

Limmat Valley Railway opens Zurich's northwestern suburbs

By George Raymond; photos by the author

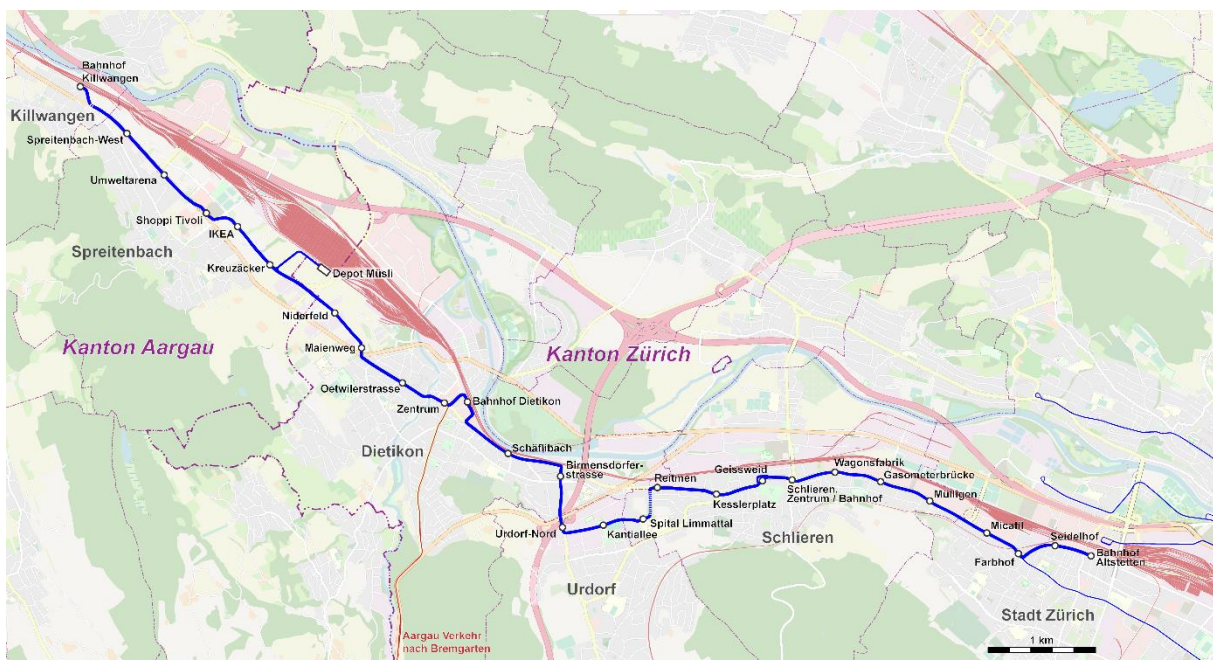
This report was the basis for [a 16 December 2022 article](#) in *Railway Gazette International*.



Flanked by officials from the cantons of Aargau and Zurich – including bearers of the cantonal sceptres – former Swiss president and then-current minister for transport Simonetta Sommaruga (centre) leaves the LimmattalBahn's inaugural train on 9 December 2022, two days before the railway started service. The Swiss federal government shouldered about a third of the LTB's cost. Pointing to the Limmat Valley's steady growth and alluding to the hard-fought referendums of 2015 and 2018, Sommaruga called voters' decision to build the LTB proof that the population understood their responsibility to prepare for future mobility needs. She also called the LTB an intermediary between S-Bahn trains and town buses. *Photo © George Raymond*

Capping 15 years of planning and construction marked by two hard-fought referendums, the 13-km Limmat Valley Railway, or LimmattalBahn, opened on 11 December 2022. The LTB runs northwest from Zurich through towns south of the main line of Swiss Federal Railways (SBB), stopping 27 times in both densely settled and emptier areas that planners have earmarked for development.

Five LTB stops offer short walks to SBB S-Bahn stations, while others serve neighbourhoods further away. The LTB also connects with numerous buses. Daily LTB ridership is expected to be 25,000 in the first year and to grow to 40,000. The LTB cost 755 million Swiss francs, including 130 million for improvements to get road traffic out the town centres while increasing road capacity.



