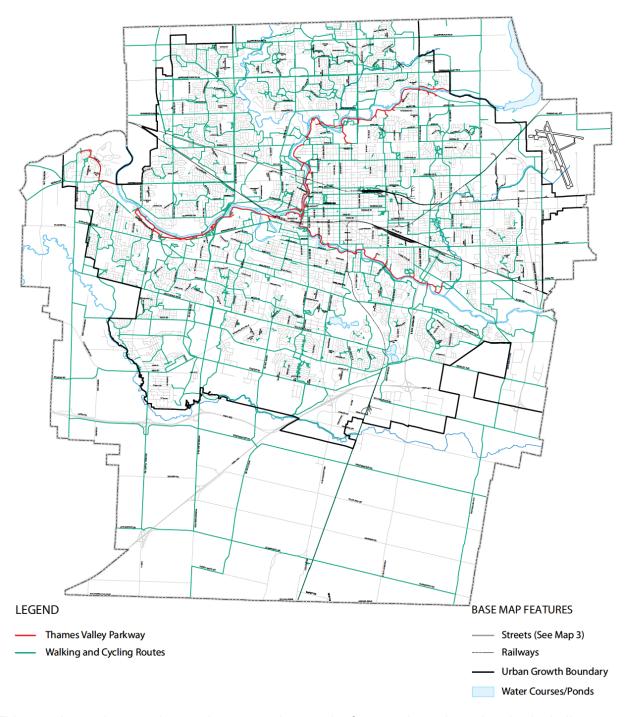
Cycling Maps and Routes

London's cycling infrastructure is being guided by the Cycling Master Plan, and the London Plan, among other inputs. It is useful to look at the proposed final maps from the various plans and compare them to existing and planned infrastructure.

London Plan (2022)

The most comprehensive and complete cycling network map is contained as Map 4 in the London Plan.



This map is a quite complete and connected network of routes throughout the city, including residential streets and multi-use paths. It includes continuous east-west and north-south routes. Some notable routes absent from other plans:

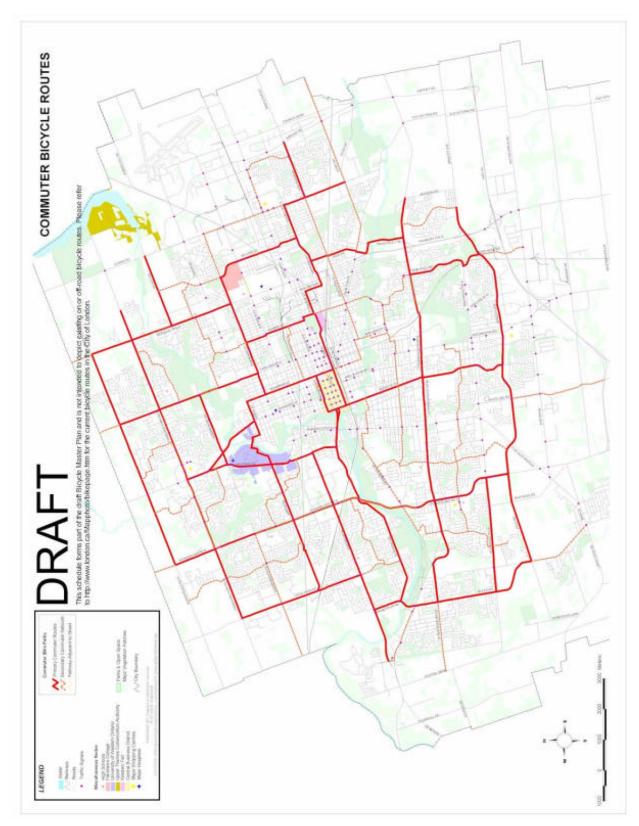
- Full length of Sunningdale
- Full length of Fanshawe Pk Rd.
- Full length of Clarke Rd

Careful comparison of this map to the Cycling Master Plan will reveal other differences. It appears that this map is not guiding infrastructure projects. Recent repaving of sections of Sunningdale and Fanshawe Pk Rd did not include paved shoulders despite ample right of way. Most of these roads currently have ample gravel shoulders and adding paved shoulders would be straightforward. These roads are also key east-west and north-south routes.

