



City of Vancouver *Planning By-law Administration Bulletins*

Planning, Urban Design and Sustainability Department

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Transportation Demand Management for Developments in Vancouver

*Authority – Director of Planning
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1 Introduction

Transportation Demand Management (TDM) may be defined as a set of strategies aimed at maximizing the utility of sustainable transportation choices. TDM is used to manage traffic and parking demands, and enhance the effectiveness of non-personal vehicle transportation.

The City may require a Transportation Demand Management Plan (TDM Plan) that provides measures which prioritize more sustainable travel as part of rezoning and/or development permit applications. This contributes to the Transportation 2040 and Greenest City targets of:

- Having walking, cycling and public transit trips make up at least 50% of all trips by 2020 and 66% of all trips by 2040;
- Reducing motor-vehicle kilometres traveled per resident by 20% from 2007 levels; and
- Reducing community-based greenhouse gas emissions by 33% from 2007 levels.

This document provides guidelines for acceptable TDM Measures and developing TDM plans as provided for in the Parking By-law.

Schedule A of this Bulletin provides several worksheets to assist in determining TDM applicability for a site, and developing a TDM Plan.

2 Process

The overall process for approval of a TDM plan includes:

1. Plan Development

The applicant determines if the TDM program is applicable to the project, as outlined in **Section 3**, and submits a TDM plan with the rezoning or development permit application.

2. Review

City staff review the TDM plan and determine compliance with the TDM Program Standards, as outlined in **Section 4.2**, and suitability of the proposed measures.

3. Conditions and Agreements

If the TDM Plan is approved, a requirement to comply with the TDM plan is included as a Condition of Approval in addition to provision of any required agreements to secure the proposed measures.

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3 Required and Permitted TDM Projects

3.1 Required TDM Projects

Refer to Worksheets A, B, and C in **Schedule A** to determine TDM Point requirements for a project.

The following developments must provide an acceptable TDM plan:

- Projects in the Downtown, except residential strata and non-social housing rental in the West End and Robson North Permit Area.
- Large Sites:
 - having a total site size of 8,000 m² (1.98 acres) or more, or
 - containing 45,000 m² (484,375 ft²) or more of new floor area.

Despite these requirements A TDM Plan is not expected for small developments or small changes of use. Also, land uses that make up only a small portion of larger developments need not provide TDM measures, even if other land uses on the site require TDM. For these exemptions, the following maximums apply:

- 500 m² of new non-residential floor area
- 2300 m² of non-residential change of use
- 11 Dwelling Units

TDM plans must meet the point targets outlined in **Table 1**, **Table 2**, or **Table 3**, depending on size and location.

3.2 Permitted TDM Projects

For all other development projects not defined under **Section 3.1**, a TDM plan may be provided in order to achieve parking reductions, as outlined in **Tables 1 to 4**, depending on location. Refer to Worksheets A, B, and C in **Schedule A** to determine TDM Point requirements for a project.

4 Deliverables

At minimum, Worksheet A must accompany each rezoning and development permit application. Where a TDM Plan is required, a TDM Plan Summary must be submitted with a rezoning or development permit application. Worksheets D, and E in **Schedule A** comprise an acceptable format for a TDM Plan Summary, although an alternative format may be submitted.

A detailed TDM Plan is required for some TDM measures and should be submitted in addition to the TDM Plan Summary. A TDM plan may form part of a Transportation Assessment and Management Study (TAMS).

This plan details TDM measures that will be incorporated into the development project as well as information detailing how the program will be delivered. This section describes the recommended content and layout of a TDM plan or TAMS chapter:

4.1 Sample TDM Plan Contents

1. TDM Plan Summary
2. Area / Site Description
 - a. Location – Downtown or City-wide
 - b. Project Description (land uses)
 - c. TDM Point Requirement or Target, Worksheet B
 - d. Transit Accessibility, Worksheet C
3. Proposed TDM Measure Details
 - a. Summary of TDM measures
 - b. Financial Incentives
 - c. Active Transportation
 - d. Alternative Commute Services
 - e. Support, Promotion, and Information
 - f. Parking Management
 - g. Other
4. Site Plan showing proposed TDM measures

The TDM plan may not need to be prepared by a transportation engineer. The City may request additional supporting information or design details as part of the review process.