The Limmattal Valley Railway or *Limmattalbahn*.

Source: Von Hoff1980 - own work, using OpenStreetMap data for the background, CC BY-SA 2.0, <https://commons.wikimedia.org/w/index.php?curid=95188910>



At its southeast extremity, the metre-gauge Limmattalbahn line, which is also called Zurich tram 20, starts at the south side of SBB's Altstetten station. A westbound LTB train is just leaving the Altstetten terminus on 12 December 2022. Trolleybuses also stop here; Zurich tram 4 serves the station's north side. *Photo © George Raymond*



Proceeding west from Altstetten, LTB's tracks merge with those of Zurich tram 2 at Farbhof. A westbound LTB train swings its seven sections on 12 December 2022 into Farbhof station, which it also shares with trolleybuses, as the catenary shows. *Photo © George Raymond*



An eastbound LTB train stops on 12 December 2022 at Zurich's Farbhof station. In two stops, the train will arrive at Zurich Altstetten and connect with S-Bahn lines including S5 and S14, which cross the bridge in the background. *Photo © George Raymond*

The LTB is meant as both an S-Bahn feeder and a motor for dense development favouring what Zurich architect and economist Sibylle Wälty calls “10-minute neighbourhoods” in which everything you routinely need is within a 10-minute walk. This requires the presence of two residents for every worker, she says.¹ Dense development hinders the sprawl that plagues many countries and keeps public transport from competing with the automobile. LTB planners saw sprawl as a threat in the Limmat Valley, where the current growth in both residents and workers was expected to continue in an area whose transport system was already overloaded.

In 2019, Zurich tram 2 was extended west from Farbhof via Wagonsfabrik stop (whose name evokes Schlieren’s industrial past) to Schlieren centre and its S-Bahn station and a loop at Schlieren-Geissweid.



An eastbound LTB train pauses in central Schlieren on 12 December 2022. Zurich’s tram 2 was extended to Schlieren in 2019 and also stops here. The author warmed himself with roasted chestnuts from the shack on the left. SBB’s S-Bahn is a short walk up the hill. *Photo © George Raymond*

Two stops after Geissweid, LTB trains turn south into the 245-metre Färberhüsli Tunnel leading to Schlieren’s Limmat Valley Hospital.

¹ “Das Dorf Dietikon existiert nur im Kopf”, *Neue Zürcher Zeitung*, 7 December 2022.



An eastbound LimmattalBahn train emerges on 12 December 2022 from the 245-metre Färberhüsli Tunnel. *Photo © George Raymond*



A westbound LimmattalBahn train emerges on 12 December 2022 from the 245-metre Färberhüsli Tunnel to serve Schlieren's Limmattal Valley Hospital, whose new building opened in 2018. *Photo © George Raymond*



An eastbound LimmattalBahn train approaches Limmattal Valley Hospital in Schlieren on 12 December 2022. Swiss post awaits on the right. *Photo © George Raymond*

After rolling west through the town of Urdorf and serving the cantonal high school (for pupils to age 19), the LTB cuts north to enter the larger town of Dietikon, where Birmensdorferstrasse stop is a short walk to Glanzenburg S-Bahn station. Two more stops bring LTB trains to Dietikon S-Bahn station. Intercity trains such as those connecting Basel and Zurich airport also stop here.



A white westbound LimmattalBahn train serves SBB's Dietikon station on 12 December 2022. To the left, a train of the Bremgarten-Dietikon Railway is about to leave for Wohlen, 19 km to the southwest. BD trains first arrived here in 1902. *Photo © George Raymond*



In Dietikon's aptly named Tramstrasse, the shared 160-metre track section of the Limmattalbahn (purple) and the Bremgarten-Dietikon Railway (green). Both connect to S-Bahn and some intercity trains (orange) at SBB's Dietikon station. Source: © Open Railway Map



On 9 December 2022, two days before the Limmattalbahn started service, master technician Pascal Eichenberger of LTB operator Aargau Verkehr brings his train onto the 160-metre section in Dietikon that the LTB shares with the Bremgarten-Dietikon railway, which originates in Wohlen, 19 km to the southwest. The BD's single track had been coming through here since 1902. *Photo © George Raymond*

The wheel profiles of Zurich trams and Bremgarten-Dietikon trains differ; a compromise profile lets LTB trains run on both networks, including to the Bremgarten workshop. These differences also meant custom-designing the turnouts the LTB and BD share in Dietikon. LTB trains run on the Zurich tram's 600 VDC between Altstetten and Schlieren and on 1200 VDC like the BD west of there.