It is worth noting that the Boler Rd project presented at the September 2023 ITCAC meeting is not included in this map. Instead, the map shows alternative routes on residential streets parallel to Boler Rd. This is consistent with my comments at the meeting.

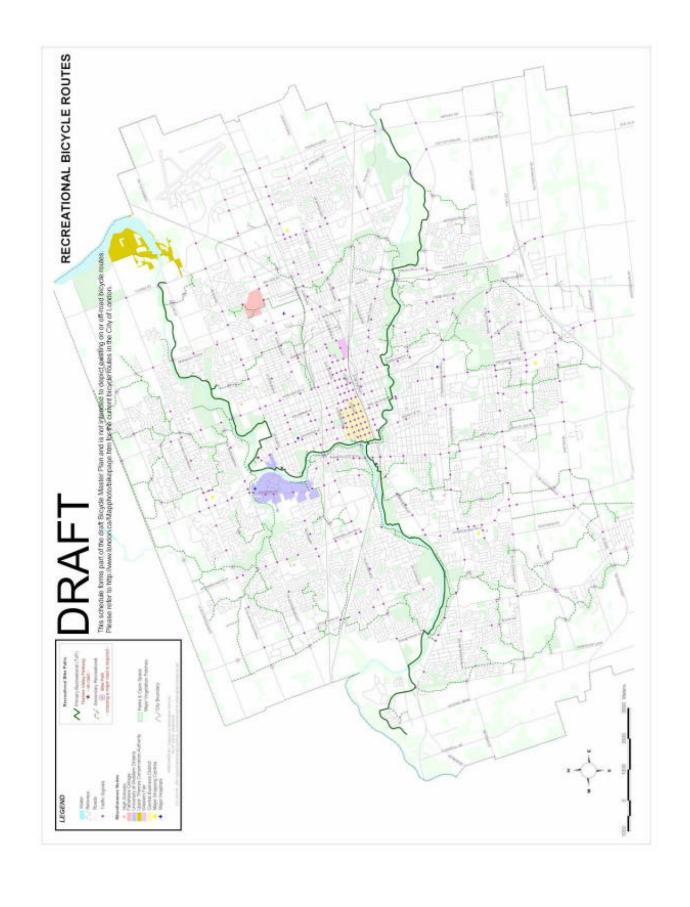
Bicycle Master Plan (2005)

The 2005 Bicycle Master Plan also proposed a connected network of east-west and north-south routes.



This map is less comprehensive than the London Plan, but it also identifies a portion of Sunningdale Rd as a key cycling route. To date there is no cycling infrastructure anywhere

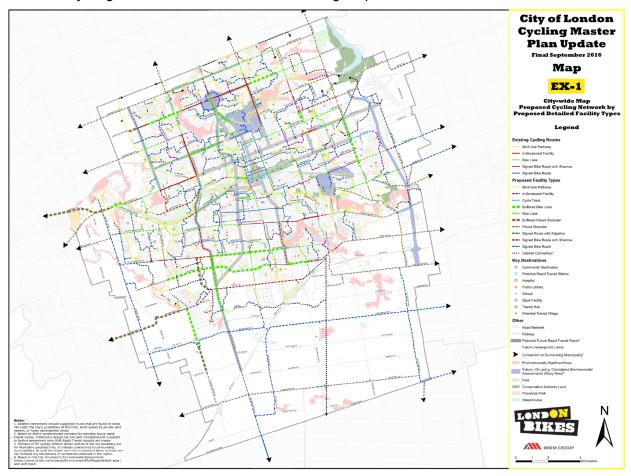
along Sunningdale despite it being a busy and dangerous road with no alternative routes, and having a wide gravel shoulder for much of its length. The map also shows completed cycling infrastructure around the UWO campus. Nearly 20 years later, this infrastructure is still missing.