4.2 TDM Standards

4.2.1 Targets

A point target is specified based upon land use, size, and location of the development. If a project involves multiple land use categories (mixed-use development), each of the land uses are subject to separate targets. TDM measures may count towards multiple land uses if they are accessible to them. For example, a single two-way shared vehicle with public access may provide points to all land uses on a project.

- For sites *requiring* a TDM plan per **Section 3.1**, a TDM plan must be submitted meeting the point target in **Table 1**, **Table 2**, or **Table 3**.
- For sites *that do not require* a TDM plan per **Section 3.2**, a TDM plan may be submitted to achieve parking reductions. Achieving the maximum point targets outlined in **Table 1** to **Table 4** allows developments to achieve a maximum vehicle parking reduction for each respective land use, as per **Table 5** and **Table 6**. A proportionally lower parking reduction may be granted for achieving a lower number of points.

4.2.2 Menu of Acceptable TDM Measures for Developments

For simplicity, the TDM program standards classify land uses into five (5) categories:

- Residential – Strata
- Residential – Rental
- Residential – Social
- Commercial – Office
- Commercial – Retail/Service

TDM plan targets and applicable measures for land uses not defined above, such as hotels, institutional and industrial land uses, will be determined on a case-by-case.

To achieve a target, developers may select from a menu of 22 TDM measures summarized in **Table 7**.

Not all TDM measures are applicable to each land use category or appropriate for every development. A single TDM measure may count towards multiple land uses if it is usable by each land use. Detailed requirements for each TDM Measure are included in **Schedule B**.

4.2.3 TDM Monitoring

Monitoring is required to assess the effectiveness of the package of TDM measures to inform future policy. Developments will be required to provide a contribution towards a City-led TDM monitoring program, as follows.

- All large sites and development projects in the Downtown will be required to provide a contribution towards TDM monitoring in an amount equal to \$2 per square meter of new gross floor area.
- City-wide, new development projects will be required to provide a contribution towards TDM monitoring equal to \$280 for each vehicle parking space being relaxed.

In addition, access agreements shall be required to secure long-term City access to the site to conduct future TDM monitoring, which may include, but not be limited to: site inspections and data collection activities, as needed.

Table 1 - TDM Point Targets for Large Sites

The following requirements apply to large sites with >8000 m² in land area, or >45,000 m² of new development floor area.

Minimum targets for each land use must be met individually; however TDM measures available to multiple land uses may count towards the requirements of all those land uses.

Note that for large sites, at least eight (8) of the required points must come from shared vehicles. While a TDM plan is required for all Large Sites, achieving the point target set in **Table** permits Large Sites to benefit from parking reductions by land use, as per **Table** and **Table**.

Development	Required Points
Residential	
Residential - Social housing	<ul style="list-style-type: none"> • Fewer than 12 dwelling units, no TDM requirement • For 12 dwelling units or more, a minimum of 18 points.
Residential – Strata	<ul style="list-style-type: none"> • Fewer than 12 dwelling units, no TDM requirement • For 12 to 24 dwelling units, a minimum of one (1) point per dwelling unit; • For 25 or more dwelling units, a minimum of 30 points;
Residential – Rental	<ul style="list-style-type: none"> • Fewer than 12 dwelling units, no TDM requirement • For 12 to 24 dwelling units, a minimum of one (1) point per dwelling unit; • For 25 or more dwelling units, a minimum of 30 points;
Commercial	
Commercial - Office	<ul style="list-style-type: none"> • Less than 500 m², no TDM requirement • For 500 to 1,000 m² a minimum of 0.024 points per m²; • For greater than 1,000 m² a minimum of 30 points;
Commercial - Retail/Service	<ul style="list-style-type: none"> • Less than 500 m², no TDM requirement • For 500 to 1,000 m² a minimum of 0.024 points per m²; • For greater than 1,000 m² a minimum of 30 points;
Other	
All other land uses	<ul style="list-style-type: none"> • Up to 30 points, to be determined on a case-by-case basis by the Director of Planning in consultation with the General Manager of Engineering Services.
Change of Use	
Change of use, all land uses	<ul style="list-style-type: none"> • For 2,300 m² or more, 30 points, to be determined by the Director of Planning in consultation with the General Manager of Engineering Services.

