

Mobility Master Plan

Feedback and comments on July 18 2023 Master Mobility Report Update to Civic Works Committee

Prepared by the Integrated Transportation Community Advisory Committee (ITCAC)
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Positive comments

- The definition of the objectives is good
- Appropriate strategies have been identified to achieve the objectives
- Focus on establishing mode share targets
- Appropriate evaluation criteria are being developed

Room for improvement

- The planning horizon is too long, without clear short term targets
- Lack of vision, assumes only incremental changes to status quo
 - Assumes cars will still be the dominant mode
 - Assumes number of weekly trips remains constant
 - Assumes transit and active transportation are the only other viable modes in the future
- Lacks a sense of urgency in addressing the climate emergency
 - Proposed measures are incremental
 - Proposed measures are far in the future

Specific issues

- Mode share targets are not ambitious
- The modelling and analysis used to determine mode share targets not well documented or incomplete
 - Incomplete or missing references
 - No comparison to other jurisdictions
 - Appears to be an extrapolation of current travel patterns
- Limited discussion of possible future trends and technologies
 - Mobility as a Service to replace private vehicle ownership
 - New forms of small urban electric vehicles
 - Shifts in attitudes toward sustainable alternatives
 - Reductions in trip frequency and distances

Specific issues

- There are no details about strategies to improve transit service
- There is little discussion of commercial traffic. Issues include
 - Increasing delivery truck traffic due to online shopping trends
 - Dangerous construction traffic e.g. cement trucks, dump trucks
- There is little discussion of other important modes including:
 - Taxis and ride-sharing services
 - School buses (included as “other” in trip survey?)
- No analysis or discussion of trip distances and types relating to mode share
 - 70% of trips are under 7 km
 - These trips are all within easy cycling distance
 - But only 1% of trips are by bike
- Limited discussion of policies and strategies to discourage use of cars
- No discussion of the problem of large private vehicles (pickup trucks, SUVs) in terms of GHG, congestion, safety
 - How can use of large vehicles be discouraged?
 - How can use of small vehicles be encouraged?

Mode share comparison (percent)

	2009 [1]	2016 [4]	2019	2030 TMP 2020 targets [1]	2030 TMP 2030 targets [1]	2050 Opt.2	2050 Opt.3	Cycling Advisory Committee targets [3]	Amsterdam (Gold Standard) [2]
Active transportation	9	13	15	10	15	18	18	35	61
Transit	12.5	8	8	14	20	12	14	35	17
Private vehicle	73.5	77	77	75	60	70	65	25	20
Other		3	0	1	5		3	5	

[1] 2030 Transportation Master Plan, January 2013

[2] Deloitte City Mobility Index, Deloitte Insights, 2018

https://www2.deloitte.com/content/dam/insights/us/articles/4331_Deloitte-City-Mobility-Index/city-mobility-index_AMSTERDAM_FINAL.pdf

[3] City of London Cycling Master Plan Review, City of London Cycling Advisory Committee, October 2019

[4] London Household Travel Survey, 2016

Modes of mobility

- Walking and cycling should be considered separately, not lumped into “active transportation”
- Emerging modes should be clearly identified and categorized, including
 - Micromobility, e.g. e-bikes, e-scooters, e-cargo bikes
 - Microcars, neighbourhood electric vehicles, slow speed electric vehicles, urban electric vehicles
 - Car sharing, e.g. Communauto
 - Bike sharing
 - Ride sharing, e.g. Uber
- Mobility as a Service (MaaS) should be assessed as a potential solution to multi-modal mobility

Factors affecting mode choice

- Distance and trip time
 - Most trips are under 7 km
- Safety and comfort
- Convenience
- Cost
- Weather
 - People may choose different modes depending on the weather
 - Percentage of good weather days can be estimated to establish mode share targets
- Cargo
 - People may choose a different mode if they need to transport cargo, e.g. groceries
- Number of people
 - People may choose different mode for solo trip than for family trip
- Available options
 - Car owners may prefer to drive because it is the fastest, most convenient, safest and most comfortable option for virtually all trips
 - Non car owners choose between walking, cycling, transit, ride sharing with friends, taxi/Uber

Strategies to change mode choice

- Improve safety and convenience of walking and cycling
- Improve convenience and trip time of transit
- Reduce convenience and increase cost of driving
- Explore new modes that combine benefits and reduce disadvantages of existing modes

Improve safety and convenience of walking and cycling

- Improve and complete safe walking and cycling network
- Sheltered and secure bike parking at popular destinations
- Secure bike parking requirements for residential developments, e.g. apartment buildings
- Separate paths for cycling and walking
- Remove barriers and improve walkability and bikeability from residential areas to local amenities
 - Walking and cycling paths right to the entrance of store fronts (not to the edge of a huge parking lot!)
 - Examine incentives and regulations to encourage property owners to accommodate active transportation

