

**NORTHLAND NEWTON DEVELOPMENT  
TRANSPORTATION DEMAND MANAGEMENT PLAN**

This document sets forth the programmatic elements of a transportation demand management plan (the “TDM Plan”) that will be implemented by Northland to encourage the use of alternate transit modes, including public transit (MBTA light rail and bus), shared transit, walking, biking, and teleworking, all in order to reduce single-occupancy automobile trips generated by the Residential Buildings and the Office Building constructed on the Property.

I. DEFINITIONS:

- a. Transportation Demand Management Plan – Concurrent with the issuance of a building permit for any new construction associated with the approved special permit for the Development, Northland will prepare and submit to the Director of Planning and Development a Transportation Demand Management Plan (the "TDM Plan"). The TDM Plan will adapt over time to respond to the changing transportation needs and circumstances of the Development, the surrounding community and the region, as well as to technological and/or other improvements, all with the objective of meeting the trip reduction goals as set forth in this document. To facilitate this flexibility, modifications, revisions, and supplements to the TDM Plan will be coordinated with the City of Newton Planning Department or its designee.
- b. Transportation Management Association – Northland will participate in or otherwise become associated with a Transportation Management Association designated by the City, such as the 128 Business Council (or other), should one be established for this area (N<sup>2</sup> Innovation District).
- c. Trip Reduction Goal – The objective of the TDM Plan will be to reduce the number of weekday AM and PM peak hour single occupancy vehicle trips generated by the residential and office uses located within the Property as described below.
- d. TDM Program - The strategies and measures to effectuate the reduction of single occupancy vehicles including, but not limited to, last-mile connections to mass transit, on-site support facilities and information, marketing and awareness programs, data collection, subsidies to support and encourage alternate modes of transportation, and the creation of enhanced pedestrian and bicycle connections facilitating access to adjoining neighborhoods, villages and alternate transit options.

II. TRIP REDUCTION GOAL:

- a. The TDM Program will be implemented to achieve a twenty percent (20%) reduction in weekday morning and afternoon peak hour residential and office trip generation from the projected number of residential and office trips (per ITE 10<sup>th</sup> edition) based on full stabilized occupancy and adjusted for internal capture and existing City of Newton mode share, as further shown on Exhibit A.

III. PLAN IMPLEMENTATION

The TDM Plan will be implemented as follows:

- a. TDM Coordinator – Northland will designate a TDM Coordinator for the development. The TDM Coordinator will be appointed no later than the earlier of: 1) issuance of a building permit for an office tenant in excess of 25,000 square feet, or 2) twelve (12) months following issuance of the first residential building permit (“TDM Plan Commencement”). The TDM Coordinator will be responsible for implementing all aspects of the TDM plan and collecting relevant data. The TDM Coordinator will be the main point of contact with the City of Newton relating to TDM plan monitoring and reporting.
- b. TDM Program – The TDM Program shall initially contain the following elements and be administered by the TDM Coordinator. As the TDM Plan is intended to evolve over time, the Program elements will be evaluated periodically for effectiveness in achieving the Trip Reduction Goal and modified as necessary.
- i. Reduced parking availability on-site for residents and office tenants to promote the use of alternate transit options.
  - ii. Unbundled parking charges for market rate residential leases (parking for affordable residential leases is included in rent).
  - iii. Shuttle Service – Direct shuttle service to the MBTA mass transit system via Newton Highlands MBTA Station will be provided to residents, office employees, retail customers and employees and members of the public. Service will be offered with 10-minute frequency and will operate 16 hours per day / 7 days per week.
  - iv. Public Transit Incentives –
    1. Shuttle Use Incentives

- a. Free shuttle service to all riders.
2. Residential MBTA Use Incentives
  - a. Resident Car-Free Incentive - Free MBTA LinkPass pass for every residential unit leased without a parking space.
  - b. Resident Public Transit Incentive – 50% reimbursement on on a monthly MBTA LinkPass for every other new residential lease.
3. Office Employer Incentive Programs – Northland will work with office employers leasing space in the Office Building to offer incentives to employees for using alternate modes of transit to commute to work or to carpool, including:
  - a. Office Employee Public Transit Incentive - 50% reimbursement on a monthly MBTA LinkPass for each full-time employee participant.
- v. Mobility Hub – A central indoor lounge waiting area will be provided to all shuttle and MBTA bus passengers. The Mobility Hub will provide real-time transit information for the shuttle and MBTA bus service.
- vi. Car sharing – Northland will contract with a car-sharing service provider such as Zip Car or Enterprise to provide a minimum of 4 vehicles on site for common use. The number of vehicles may be increased as demand warrants.
- vii. Bicycle accommodations – Secure sheltered or indoor bicycle storage accommodation for 1,100 bicycles for residents and office employees and retail employees. Outdoor bicycle storage for retail customers and visitors. Shower facilities available to office employees. Bicycle repair stations with air pumps at sheltered and indoor storage facilities.
- viii. Bicycle and scooter sharing – Northland will work with the City’s designated service provider (currently Lime Bike) to provide on-site access to shared bikes and scooters or alternative shared non-vehicular transportation once approved by the City.
- ix. TNC Management – Designated TNC curbside drop-off and pick-up locations will be maintained initially in the following locations:
  1. Building 3, near the residential lobby entrance on Main Street.
  2. Building 6, near the residential lobby entrance on Main Street and near the residential lobby on Charlemont St.