**Table 2 - TDM Point Targets for Downtown Sites
outside the West End and Robson North Permit Zone**

The following requirements apply to sites that are within Downtown, but not within the West End and Robson North Permit Zone, which are not large sites.

Minimum targets for each land use must be met individually; however TDM measures available to multiple land uses may count towards the requirements of all those land uses.

Land Use	Calculation
Residential	
Residential - Social housing	<ul style="list-style-type: none"> • Fewer than 12 dwelling units, no TDM requirement • For 12 dwelling units or more, a minimum of 12 points
Residential - Strata	<ul style="list-style-type: none"> • Fewer than 12 dwelling units, no TDM requirement • For 12 to 24 dwelling units, a minimum of one (1) point per dwelling unit; • For 25 to 220 dwelling units, a minimum of 24 points; • For 221 dwelling units or more, a minimum of 24 points, with a minimum of 8 points from shared vehicle-related measures.
Residential – Rental	<ul style="list-style-type: none"> • Fewer than 12 dwelling units, no TDM requirement • For 12 to 24 dwelling units, a minimum of one (1) point per dwelling unit; • For 25 to 220 dwelling units, a minimum of 24 points; • For 221 dwelling units or more, a minimum of 24 points, with a minimum of 8 points from shared vehicle-related measures.
Commercial	
Commercial - Office	<ul style="list-style-type: none"> • Under 500 m² no TDM requirement • For 500 to 1,000 m² a minimum of 0.024 points per m²; • For 1,001 to 2,300 m² a minimum of 24 points; • For 2,301 m² or more, a minimum of 24 points, with a minimum of 8 points from shared vehicle-related measures.
Commercial Retail/Service	<ul style="list-style-type: none"> • Under 500 m² no TDM requirement • For 500 to 1,000 m² a minimum of 0.024 points per m²; • For 1,001 to 2,300 m² a minimum of 24 points; • For 2,301 m² or more, a minimum of 24 points, with a minimum of 8 points from shared vehicle-related measures.
Other	
All other land uses	<ul style="list-style-type: none"> • Up to 24 points, to be determined on a case-by-case basis by the Director of Planning in consultation with the General Manager of Engineering Services.
Change of Use	
Change of use, all land uses	<ul style="list-style-type: none"> • Under 2300 m² no TDM requirement • For 2,300 m² or more, up to 24 points, to be determined by the Director of Planning in consultation with the General Manager of Engineering Services.

Table 3 - TDM Point Targets within the West End and Robson North Permit Zone

The following requirements apply to sites within the West End and Robson North Permit Zone, which are not large sites.

Minimum targets for each land use must be met individually; however TDM measures available to multiple land uses may count towards the requirements of all those land uses.

Land Use	Required Points
Residential	
Residential - Social housing	<ul style="list-style-type: none"> For 12 dwelling units or more, a minimum of 12 points;
Residential - Strata	<p>No TDM Requirement <i>Up to 20% parking requirement reduction with maximum points</i> <i>Up to 10% parking requirement reduction with proximity to transit (refer to Worksheet C)</i></p> <ul style="list-style-type: none"> For less than 12 dwelling units, up to 12 points; For 12 to 24 dwelling units, up to one (1) point per dwelling unit; For 25 to 220 dwelling units, up to 24 points; For 221 dwelling units or more, up to 24 points, with up to 8 points from car share-related measures, proportional to total points achieved.
Residential - Rental	<p>No TDM Requirement <i>Up to 40% parking requirement reduction with maximum points</i> <i>Up to 20% parking requirement reduction with proximity to transit (refer to Worksheet C)</i></p> <ul style="list-style-type: none"> For less than 12 dwelling units, up to 12 points; For 12 to 24 dwelling units, up to one (1) point per dwelling unit; For 25 to 220 dwelling units, up to 24 points; For 221 dwelling units or more, up to 24 points, with up to 8 points from car share-related measures, proportional to total points achieved.
Commercial	
Commercial Office	<ul style="list-style-type: none"> Less than 500 m², no TDM requirement For 500 to 1,000 m² a minimum of 0.024 points per m²; For 1,001 to 2,300 m² a minimum of 24 points; For 2,301 m² or more, a minimum of 24 points, with a minimum of 8 points from shared vehicle-related measures.
Commercial Retail/Service	<ul style="list-style-type: none"> Less than 500 m², no TDM requirement For 500 to 1,000 m² a minimum of 0.024 points per m²; For 1,001 to 2,300 m² a minimum of 24 points; For 2,301 m² or more, a minimum of 24 points, with a minimum of 8 points from shared vehicle-related measures.
Other	
All other land uses	<ul style="list-style-type: none"> Up to 24 points, to be determined on a case-by-case basis by the Director of Planning in consultation with the General Manager of Engineering Services.
Change of Use	
Change of use, all land uses	<ul style="list-style-type: none"> Under 2300 m², no TDM requirement For 2,300 m² or more, up to 24 points, to be determined by the Director of Planning in consultation with the General Manager of Engineering Services.