Improve trip time and convenience of transit

- More frequent service
- Conveniently located bus stops
- Comfortable bus shelters
- More reliable schedules
- Fewer transfers and more direct routes
- Dedicated bus lanes

Reduce convenience and increase cost of driving

- Parking restrictions and fees
- Congestion charges
- Road tolls
- Limits on road expansions to prevent induced demand
- Road diets to remove existing lanes
- Barriers in residential neighbourhoods to prevent cut-through traffic
- Accept congestion at peak times
- Priority access to direct routes for alternative modes
- Ring roads instead of direct routes for cars

These measures will be resisted by the majority of Londoners who drive.

Explore new modes

- Microcars for urban trips in all weather
- Electric micromobility including e-bikes and e-cargo bikes
- Bike-share and car-share systems
- Grocery cart borrowing/sharing for pedestrians
- Mobility as a Service (MaaS) instead of private car ownership
- Examine measures to safely accommodate different modes
 - Pedestrians
 - Cyclists
 - Electric micromobility e.g. e-bikes, e-scooters
 - Neighbourhood electric vehicles
 - Buses
 - Private vehicles
 - Commercial vehicles

Traffic/Transportation Demand Modeling/Forecasting

1. Trip generation (the number of trips to be made)
 - a. What are the types and purposes of trips?
2. Trip distribution (where those trips go)
 - a. Distances and travel times from where people live to where they need to go
3. Mode choice (how the trips will be divided among the available modes of travel)
 - a. Need to evaluate feasibility of modes, not just existing preferences (i.e. driving for every trip!)
 - b. We need potentially achievable mode share targets that are not car-dominated
4. Trip assignment (predicting the route trips will take)
 - a. Routes may be different for driving, cycling and transit

Traffic demand modelling questions

- Frequency of trip types
 - Commuting
 - Shopping
 - Visiting and socializing
 - Recreation
 - School
 - Transporting kids
 - Other?
- Trip distance vs trip purpose
 - Are non-commuting trips shorter?
 - How many could be done using active transportation instead of driving?
- Can current trip frequencies and distances be reduced in the future?

Is London already a 15-minute city?

- An analysis is needed to determine how many Londoners currently live within 15 minutes of jobs and amenities
- According to the trip survey data, 38% of trips (all modes) are under 3 km, 32% between 3 and 7 km
- This suggests that the majority of trips are within walking or biking distance now
- If people walk or bike instead of drive for half these trips, the active transportation mode share would be 35%!
- Is this a realistic target? What needs to be done to achieve it?

Neighbourhood walkability and bikeability analysis

- Map residential population density
 - Where people live
- Map employment density
 - Where people work
- Map location of amenities and services
 - Shopping, health and dental, restaurants, services
- Map existing and planned walking and cycling infrastructure, including bikeable residential streets
- Estimate percentage of London population within 15 minute walk or bike ride of
 - Jobs
 - Amenities and services
- Identify gaps and barriers in existing and planned walking and cycling infrastructure connecting homes to destinations.
- Base mode share targets on result of the analysis

This is basically transportation demand modelling focussed on active transportation



There are stores and shopping centres at nearly every major intersection, within walking distance of area residents. However, they are nearly always separated from residential areas by walls and other barriers. This forces people to walk and cycle a longer distance along busy roads instead of a short distance through their quiet neighborhood. This shows the 5-min bike radius. If barriers are removed it should be possible to ride a bike to the local store on quiet residential streets and paths.

Thinking outside the box...

Future trends

- Working from home instead of commuting
- Working in local business or commercial parks instead of downtown
- Online learning instead of classrooms
- Home delivery instead of shopping trips
- Home delivery instead of eating out
- Home entertainment instead of concerts, movies
- Virtual interaction instead of in-person socializing
- Single car instead of two car households
- Others?

Shopping cart sharing system

- Allow people to walk home with groceries instead of driving
- There is already a demand for this



Community parcel lockers

- Secure community parcel lockers for home deliveries
- Similar to neighbourhood mailboxes
- Reduces neighbourhood commercial traffic



Microcars for urban commuting

- The majority of trips are single occupant trips of less than 7km
- The most popular vehicles are large pickup trucks and SUVs
- Small electric urban vehicles would be a much safer, cheaper and more sustainable alternative
- Will they become a dominant mobility mode in the future?



Mobility as a Service (MaaS)

- Allows people to use a bike, microcar, bus, or large vehicle as needed for each trip purpose and distance
- People do not need to own a large vehicle
 - They might own an e-bike or microcar for daily use
- Pricing structure would encourage the use of the most sustainable and efficient mode for each trip

Questions and comments?