An LTB train turns west on 12 December 2022 to leave the 160-metre section in Dietikon that the LTB shares with the Bremgarten-Dietikon Railway, which originates in Wohlen, 19 km to the southwest. The BD's single track had been coming through here since 1902. *Photo © George Raymond*

Continuing westward from Dietikon station, LTB trains stop at three other stations in Dietikon and pass a fourth, Niderfeld, whose platforms are not yet equipped but is ready for urban development or special events in the surrounding fields. On the border between the cantons of Zurich and Aargau, the LTB reaches the 600-metre spur to its stabling depot.



In Spreitenbach, a westbound Limmattalbahnhof train passes the 600-metre spur to the railway's stabling depot on 12 December 2022. Much of this area is still fields but earmarked for dense development.

Photo © George Raymond

The Limmattalbahnhof runs eight 44-metre Tramlink trainsets built by Stadler in Valencia, Spain, at up to 60 km/h. This fleet allows trains every 15 minutes. Aargau Verkehr, which won a tender call to operate the LTB, bought Tramlinks jointly with the operator of the rebuilt Waldenburg line near Basel. Both fleets entered service on 11 December 2022.



LTB's stabling depot, seen here on 9 December 2022, two days before the start of service, lies side-by-side with SBB's Limmattal marshalling yard. It has room to expand the fleet for more frequent service or for the LTB's possible extension to Baden. *Photos © George Raymond*



The seven sections of an eastbound LimmattalBahn train pass a new hotel-apartment building at Kreuzäcker stop in Spreitenbach on 12 December 2022. *Photo © George Raymond*



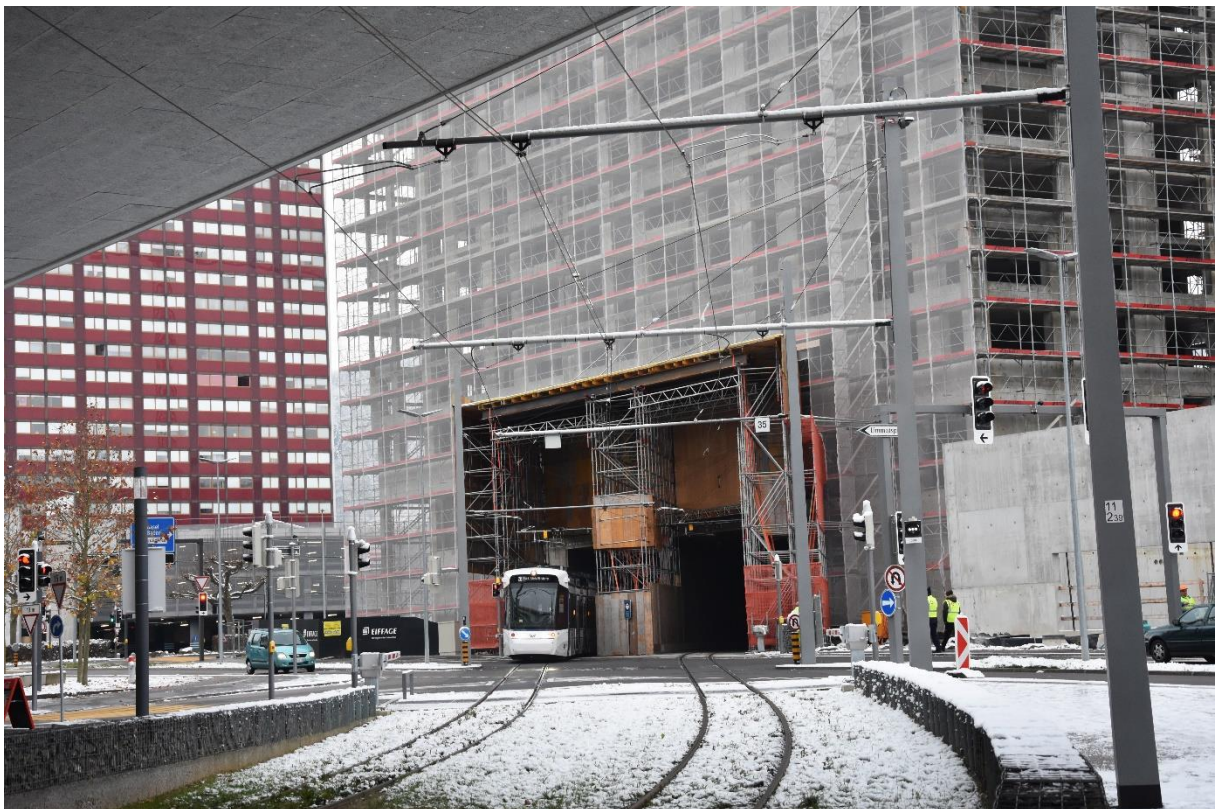
The LimmattalBahn trains offer riders wi-fi and plenty of plugs. 12 December 2022. *Photo © George Raymond*