Table 4 - TDM Plan Point Targets to Achieve Parking Reductions

The following opportunities are available to sites outside the downtown, which are not large sites and do not require TDM, but may provide TDM measures in order to reduce parking requirements.

TDM measures available to multiple land uses may count towards parking requirement reductions of all those land uses.

Parking reductions up to the maximum percentage for the land use may be received for TDM plans achieving the maximum point value. A proportionally lesser parking reduction may be received for a lesser number of TDM points.

In addition to TDM parking requirement reductions, reductions for Transit Accessibility may apply. Refer to **Table** and **Table**.

Land Use	Maximum Points
Residential	
Residential - Social housing (Maximum 40% reduction)	<ul style="list-style-type: none"> Up to 12 points
Residential – Strata (Maximum 20% reduction)	<ul style="list-style-type: none"> For less than 12 dwelling units, up to 12 points; For 12 to 24 dwelling units, up to one (1) point per dwelling unit; For 25 to 220 dwelling units, up to 24 points; For 221 dwelling units or more, up to 24 points.
Residential - Rental (Maximum 40% reduction)	<ul style="list-style-type: none"> For less than 12 dwelling units, up to 12 points; For 12 to 24 dwelling units, up to one (1) point per dwelling unit; For 25 to 220 dwelling units, up to 24 points; For 221 dwelling units or more, up to 24 points.
Commercial	
Commercial – Office (Maximum 20% reduction)	<ul style="list-style-type: none"> For less than 500 m² up to 12 points; For 500 to 1,000 m² up to 0.024 points per m²; For 1,001 to 2,300 m² up to 24 points; For 2,301 m² or more, up to 24 points.
Commercial - Retail/Service (Maximum 20% reduction)	<ul style="list-style-type: none"> For less than 500 m² up to 12 points; For 500 to 1,000 m² up to 0.024 points per m²; For 1,001 to 2,300 m² up to 24 points; For 2,301 m² or more, up to 24 points.
Other	
All other land uses (Maximum 20% reduction)	<ul style="list-style-type: none"> Up to 24 points, to be determined on a case-by-case basis by the Director of Planning in consultation with the General Manager of Engineering Services.
Change of Use	
Change of use, all land uses (Maximum 20% reduction)	<ul style="list-style-type: none"> For less than 2,300 m² up to 12 points; For 2,300 m² or more, up to 24 points, to be determined on a case-by-case basis by the Director of Planning in consultation with the General Manager of Engineering Services.

Table 5 - Maximum Vehicle Parking Reductions by Land Use, Transit Accessibility, and TDM Commitment

Development	Transit Accessibility		
	Level A	Level B	Level C
Residential – Rental (including social housing) no TDM plan	20%	10%	0%
Residential – Rental (including social housing) with TDM plan achieving applicable Point Target per Table 1 to 4	60%	50%	40%
All other land uses no TDM plan	10%	5%	0%
All other land uses with TDM plan achieving applicable Point Target per Table 1 to 4	30%	25%	20%

Table 6 - Transit Accessibility Definitions

Transit Accessibility	Development Location
Level A	<p>Within:</p> <ul style="list-style-type: none"> • 100 m walking distance of any one (1) existing FTN route, including B-Line stops, or • 200 m walking distance of any intersection of two (2) existing FTN routes, including B-Line stops, or • 400 m walking distance of a SkyTrain station
Level B	<p>Within:</p> <ul style="list-style-type: none"> • 101 m to 200 m walking distance of any one (1) existing FTN route, including B-Line stops, or • 201 m to 400 m walking distance of any intersection of two (2) existing FTN routes, including B-Line stops, or • 401 m to 800 m walking distance of a SkyTrain station
Level C	<p>Greater than:</p> <ul style="list-style-type: none"> • 200 m walking distance of any one (1) existing FTN route, including B-Line stops, or • 400 m walking distance of any intersection of two (2) existing FTN routes, including B-Line stops, or • 800 m walking distance of a SkyTrain station

