there opportunities to partner with local business parks, universities, developers, or other private partners?
 - iii. Have you considered federal and state grants?
 - iv. Are additional funds from CDOT requested?



7 Identify needs for an Intergovernmental Agreement (IGA)

- a. Reference a project scope of work
- b. Contain a schedule for implementation of the TDM Plan, which carefully considers lead times for capital acquisition to ensure on-time delivery
- c. Identify the responsible parties for funding and deployment of the TDM plan
- d. Reference dates the IGA is active
- e. Reference a timeframe to revisit, refresh and amend both the TDM Plan and the IGA
- f. Contain signatories and their respective titles.

8 Provide the Marketing and Education Timeframe and Materials

- a. Communications and marketing plans
 - i. Are flyers and/or press releases needed?
 - ii. Provide information about all of the social media platforms and electronic communications that will be used to encourage the use of these TDM strategies.
 - iii. What other groups in the community need outreach?

9 Create a TDM Implementation Schedule

- a. Schedule with key tasks identified
- b. Start date
- c. Management responsibilities and staffing
- d. Maintenance responsibilities and staffing

10 Evaluate Success of the Plan

- a. Determine Key Performance Indicators (KPIs) of a successful project and how they will be reported
- b. Identify parties responsible for evaluation and cadence of reports
- c. What type of greenhouse gas emission reduction will be achieved by this plan?

For more information about developing, implementing, or monitoring your Transportation Demand Management Plan, please contact Lisa Streisfeld at the Colorado Department of Transportation: lisa.streisfeld@state.co.us or 303-757-9876.