



# How Cities can Engage Organizations in Improving Urban Mobility

Although organizations cannot determine how employees commute to work, they can influence their travel patterns by implementing actions that foster the most sustainable ones. Such measures benefit organizations — potentially attracting employees that would not consider the job due to transportation challenges — cities and people.

# In this unit, you will learn:

- The benefits of Travel Demand Management (TDM) for organizations, their employees and cities.
- How the public sector can foster organizations to take action toward improving urban mobility through a Trip Reduction Ordinance (TRO).
- How a government authority can prepare a TRO and the main barriers to its success.
- What a Workplace Travel Plan (WTP) is.

#### **Course Content**

#### Introduction

How Cities Can Engage Organizations in Improving Urban Mobility

In this Learning Guide, you will learn:

- The benefits of Travel Demand Management (TDM) for organizations, their employees and cities.
- How the public sector can foster organizations to take action in improving urban mobility through a Trip Reduction Ordinance (TRO).
- How a government authority can prepare a TRO and the main barriers to its success.
- What a Workplace Travel Plan (WTP) is.

#### **Definitions**

A **Trip Reduction Ordinance** (TRO) is a type of Travel Demand Management law in a city, state, or country that requires certain organizations to develop Workplace Travel Plans to reduce the number of trips or promote more sustainable travel patterns among employees in their commute to work.

An **organization** is any employer or development complex, public or private, that generates daily commuting trips. For example, it could be a public building, office complex, industry, shopping center, university, school, hospital, or company.

A **Workplace Travel Plan** is a package of coordinated actions defined and developed by an organization that spells out goals and how the organization will foster a more sustainable and efficient commute among its employees. It can be directly linked to a TRO or be developed spontaneously by the organization.

In this unit you will learn the practical steps to developing a **Trip Reduction Ordinance** and options for Workplace Travel Plans.

For an overview of reducing the demand for urban vehicle trips, see the unit:

#### **Reducing Demand for Vehicle Trips in Cities**

That unit describes:

- Why it is smarter and cheaper to reduce the demand for trips rather than increase the number and size of roads to accommodate more cars
- How to reduce congestion and pollution by managing demand
- How one type of demand management—a trip reduction ordinance—has worked in several cities

### **Advantages of a Trip Reduction Ordinance**

A TRO can benefit a region, city, or organization, as well as their residents or workers.

## Region/City

- Reduces local congestion
- Reduces air pollution from traffic
- Boosts investments in more sustainable transport modes
- Decreases traffic accidents
- Reduces need for additional roads and parking spaces, leaving land open for other uses
- Incentivizes sustainable mobility businesses



With TROs the number of cars on the street decreases, reducing air pollution. Photo by Mariana Gil / WRI Brasil.

# Organization

- Attracts and retains talents from a larger travel shed
- Decreases the need for company parking lots
- Fulfills sustainability goals
- Increases productivity
- · Follows international good practice standards



Reducing the number of commuting vehicles can reduce the need for parking spaces. Photo by Mariana Gil / WRI Brasil.

# **People**

- Encourages physical activity
- Improves quality of life
- Reduces commuting time
- Increases reliability of travel time
- Increases satisfaction with the organization



A TRO policy can encourage people to engage in more active ways of transportation. Photo by Mariana Gil / WRI Brasil.

## First, define the goals of your Trip Reduction Ordinance

Some common goals of TRO policies around the world are to:

- Encourage sustainable transport
- Reduce emissions
- Reduce fuel consumption
- Reduce the number of single-occupancy vehicle trips
- Reduce the number of Vehicle Kilometers Traveled (VKT)

These are the most common examples, but cities can think broader and craft TROs to improve affordability (lower commute costs) or public health (more focus on biking and walking) as well.

# Then quantify the goals following the SMART principle

**SPECIFIC:** define the goal with no ambiguity

MEASURABLE: a goal must have well defined ways of being measured

**ACHIEVABLE:** the goal must be reasonable

**RELEVANT:** it must be worthwhile in its context

**TIME-BOUND:** it must have deadlines for accomplishments

A good example may be:

• Reduce VKT by 35% over a 12-year period (intermediate goals: year 3 - 20%, year 6 - 25%)

When goals are quantified they become objectives that can be assigned to certain organizations.

The policy can stipulate common objectives for the whole city or vary them for different areas. For example, organizations in inner city areas with better access to public transport can have higher targets in reducing single-occupancy vehicle trips than those in suburban areas. Cities can also consider

different targets in alignment with the available of non-motorized facilities as well.