The 2005 Bicycle Master Plan also identifies a network of recreational cycling routes including TVP. It is clear that many parts of the city can be reached using this network of paths. It is worth noting that some of the paths shown on the map do not exist, e.g. extensions of TVP.

Cycling Master Plan (2016)

The 2016 Cycling Master Plan contains the following map.



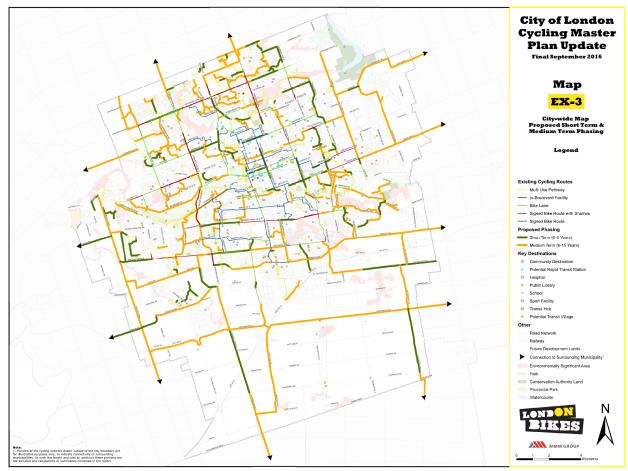
This extends the map from the 2005 Bicycle Master Plan, and corresponds to the London Plan map. In particular, this map includes the following cycling routes:

- Full length of Sunningdale Rd.
- Full length of Fanshawe Pk Rd.
- Full length of Clarke Rd.

This map also shows a credible network of routes on quiet residential streets and multi-use pathways.

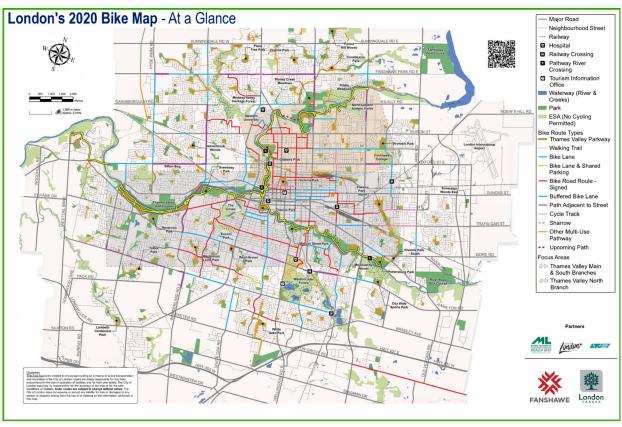
The 2016 Cycling Master Plan prioritizes and categorizes routes as short-term (0-5 years), medium term (6-15 years) and long term (>15 years). It claims to use a variety of criteria to prioritize routes, but these are not documented. The resulting map has many significant gaps. For example, completing cycling infrastructure for the full length of Sunningdale Rd., Fanshawe Pk Rd. and Clarke Rd. are considered low priority despite the heavy traffic, lack of alternative

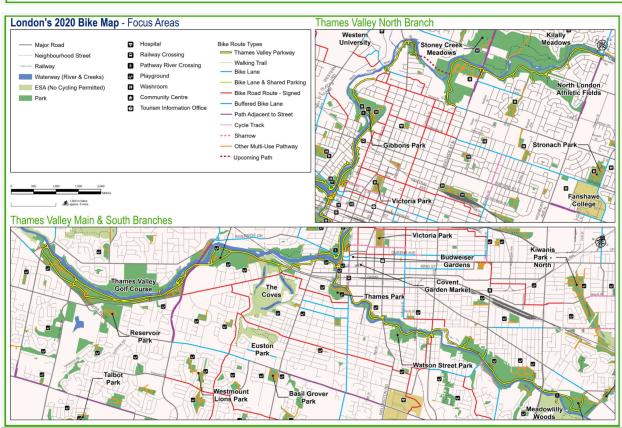
routes, and low cost of paving the existing gravel shoulders. The resulting map, shown below, seems to be guiding City infrastructure planning. Sections of Sunningdale Rd. and Fanshawe Pk Rd. did not get paved shoulders during recent repaving despite the small marginal cost, probably because these are not identified as part of the short and medium term plan. It is also notable that routes along residential streets no longer appear on this map. Even when the short and medium term projects are complete after 15 years, many significant gaps remain.



