




2024

# TDM ORDINANCE REFERENCE GUIDE

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A comprehensive reference guide that outlines the insights, strategies, and best practices for implementing TDM ordinances for local jurisdictions

A close-up, high-angle photograph of city buildings at night. The buildings are illuminated with various lights, creating a vibrant scene. The image is partially framed by a green geometric shape on the left side.



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# ABOUT THE GUIDE

Across the country, cities and towns have a growing interest in Transportation Demand Management (TDM) ordinances and policies that help address diverse transportation and land-use related issues: supporting climate goals, improving air quality, reducing traffic congestion, encouraging active transportation, achieving greater transportation system efficiency, safety, and much more. TDM ordinances alone cannot solve transportation-related challenges. They are most effective when considered as one element amongst a suite of strategies to achieve local mobility and transportation-related goals.



This reference guide will support jurisdictions as they contemplate or plan the development of a TDM ordinance or policy. This document is informed by interviews with diverse TDM practitioners including consultants, academics, city TDM program implementers and administrators, transportation management associations, Association for Commuter Transportation (ACT) staff and members, state DOTs, transit agencies, and regional planning organizations.

Keep in mind that your jurisdiction is not alone in pursuing or designing a TDM ordinance. From Maryland to California cities and towns have adopted TDM ordinances of varying complexity and sophistication. This guide is a starting point to begin thinking about how to build support from within your planning department for pursuing an ordinance. Or, if your jurisdiction is further along in its ordinance journey, this guide will help develop key ordinance design and implementation considerations. Inevitably, this guide will only be one resource of many. Other resources, whether consultants, ACT, jurisdictions within or beyond your state, etc., will likely be required.



# PART 1

# TDM BENEFITS

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Transportation demand management in general and TDM ordinances specifically are cost-effective strategies to help jurisdictions effectively mitigate common transportation-related problems such as peak period and/or special event traffic congestion, parking shortages, traffic safety, air pollution, and much more.

Managing congestion and economic development are not at odds with each other, in fact they can support one another. For example, in Washington State, the City of Seattle boasts one of the most robust TDM programs in the country while experiencing a thriving, robust and growing economy.

SUMC MLC: Mobility Learning Center: Successes in Seattle with Transportation Demand Management ([sharedusemobilitycenter.org](http://sharedusemobilitycenter.org)).

Explore the Association of Commuter Transportation's website ([www.actweb.org](http://www.actweb.org)) for a TDM definition and fundamentals, including benefits, roles, strategies, and much more. ACT is the premier organization and leading advocate for commuter transportation and transportation demand management professionals.

# PART 2

## KEY CONSIDERATIONS

### ESSENTIALS

- It is critically important that a jurisdiction develop clear and compelling goals that their TDM policies will support. Ordinance policy outcomes must be clearly articulated, communicated, and understood by key stakeholders. Goals are diverse and must be tailored for individual jurisdictions.
- Common goals include addressing climate objectives, improving safety, supporting local transportation plans, achieving greater sustainable mode share, reducing vehicle miles traveled (VMT), serving vulnerable populations (equity), improving system efficiency, improving air quality, etc. See Part 2: Comparative Analysis for how different cities prioritize different goals.
- Focus on the why. When discussing a possible ordinance with stakeholders, e.g., developers, the public, agency staff, decision makers, it's important to focus on the goals, the "why" for the ordinance. TDM is not usually a selling point. Communications and engagement messaging should focus on shared community goals the TDM policy will support.
- Have access to the right data and package and message if for your target audience. It is critical to have local data and information in early stages of TDM program development that help substantiate the efficacy of proposed TDM measures.
- Link ordinance goals to community values and objectives. Consider TDM as a broader suite of strategies to help achieve transportation-related community goals. Link the TDM ordinance to the vision a community is working toward. Align TDM with parking, zoning, development, transportation system efficiency, safety, access, and other relevant policies. Review MPO and regional plans to identify possible linkages between local TDM ordinance goals and regional plans.



- Design clear performance metrics. Clearly define success. Develop a strategy for measuring performance. Evaluate continuously and plan for ongoing program assessment and updates. Consider SMART objectives.
- Focus on behavior change, not technology. Remain wary of technologies that promise simple solutions to the complicated reality of achieving behavior change. Push for evidence-based solutions. There are no silver bullets.
- Build in program flexibility as much as possible. TDM programs will require updates and modifications along the way. Avoid putting too many details in city code or statute that require a high level of effort to change. Consider putting implementation details at policy level where they can be easily amended by planning staff and will not require approval by elected officials.
- Ordinances that provide multiple options to achieve compliance are more successful in reaching goals and buy-in from stakeholders than ordinances that provide a narrow window for compliance. Consider an ordinance that adopts a menu-based approach rather than prescriptive TDM requirements. Consider goal-based programs vs activity-based programs, e.g., reducing vehicle miles traveled vs achieving a certain number of transit trips.