3. Building 5, near the residential lobby entrance on Main Street and near the leasing office entry on Pettee Lane.
- x. TDM Marketing and Awareness Campaign – The TDM Coordinator shall build awareness of alternate transportation opportunities and incentives through ongoing marketing targeted at all residents, employees, and visitors to the development. The outreach shall include, but may not be limited to, the following:
1. Posted transit opportunities and incentives in project marketing materials and website.
  2. TDM program information included in resident welcome kits and in residential common areas.
  3. Information sessions offered to residents and office and retail employees.
  4. Transit screens in the Mobility Hub and building lobbies offering real-time shuttle and MBTA schedule information and TNC availability information.
  5. Prominent outdoor signage identifying shuttle pick-up/drop-off location; Mobility Hub; bicycle and pedestrian pathways; bicycle accommodations; and TNC pick-up locations
- c. TDM Plan Phase-In – The TDM Plan will be phased in during the first sequence of construction for the development and prior to any residential or office occupancy. The phase-in will begin at the TDM Plan Commencement and include the following:
- i. The TDM Coordinator will be in place, marketing materials will be created and TDM marketing and awareness programs will be initiated.
  - ii. Contractual arrangements will be made with outside vendors supporting the TDM program, including car-sharing, bike sharing, and shuttle service.
  - iii. Shuttle Service will be phased in as follows:
    1. On demand service with scheduled commuting hour runs will commence upon receipt of the first residential or Office Building tenant space certificate of occupancy. Service and capacity will scale up as necessary to accommodate demand during the construction completion/early occupancy stage. Temporary accommodations will be made for shuttle pick-up/drop-off based on construction sequencing.

2. Full scale shuttle service as described above will commence upon receipt of the Certificate of Occupancy that brings the total occupiable units over 400 for the Development.
  3. Permanent pick-up/drop-off accommodations will be established at the Mobility Hub upon completion of construction of the facility.
  - iv. Annual reporting to the City will commence upon receipt of the Certificate of Occupancy for the first residential building as described below.
- IV. Site Traffic Monitoring. Northland shall engage a qualified outside firm to perform a trip count (“Trip Count”) annually to assess performance of the TDM Program and measure the results against the TDM Reduction Goals. Residents and office tenants will be issued identifying parking stickers. The Trip Count shall include: 1) a count of resident and office vehicles entering and exiting at all garage entries during the weekday morning and evening peak hour; and 2) Intercept Surveys taken at every residential building and office building entry/exit point to capture residential and office visitors and TNC users. Trip Counts will be conducted over three (3) consecutive weekdays (Tuesday through Thursday) between September and November and the results shall be averaged. The initial Trip Count for the development (“Initial Trip Count”) will be taken once the development achieves 80% occupancy of the development’s residential units. The results will be compared against the TDM Reduction Goal, adjusted for occupancy, and if the TDM Reduction Goal is exceeded, then remedies will be applied as described below (“TDM Remedies”). The results of the Trip Counts will be provided to the City of Newton as part of the Annual Reporting.
- V. Annual Reporting. Northland will submit a report to the City of Newton and conduct an in-person review meeting with City Planning and Transportation staff annually on or before March 1<sup>st</sup>. The Annual Report shall include:
- a. A status of the TDM measures currently in place
  - b. The results of the Trip Count, beginning with the initial Trip Count
  - c. Biennial weekday peak hour counts of total trip counts entering and exiting the site at each access point.
  - d. Biennial personal survey and utilization data collected including:
    - i. Shuttle ridership
    - ii. Utilization of Public Transit Incentives
    - iii. Resident and office employee transit and schedule preferences

- iv. Car share utilization, if trackable
    - v. Bike share utilization, if trackable
  - e. Recommendations for TDM program modifications
  - f. Action Plan for TDM Remedies if the TDM Reduction Goal is exceeded
  
- VI. If the TDM Reduction goals are exceeded, concurrent with the delivery of the Annual Report, Northland shall schedule and in-person meeting with designees of the Director of Planning and Development to review the TDM Remedies Action Plan.
  
- VII. TDM Investment
  - a. TDM Investment – Northland intends to initially spend \$1.25 million annually on shuttle service and Public Transit Incentives (“TDM Investment”) in order to achieve the TDM Reduction Goal.
  - b. If the Trip Count exceeds the TDM Reduction Goal as indicated in the Annual Report, then Northland shall make an additional investment in TDM Program measures equal to 1% of the TDM Investment for every 1% of overage beyond the Trip Reduction Goal, provided that no additional investment is required if the overage is less than 5%. The maximum amount of additional investment shall not exceed 20% of the TDM Investment.
  - c. If the Trip Counts are at or below the Trip Reduction Goals for four (4) consecutive years, then Northland may discontinue submitting Trip Counts and Annual Reports, provided a TDM Plan remains in place. If Northland shall make any substantial modifications to its TDM Plan, the revised TDM Plan must be first submitted to the City Director of Planning and Development for review. The Director may require a follow-up Trip Count one-year following implementation and require additional mutually agreed upon corrective measures if the results exceed the Trip Reduction Goal.

**Northland Needham Street  
Trip Reduction Metrics**

**NND Office and Residential Trip Generation**

Peak Hour	Unadjusted ITE Volumes <sup>a</sup>	Projected Trip Generation Volumes <sup>b</sup>	20% Total Trip Reduction <sup>c</sup>
Weekday Morning	459	361	289
Weekday Evening	525	275	220

a - Raw unadjusted trips for residential and office land uses independent from any external forces - from Table 2 in the 3/28/19 memo by VHB.

b - Adjusted for trip reduction credits for internal shared trips (mixed-use development) and existing mode share characteristics in the City of Newton (88% vehicle share for office, 79% vehicle share for residential) - from Table 6 in the 3/28/19 memo by VHB.

c - 20% trip reduction from the projected driveway volumes.