#### Determine which organizations to include in the policy

Usually, TROs include organizations by type, age, or size.

#### **Type**

- Industry
- Business
- · Health institutions
- Education institutions
- Public institutions

#### Age

- Only new developments
- New developments and those seeking licensing renewal
- All developments

#### Size

- · Number of employees
- Floor space
- Number of parking spots
- Estimated trips generated (applicable to new developments)

Some TRO's limit the focus on commutes at the peak hours, but this can be harder to control.



The policy can focus only on new developments or on all of them. Photo by Mariana Brasil / WRI Brasil.

A TRO can be compulsory or voluntary - or both depending on the type of organization

Depending on the organization's characteristics (type, size and age), cities can determine that some must

comply with the policy while others may participate voluntarily. The TRO compliance requirements can also change over time, being voluntary during its first years to foster early adopters and help the city learn from the process and build support, and later becoming compulsory.



Organizations can lead efforts to reduce the commuting footprint of their employees. Photo by Mariana Gil / WRI Brasil.

#### How does an organization comply with a TRO?

Organizations usually develop a Workplace Travel Plan (WTP) — a written document presenting the organization's plan to achieve the TRO goals. In addition, each organization needs to:

- Hire or appoint a mobility coordinator.
- Develop a marketing strategy.
- Conduct a periodic evaluation of results.
- Send annual or bi-annual reports to the public authority.
- Receive evaluations from the public authority.

Some TROs may offer alternatives to the development of a WTP. For example, they may allow organizations to pay a per-employee fee as an alternative to submitting the WTP and use the funding to support sustainable travel options in that area.

#### **Mobility coordinators**

- Each organization appoints a <u>mobility coordinator</u>.
- The mobility coordinator is tasked with creating, managing, and promoting an organization's Workplace Travel Plan program.
- This can be a full-time position (in large organizations), or the duties can be added to a team member's job description.
- A clear supervisor needs to be assigned to evaluate the Mobility Coordinator's performance.



Photo by Lara Caccia / WRI Brasil

## Define how the Workplace Travel Plan must be developed

- **Type 1 Programed (activity-based)** in which an organization selects mobility measures among options provided by the authority to craft its plan, or
- **Type 2 Performance-based** in which the organization develops a plan to meet the objectives set by the authority based on the commuting patterns of its employees. Focus is more on the results rather than how they are achieved.

Either way, a WTP should be dynamic and change over time in response to experience or changing needs and conditions of the organizations or of their surrounding area.



Photo by Mariana Gil / WRI Brasil.

## **TRO Type 1: Programmed Workplace Travel Plan**

The municipality gives organizations a list of urban mobility measures from which to choose. These can include:

#### A fixed number of measures

• This number can vary according to certain criteria (e.g., size or location of the organization).

## A list of measures that add up to a set point score

 The authority attributes a point value to each measure. The organization must select measures that add up to a minimum score. The minimum score can be based on criteria such as land use, built area, or location, among others.

#### A kit of measures

• A kit is a bundle of measures that must be implemented together. Kits can vary according to certain criteria (e.g. size or location of the organization).

The benefit of a **programmed TRO** is that if an organization is implementing the chosen measures, it is complying with the policy.

The results of the measures used are evaluated in a periodic report, which determines whether they have been effective or whether new measures are needed.

#### **TRO Type 2: Performance-based Workplace Travel Plan**

Each organization prepares its own WTP to meet goals set by the city or state.

- The organization conducts a baseline survey to determine the commuting habits of its employees.
- The organization prepares a first draft of the WTP with measures it believes will meet its goals.
- The draft plan is submitted to the regulatory authority for approval.
- The authority evaluates whether the selected measures are enough to meet the established goals.
- If the authority determines that the chosen measures are not enough, both parties work together to improve the plan until it is approved.



# State of Washington

# Employee Questionnaire

#### **Directions**

- · All questions refer to work for this employer only.
- Use a No. 2 pencil.
- · Fill in the circles completely.
- · Erase cleanly any marks you wish to change.
- · Do not make any stray marks on the form.