# ENGAGEMENT

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- Engage stakeholders early and often, especially those who may be resistant to a TDM policy, e.g., developers, businesses, and housing advocates who are likely to only see associated costs and additional requirements.
- Develop clear and professional presentations and educational materials, e.g., fliers, one-pagers, PowerPoint, etc. This is equally important when engaging agency and city staff, decision-makers, and the public.
- Talking points should be simple, focus on the why and highlight beneficial outcomes. Consultant firms with experience working to support jurisdictions with TDM policy development and design may add tremendous value to engagement and communications strategies.
- Establish key partnerships with transportation management association, community-based organizations, and local/regional agencies to demonstrate wide-scale support.
- Identify and develop ordinance champion(s) whose mission will benefit from TDM ordinance outcomes e.g., special interest groups, agency heads, elected officials, etc.



# FUNDING AND ENFORCEMENT

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- Establish realistic cost estimates. Once established, full-time employees are required to enforce, implement, and administer a TDM ordinance. These costs are often overlooked and/or underestimated by jurisdictions. On the very conservative end, dedicate at least one full-time employee to administer the ordinance.
- In addition to full-time employees, associated costs may include performance measurement tools, consultants, communication, and educational materials, etc.
- Consider enforcement mechanisms early. Compliance is resource-intensive and enforcement may not lead to significant payoffs in program performance.
- Peer competition is often a successful motivator, e.g., having companies or developers compete against each other for highest performing programs which can result in good branding and marketing.

# COMMON CHALLENGES

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- Lack of resources and full-time employees for ongoing program implementation, evaluation and monitoring, data collection and analysis, administration, and enforcement.
- Pushback from developers, businesses, affordable housing groups and others who focus on added costs resulting from new ordinance compliance.
- Difficulty in measuring and tracking performance over time.
- Conflicts with housing affordability goals.
- Public perception issues around parking reductions.



# PART 3

# COMPARATIVE ANALYSIS

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## Motivations and Goals

Different cities and states have had varying primary motivations for pursuing TDM ordinances:

- San Jose: Climate action goals were a primary driver. The city realized that building complete streets was not enough to reduce single-occupancy vehicle trips from 85% to 25% by 2040.
- San Francisco: TDM was part of a broader transportation sustainability initiative coinciding with a shift from Level of Service to vehicle miles traveled in environmental analysis.
- Denver: Population growth and over-development spurred traffic and parking concerns.
- Maryland DOT: Improved transportation connections to support multimodal options for the movement of people and goods.

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## Stakeholder Engagement

All jurisdictions emphasized the importance of stakeholder engagement, but approaches varied:

- San Jose engaged with housing advocacy and environmental groups, the city's transportation and planning divisions, developers, local elected officials, and the general public.
- San Francisco held over 40 public meetings with stakeholder and neighborhood organizations (Press Release: <https://sfplanning.org/press-release/san-francisco-moves-forward-groundbreaking-transportation-demand-management>)
- Denver used webinars with developers, meetings with stakeholder groups, and forums with the public.



## Funding and Capacity

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Budget and staffing constraints were common challenges, but addressed differently:

- To develop and pursue their ordinance, San Jose received funding from the American Cities Climate Challenge for a consultant and 2.5 years of staffing.
- San Francisco had strong city support for funding and staff resources, which they acknowledged as a luxury and may not be made available under different circumstances.
- Denver's TDM program is funded by the general fund that supports about 1/3 of a full-time employee to support the ordinance.
- Chicago's ordinance went into effect without designated funding for a TDM program, leading to a disjointed rollout.

## Ordinance Structure and Flexibility

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Approaches to ordinance structure varied:

- San Francisco specifically structured their ordinance in two parts: planning code provision and elected official approval. Planning code updates are made with relative ease and allows program amendments and changes to be made relatively quickly with a low level of effort.
- Denver opted for flexible, non-prescriptive strategies.
- San Jose developed a TDM handbook with different requirements for commercial and residential properties.

# Parking Policy Integration

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The connection between TDM and parking policy varied:

- San Francisco identified parking as the #1 driver for vehicle miles traveled and integrated it strongly in their TDM program.
- Denver noted a weak nexus between TDM and parking ordinance with parking minimums still existing in many parts of the city.
- San Jose used TDM as part of a strategy to move towards removing minimum parking requirements.

# Enforcement and Monitoring

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Approaches to enforcement and monitoring differed:

- San Francisco planning department staff review and approve TDM plans during the entitlement review process.
  - A notice of special restriction indicating the project is subject to certain TDM measures must be recorded on the property per Planning Code section 169.4(e).
  - Planning department staff conduct site inspections prior to issuance of Certificate of Occupancy.
  - Annual monitoring by planning department staff begins 18 months after the first Certificate of Occupancy is issued.
  - If TDM requirements are non-compliant, the department's code of enforcement team may take action and impose applicable fees and fines.
- Denver uses a tiered system based on development size, with larger developments required to submit biannual surveys.
- Chicago's ordinance lacked clear definitions of what it is, or implementation time leading to challenges.



## Regional Considerations

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Geographic and political contexts influenced approaches:

- San Francisco's dense urban environment allowed for more aggressive TDM measures.
- Denver, as a growing city, focused on managing new development impacts.
- Chicago emphasized the need for a more regional, government policy-backed TDM program.
- Cities often looked to each other for guidance:
  - San Jose consulted with the cities of Los Angeles and San Francisco.
  - Chicago mainly looked to Boston, San Francisco, and a few others to learn about their approaches.
  - Many interviewees mentioned the value of having examples from peer cities.