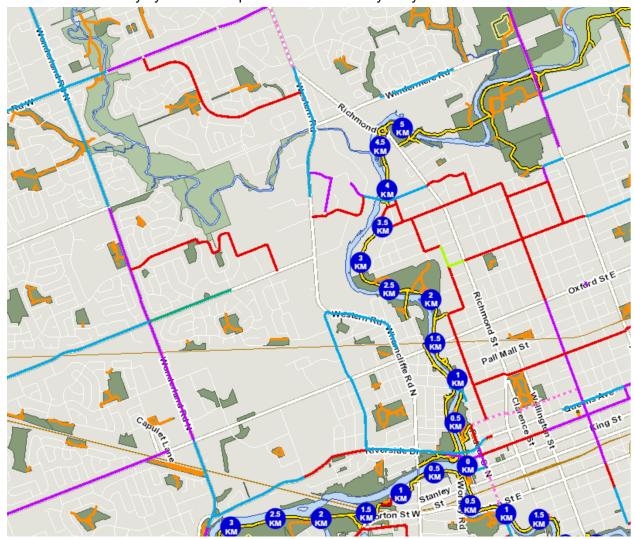
Maps of current cycling infrastructure

The City provides a map last updated in 2020. It is a PDF file so it is difficult to use as a route planning tool. It shows many different types of infrastructure in different colours, and there are no clear continuous routes. Cyclists must rely on local knowledge to find safe connected routes that use residential streets and pathways, and avoid busy and dangerous roads. The map is also out of date and inaccurate.





The City also has a zoomable online map of cycling infrastructure, but many cyclists are not aware of this map. It is accurate and up-to-date. Significant gaps in the network are easy to identify. Below is a portion of the map. Note the key gap around the Sarnia and Western Rd. intersection. These are busy and dangerous roads, and there are no safe routes for cyclists to get to the Western campus from the South or West of this intersection. This gap has existed for many years, but will be addressed in the upcoming Sarnia-Western Rd project. Note also that a very busy portion of the 4-lane Richmond St. south of Fanshawe Pk Rd is designated as a sharrows. Essentially cyclists are expected to share a very busy lane with cars.



https://london.maps.arcgis.com/apps/webappviewer/index.html?id=d52101e2724d4525ac8be44 00cf8c087

The city also provides a traffic volume map. This is very helpful in identifying suitable cycling routes.

https://london.maps.arcgis.com/apps/webappviewer/index.html?id=580f8891b84548dca9cd162d4dc73a03

The traffic volume on Richmond St at the sharrows is 30K vehicles/day.

The traffic volume on Riverside Dr. (one lane each way) is 20-25K vehicles/day. This is a signed bike route with no safe alternative routes.

July 2023 Master Mobility Plan Update report

The MMP Update Report contains the following map of cycling infrastructure. There are no continuous routes in any direction, and many of the gaps involve busy and dangerous roads. The map also shows the incremental addition to infrastructure from projects in 2022. At this rate it is apparent that it will take many years to close the gaps and create a continuous network.