1.	Which of the following best desc	ribes your employment status?	
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- Full-time (35 hours or more each week)
- O Part-time (20 to 34 hours each week)
- O Part-time (less than 20 hours each week)

2.	What days do you typically begin work between 6 and 9 a.m.?
	(Mark all that apply)

- Monday
- Tuesday
- Wednesday
- Thursday
- O Friday
- Saturday
- Sunday
- Never

#### 3. ONE WAY, how many miles do you commute from home TO your usual work location?

- DO NOT use roundtrip or weekly distance.
- Include miles for errands or stops made daily on the way to
- If you telework, report the miles from your residence to your
- Round off the distance traveled to the nearest miles.
- Write numbers in the boxes and fill in the corresponding

0	0	0
1	1	1
2	2	2
3	3	3
4	4	4
(5)	(5)	(5)
6	6	6
7	7	7
8	8	8
9	9	9

- 4. Last week, what type of transportation did you use each day to commute TO your usual work location?
  - If you used more than one type, fill in the type used for the LONGEST DISTANCE.
  - Fill in ONLY ONE type of transportation per day.
  - Fill in "Carpooled" only if at least one other person age 16 or older was in the vehicle.
  - Fill in "Teleworked" if you eliminated a commute trip by working at a location less than half the distance from your usual work location.
  - If you teleworked part of the day then went to your usual work location, fill in how you got to your usual work location.

M	T	W	Th	F	Sa	Su	
0	0	0	0	0	0	0	Drove Alone
0	0	0	0	0	0	0	Carpooled (2 or more people)
0	0	0	0	0	0	0	Vanpooled
0	0	0	0	0	0	0	Rode a motorcycle
0	0	0	0	0	0	0	Rode a bus
0	0	0	0	0	0	0	Rode a train/light rail/streetcar
0	0	0	0	0	0	0	Rode a bicycle
0	0	0	0	0	0	0	Walked
0	0	0	0	0	0	0	Teleworked
0	0	0	0	0	0	0	Compressed workweek day off
0	0	0	0	0	0	0	Overnight buisness trip
0	0	0	0	0	0	0	Did not work (day off, sick, etc.)
0	0	0	0	0	0	0	Boarded Ferry with car/van/bus
0	0	0	0	0	0	0	Boarded ferry as walk-on passenger
0	0	0	0	0	0	0	Other:

5.	If you carpooled or vanpooled as part of your commute, or i					
	you rode a motorcycle, how many people (age 16 or older)					
	were usually in the vehicle including yourself?					

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0	One person	0	Nine people
0	Two people	0	Ten people
0	Three people	0	Eleven people
0	Four people	0	Twelve people
0	Five people	0	Thirteen people
0	Six people	0	Fourteen people
0	Seven people	0	Fifteen or more people
0	Eight people		

6. What is your home zip code? (Write numbers in the boxes and fill in the corresponding circles.)

0	0	0	0	0
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
(5)	(5)	(5)	(5)	(5)
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9

<ul> <li>7. Was last week a typical week for commuting? <ul> <li>Yes</li> <li>No</li> </ul> </li> <li>8. Which of the following best describes your work schedule?</li> </ul>	11. When you do not drive alone to work, what are the three most important reasons?  Solution Financial incentives for carpooling, bicycling or walking  Free or subsidized bus, train, vanpool pass or fare benefit			
<ul> <li>5 days a week</li> <li>4 days a week (4/10s)</li> <li>3 days a week</li> <li>9 days in 2 weeks (9/80)</li> <li>7 days in 2 weeks</li> <li>Other:</li> <li>9. On the most recent day that you drove alone to work, did you pay to park? (Mark "yes" if you paid that day, if you prepaid, if you are billed later, or if the cost of parking is deducted from your paycheck.)</li> <li>Yes</li> <li>No</li> </ul>	Personal health or well-being Cost of parking or lack of parking To save money To save time using the HOV lane I have the option of teleworking Driving myself is not an option Emergency ride home is provided I receive a financial incentive for giving up my parking space Preferred/reserved carpool/vanpool parking is provided Environmental and community benefits Other:			
Occasionally, on an as-needed basis  1-2 days/month  1 day/week  2 days/week  3 days/week	12. When you drive alone to work, what are the three most important reasons?  Riding the bus or train is inconvenient or takes too long I need more information on alternative modes My job requires me to use my car for work My commute distance is too short Family care or similar obligations I like the convenience of having my car Bicycling or walking isn't safe There isn't any secure or covered bicycle parking Other:			

# Thank you for completing the survey!

# How can cities and states help organizations create Workplace Travel Plans?

- Engage organizations while conceiving the TRO
- Help define the vision, objectives, and goals of their WTP and develop an internal communication strategy.