FTN: Frequent Transit Network, as defined by TransLink, <https://www.translink.ca/Plans-and-Projects/Frequent-Transit-Network.aspx>

Table 7 - Menu of Acceptable TDM Measures for New Developments

TDM Measure		Details	Applicable Land Uses - Maximum Points				
			Residential Strata	Residential Rental	Residential Social Housing	Commercial Office	Commercial Retail/Service
Financial Incentives							
FIN-01	Car Share Membership	Provide annual car share membership to residents.	2	4	4		
FIN-02	Public Transit Passes	Provide subsidized transit pass for residents and employees.		16	16	16	6
Active Transportation							
ACT-01	Additional Class A Bicycle Parking	Provide additional Class A bicycle parking above minimum requirements.	8	8	8	8	3
ACT-02	Improved Access to Class A Bicycle Parking	Provide improved access to Class A bicycle parking.	8	8	8	8	3
ACT-03	Enhanced Class B Bicycle Parking	Provide enhanced visitor Class B bicycle parking, including well-lit, secure, indoor facilities.	2	2	2	2	2
ACT-04	Secure Public Bicycle Parking	Provide secure public bicycle parking on-site.				2	2
ACT-05	Bicycle Maintenance Facilities	Provide on-site bicycle maintenance facilities.	2	2	2	2	2
ACT-06	Improved End-of-trip Amenities	Provide improved and/or additional end-of-trip amenities for employees.				6	2
ACT-07	Public Bicycle Share Space	Where the City requires space and SRW for on-site Public Bicycle Share (PBS) station.	8	8	8	8	8
ACT-08	Shared Bicycle Fleet	Provide fleet of bicycles for residents, employees, and/or guests to use (private bicycle share).		4	4	4	2
ACT-09	Walking Improvements	Provide safe, attractive, and direct off-site connections for pedestrians linking building entrances with public sidewalks, transit stops, and key destinations. Subject to City approval.	6	6	6	6	6

TDM Measure	Details	Applicable Land Uses - Maximum Points					
		Residential Strata	Residential Rental	Residential Social Housing	Commercial Office	Commercial Retail/Service	
Alternative Commute Services							
COM-01	Carshare Spaces	Provide dedicated publicly available parking spaces for car share vehicles (1-way or 2-way).	8	16	16	8	8
COM-02	Carshare Vehicles and Spaces	Provide publicly accessible two-way car share vehicle(s) and space(s) on-site for 3 years.	8	16	16	8	3
COM-03	Additional Pick-Up/Drop-Off Spaces	Provide improved and/or additional short-term pick-up/drop-off passenger spaces.	8	8	8	8	8
COM-04	Shuttle Bus Service	Provide free local shuttle bus services to between the development site and regional transit hubs, commercial centres, and residential areas for customers, employees, and visitors.				14	14
COM-05	Vanpool/Carpool Service	Provide vanpool/carpool services to employees.				4	2
Support, Promotion, Information							
SUP-01	Transportation Marketing Services	Provide Travel planning resources such as individualized marketing, including active transportation maps, community resources		2	2	2	2
SUP-02	Real-Time Information	Install real-time alternative transportation information boards in lobbies and/or other public areas.		2	2	2	2
SUP-03	Multimodal Wayfinding Signage	Provide directional signage to major destinations and public amenities.	2	2	2	2	2

TDM Measure	Details	Applicable Land Uses - Maximum Points				
		Residential Strata	Residential Rental	Residential Social Housing	Commercial Office	Commercial Retail/Service
Parking Management						
PKG-01	Parking Pricing	Implement paid parking for all users, including employees, customers, visitors. This measure is only applicable to sites outside the Downtown.			4	4
PKG-02	Parking Supply	Provide no more than the minimum vehicle parking provisions required as per bylaw for all individual land uses on site. Outside the Downtown, this measure is only applicable to Large developments.		2	2	2
Other						
OTH-01	Innovative Strategies	The City may consider other innovative developer-proposed strategies proposed by the developer, with acceptable rationale, justification.		16	16	16