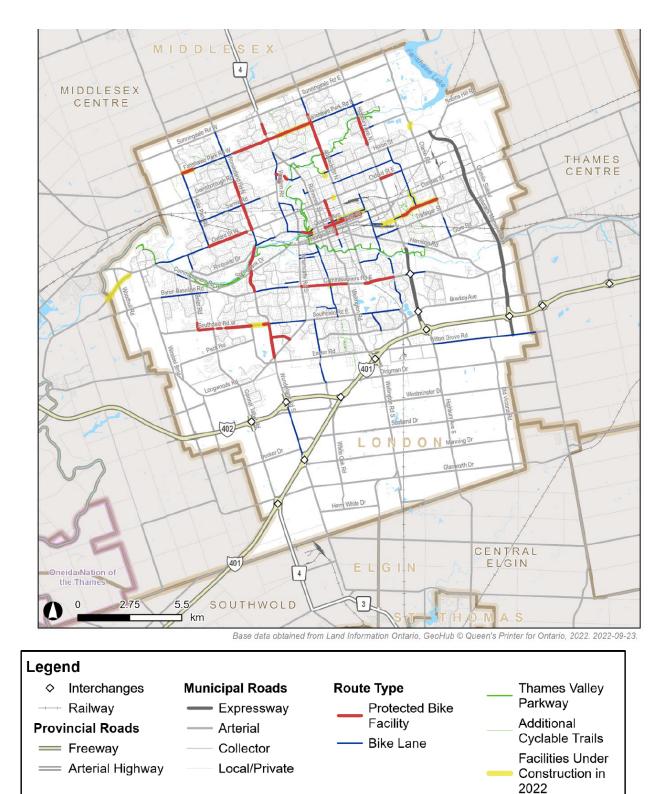


Figure C-4: Cycling Facilities in London

Comments and observations

Despite years of planning and infrastructure projects, London does not have a viable network of connected safe cycling routes.

At the current rate of progress about 10 km/year are added to the infrastructure. At this rate it will be many more years before the gaps are filled.

Expensive infrastructure projects are being proposed that do not follow any of the existing plans. In particular, Boler Rd is not designated as a cycling route on any of the recent plans.

Safe routes can be found to most destinations by connecting cycling infrastructure, quiet residential streets, and multi-use pathways. However, these are not shown on any existing cycling maps and require local knowledge and careful route planning by individual cyclists.

Online Route Mapping

It would be very useful to have an online route mapping tool to help cyclists find safe routes and avoid dangerous roads. Such a tool will serve several useful purposes:

- Help plan safe routes while waiting for the comprehensive cycling network to be completed
- Identify gaps where no safe routes or detours exist. An example is the sharrows section of Riverside Dr. This is dangerous for cyclists, and there is no viable alternative route.
- Help cyclists avoid hazardous roads like Oxford St., Warncliffe Rd. etc.

Here is a screenshot of an online map showing various routes, gaps, etc. This is an example of what an online map might look like.

https://www.google.com/maps/d/edit?mid=1Y-ZTWLOWiJ0WFPbaW5OA86ryt7Ewqqc&ll=42.99 904834173556%2C-81.2907217095349&z=12

Criteria for a "safe" route:

- Low traffic volume (less than 5-10K vehicles/day)
- Low speed limit (40 km/h)
- Protected or signalized crossings at arterial roads
- Protected bike lane on busier roads
- Few intersections
- Few driveway and parking lot entrances

Criteria for "dangerous" route:

- High traffic volume (more than 10-20K vehicles/day)
- Higher speed limits (50 or 60 km/h)
- Narrow lanes with no shoulder or bike path
- Frequent intersections
- Frequent driveway and parking lot entrances

Criteria for a "pleasant" route

- Separated from car traffic
- Parkland instead of buildings

Few if any traffic lights

Other notes:

- An indirect route, e.g. TVP, can be as fast or faster than a direct route, e.g. bike path along arterial road, because there are no delays from traffic lights
- Commuters may choose a slightly longer but much more pleasant route, e.g. TVP to downtown
- It is possible to get to most places in London using TVP, multi-use paths and residential streets.
- TVP provides safe and pleasant routes to downtown from many parts of the city

Google Maps

Google Maps is a useful tool for planning routes. It is intelligent enough to recommend different routes for different modes, e.g. car, transit, cycling and walking. It does a good job much of the time but it cannot be relied on to provide a safe route in every case. For example it may recommend a cycling route that includes portions of dangerous roads like Oxford St, etc. One solution is to investigate what datasets are used by Google Maps to generate routes, and to update them so that Google selects appropriate routes.

Updated London cycling map

A useful alternative would be to update the existing ArcGIS map with additional layers showing safe and recommended residential streets, roads to avoid, signalized intersections, planned infrastructure projects, and the planned final cycling network shown in the London Plan.