- Hold capacity-building sessions to develop and implement the Workplace Travel Plan.
- Help organizations conduct a survey of employee commuting patterns.
- Create a reference guide and standard templates (e.g., a survey report) that can be adapted by organizations developing their WTP.
- Provide a forum for dialogue among the mobility coordinators from all organizations to discuss best practices and learn from each other.

A WTP cannot be viewed as a regulatory tool only, it needs to be viewed as a value-added tool for the organization in fulfilling its other organizational goals

Transportation Management Associations (TMA)

In many USA cities, non-profit organizations called TMAs are contracted by the cities to help regulatory agencies to support the development of WTP by organizations. Such entities may also allow small employers to provide services and incentives towards a more sustainable commute pattern. In general, TMAs have been successful approach that transformed the relationship between public and private sectors.



Administrative Center of the State of Minas Gerais Belo Horizonte, Brazil. Photo by WRI Brasil.

Use incentives and penalties to get organizations to follow their Workplace Travel Plans

Incentives can engage companies when the policy is voluntary.

## **Common incentives are:**

- Lead by example (government, specially the transit agency should be the first to adopt a WTP)
- Performance recognition (e.g., an award that promotes peer-to-peer competition)
- Tax reduction (e.g., of municipal or state taxes)



Stamp for "Bicycle Friendly Company" from the city of Joinville in Brazil.

### Penalties for organizations that do not create or comply with a WTP can be:

- "Name and shame" (publicly disclose the organizations that are not complying)
- Refuse to license expansion of facilities
- Charge fines

Penalties are given for not complying with the policy, not for unreached goals and objectives, which organizations are urged to try harder to meet.

#### Seattle achieved results with its Trip Reduction Ordinance



Photo by Bala / Wikimedia Commons.

Seattle, Washington, is one of the fastest growing cities in the United States. It has added more than 90,000 jobs in the city center from 2010 to 2019, and is home to large companies like Amazon, Boeing and Microsoft. Even so, the number of trips in private single-occupancy vehicles has fallen and a majority of commuters prefer public transport.

When Washington State passed a law in 1991 that required cities or regions to develop Trip Reduction Ordinances, Seattle developed its **Commute Trip Reduction** ordinance. Today over 250 employers meet the applicability criteria, impacting up to 190,000 people.

Seattle is divided into eight regions, called networks. Each network had a measurable objective and preferred strategies to reduce single-occupancy vehicle trips.

In the city center, from 2010 to 2019, single-occupancy vehicle trips fell 9 percent while public transportation use rose 4 percent and telework more than doubled. Beyond that, participating organizations have invested almost US\$100 million each year in encouraging the use of more sustainable transport modes. One of the main pillars of the policy is the subsidy to the public transport system provided by the organizations that comply with it.

#### How Seattle carried out the elements of its TRO

**Goals:** reduce traffic congestion, emissions of greenhouse gases and other air pollutants, and energy consumption.

**Objectives:** variable among the city's eight regions, called 'networks'

**Type:** <u>performance-based</u> (but the organizations must choose measures from a list with 18 options)

**Applicability criteria:** all companies with 100 or more employees

**Incentives:** annual awards give recognition to the best performing work sites (Commute Trip Reduction champions)

**Penalties:** none for not achieving objectives, \$250 a day for noncompliance with the policy. This is the last resource used. Prior to that one-on-one assistances are conducted.

#### Requirements for participating organizations:

- Designate a mobility coordinator.
- Distribute the CTR program summary to employees at least twice a year and to each new employee.
- Choose to implement at least 2 of the 18 options.
- Submit a program report every two years.
- Conduct a commuter habits survey every two years.



Target percentage caps on single-occupancy vehicle trips for each of the eight networks covered by Seattle's Commute Trip Reduction ordinance. Source: Seattle Department of Transportation.

# **Quiz Yourself - 1**

Reduces local congestion
 Reduces need for additional roads and parking spaces, leaving land open for other uses
 Reduces air pollution from traffic
 All of the above

# **Quiz Yourself - 2**

- Type (industry, health, education, business office)
- O Age (new development, seeking renewal licensing)
- O Size (number of employees, parking spots, area)
- O All of the above

#### **Quiz Yourself - 3**

- O Fine an organization that is not in compliance.
- O Provide support for the organization such as developing capacity to conduct the staff travel survey, develop a Workplace Travel Plan, and set the vision, goals and objectives.
- O Remove the organization from the TRO program.
- O Do nothing.

#### **Further Reading**

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#### **Credits**

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