# PART 4

## CASE STUDY:

# SAN FRANCISCO'S TDM ORDINANCE

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### Background

San Francisco implemented its TDM ordinance as part of a broader "Transportation Sustainability Program" in response to rapid development and the need to manage transportation impacts. The city's shift from level of service to vehicle miles traveled in environmental analysis created an opportune moment for this change.

### Key Features

- **Flexibility:** The ordinance offers 66 sustainable TDM measures, allowing developers to choose strategies that best fit their projects. Keep enforceability in mind when considering the array of available options. This TDM program also allows for a project to be updated administratively without Planning Commission action. ([Transportation Demand Management \(TDM\) Program Standards and Appendix A | SF Planning](#))
- **Point System:** TDM measures are assigned point values based on their effectiveness in reducing vehicle miles traveled. One point approximately corresponds to a 1% decrease in vehicle miles traveled. There is no option for a project to pay a fee to exempt itself from the program.
- **Scalability:** Requirements are based on project size, with larger developments required to implement more measures.
- **Integration with Parking:** Parking reduction is heavily weighted in the point system, reflecting its significant impact on vehicle miles traveled.
- **Online Tool:** An interactive TDM tool helps developers understand and select appropriate measures. [Transportation Demand Management \(TDM\) Tool | SF Planning](#)
- **Ongoing Monitoring:** The program includes requirements for ongoing reporting and compliance checks. The requirements of ongoing monitoring should remain flexible since they would apply for the lifetime of the project.



## Implementation Process

- **Extensive Stakeholder Engagement:** Over 40 public meetings were held with various stakeholders to gather feedback and build support.
- **Data-Driven Approach:** The City contracted with a consulting firm to conduct studies and literature reviews, ensuring a solid empirical foundation.
- **Flexible Structure:** The ordinance was structured in two parts to allow for easier updates without requiring full legislative approval.
- **Funding Mechanism:** A portion of an existing transportation impact fee was allocated to fund program administration and ongoing research. For TDM plan review and ongoing monitoring fees, see the planning department's [fee schedule](#).

## Challenges and Solutions

- **Developer Concerns:** The city made practical adjustments, such as capping requirements at 80% of total possible points for very large projects.
- **Implementation Complexity:** Focus was placed on ease of implementation from the start, informing measure selection and program design.
- **Data Limitations:** The City acknowledged data gaps and built in mechanisms for ongoing research and program updates. The Planning Department has an ongoing arrangement with the San Francisco County Transportation Authority (SFCTA) to study certain aspects of the TDM program to improve the efficacy of the program over time. One third of program fees goes to the SFCTA for continuing research.



## Outcomes and Lessons

- **Adaptability:** The program has gone through several iterations based on implementation experience and new data.
- **Integration with City Goals:** The TDM program is seen as a key tool in achieving broader climate and transportation goals.
- **Stakeholder Buy-in:** By the time of approval, most stakeholders were supportive due to the extensive engagement process.
- **Ongoing Improvement:** The City continues to collect data and make adjustments, demonstrating the importance of building in flexibility from the start.

## Key Takeaways

San Francisco's approach demonstrates how a comprehensive, flexible, and data-driven TDM ordinance can be successfully implemented in a large, complex urban environment. While specific strategies may need to be adapted for different contexts, the overall approach offers valuable lessons for other cities considering TDM ordinances.

- Integrate TDM with broader city initiatives and policy shifts.
- Invest in extensive stakeholder engagement throughout the process.
- Use data to inform program design but build in flexibility for updates not tied to Code which is difficult to amend and may invite unwanted changes.
- Consider implementation and enforcement from the beginning of program design.
- Create a dedicated funding source for ongoing program administration and research.



# RESOURCES

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Association for Commuter Transportation ([www.actweb.org](http://www.actweb.org))

US DOT: [Transportation Demand Management | Organizing and Planning for Operations - FHWA Office of Operations \(dot.gov\)](#)

San Jose: [Parking and Transportation Demand Management \(TDM\) Ordinance Update | City of San José \(sanjoseca.gov\)](#)

San Francisco: [Transportation Demand Management Program | SF Planning](#)

San Francisco Technical Justification document: [TRANSPORTATION DEMAND MANAGEMENT Technical Justification](#)

Denver: [Transportation Demand Management \(TDM\) - City and County of Denver \(denvergov.org\)](#)

Nelson Nygaard: [The New Transportation Demand Management: An Implementation Guide for City Officials | Nelson\Nygaard \(nelsonnygaard.com\)](#)

Center for Urban Transportation Research (CUTR), University of South Florida: [Transportation Demand Management – CUTR – Center for Urban Transportation Research | University of South Florida \(usf.edu\)](#)

CUTR's national TDM listserv is a particularly valuable resource for all levels of TDM practitioners: [LISTSERV 16.5 - LISTSERV Archives at LISTSERV.USF.EDU](#)