In Aargau canton, the LTB offers stops at IKEA and the Tivoli mall in Spreitenbach before terminating at Killwangen-Spreitenbach S-Bahn station. Speeding away from IKEA stop, a westbound Limmattalbahn train passes the Limmatspot complex next to Tivoli on 12 December 2022. *Photo © George Raymond*



A westbound Limmattalbahnhof train rolls beneath the Limmatspot building next to the Tivoli complex in Spreitenbach on 12 December 2022. *Photo © George Raymond*



An eastbound Limmattalbahnhof train emerges from Tivoli Garden in Spreitenbach on 12 December 2022. *Photo © George Raymond*



Most people still come to the Tivoli mall – the oldest in Switzerland – by car, but on 12 December 2022 SBB is present and ready to capture them. *Photo © George Raymond*



A westbound train accelerates out of the Limmattalbahnhof's station on 12 December 2022 under the Tivoli shopping and development complex in Spreitenbach. Unlike Zurich's trams, which have doors on one side and a single cab and need a loop to reverse, LTB trains are double ended. This saves space at end stations and lets a single set of escalators reach the line's only central platform, here at Shoppi Tivoli station. *Photo © George Raymond*



Approaching its western terminus at SBB's Killwangen-Spreitenbach station, a LimmattalBahn train passes beneath Zürichstrasse on 12 December 2022. *Photo © George Raymond*

Objections to the LTB project – including alleged redundancy with the S-Bahn, the cost of a rail line compared to a trolleybus, doubts about potential growth, fears of excessive urbanisation and population growth, the loss of road lanes and demands to put more of the line in tunnel – led to a referendum on the line in 2015 in which 64% of Zurich canton voters said yes but 64% of Dietikon voters said no. In a second vote in 2018, 83% of Zurich canton voters and 52% of those in Dietikon approved extending the LTB past Schlieren to Killwangen.

The LTB project planted 955 trees, resulting in biodiversity but also stretches of lime and cherry trees for the eyes and nostrils in late spring. The Limmat river valley connects Baden and Zurich. It was the natural route for Switzerland's first rail line in 1847. Planning is now underway for an LTB extension from Killwangen to Baden that would cross the Limmat but preserve the river's scenic banks. Given lower growth projections than east of Killwangen, however, planners are also considering a busway.



The Limmattalbahn's western terminus at SBB's Killwangen-Spreitenbach S-Bahn station on 12 December 2022. Photos © George Raymond



Inside a LimmattalBahn train at SBB's Killwangen-Spreitenbach station on 12 December 2022. *Photo © George Raymond*



An eastbound LimmattalBahn train climbs out of SBB's Killwangen-Spreitenbach S-Bahn station on 12 December 2022. Zurich Altstetten is 39 minutes and 26 stops away. Running on its own right-of-way on 92% of the line, the train will average 22 km/h. *Photo © George Raymond*