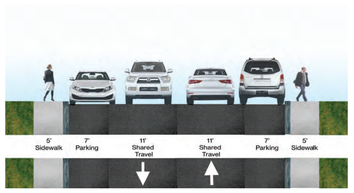
CITY OF LITTLETON BIKEWAY DESIGN GUIDE

Developed by Aidan Johan & Krista Runchey
For the City of Littleton Co.

Existing Conditions

The city's existing bike network can be expanded through relatively small and cost-effective interventions focusing on connecting riders to existing bike lanes, parks and open space, schools and municipal buildings.



Key Takeaways

- The City of Littleton Bikeway Design Guide offers two types of recommendations: one, the best facilities possible and two, the most cost efficient facilities.
- The four typologies in the guide can be applied to any street in the city to find the best-fit bike facility.

Typologies

Typology	# of lanes	Traffic Volume	Intersections	Connectivity	Length
1	2	>1,000	0-4	1	0.5-0.8
2	2	2,000 – 2,999	5-9	2	0.5-0.8
3	3	3,000 – 3,999	10-14	3	0.9+
4	4	4,000 +	15 +	4	0.9+

Typology 1: Simple
Typology 2: Moderate
Typology 3: Complex
Typology 4: Most Complex

Purpose

In 2019 the City of Littleton adopted its first Transportation Master Plan (TMP). The TMP planning process highlighted the need to expand and modernize the city's bike network. The Littleton Bikeway Design Guide offers a typology system allowing city staff to categorize Littleton's different streets in order to determine and pick the best type of bike infrastructure.

Recommendations

Image from NACTO

Sharrows: for low-traffic and slow streets, to be used in addition to other traffic calming measures

Image from Bloomber.com

Super Sharrows: for streets where bike lanes may not be feasible, but cyclists have priority

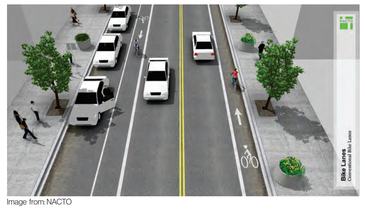


Image from NACTO

Conventional Bike Lanes: for streets with higher volumes and speed

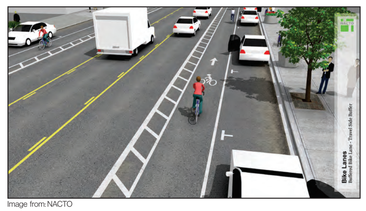


Image from NACTO

Buffered Bike Lanes: For streets with high traffic volumes and fast speeds

Image from NACTO

Protected Bike Lanes: for streets with the highest traffic volumes and high speeds

Image from NACTO

Bike Box: provides shelter for cyclists from right turning vehicles and improved sight lines

Image from NACTO

Two-stage Turn Queues: to allow cyclists to turn left at multi-lane intersections

Image from theurbanist.org

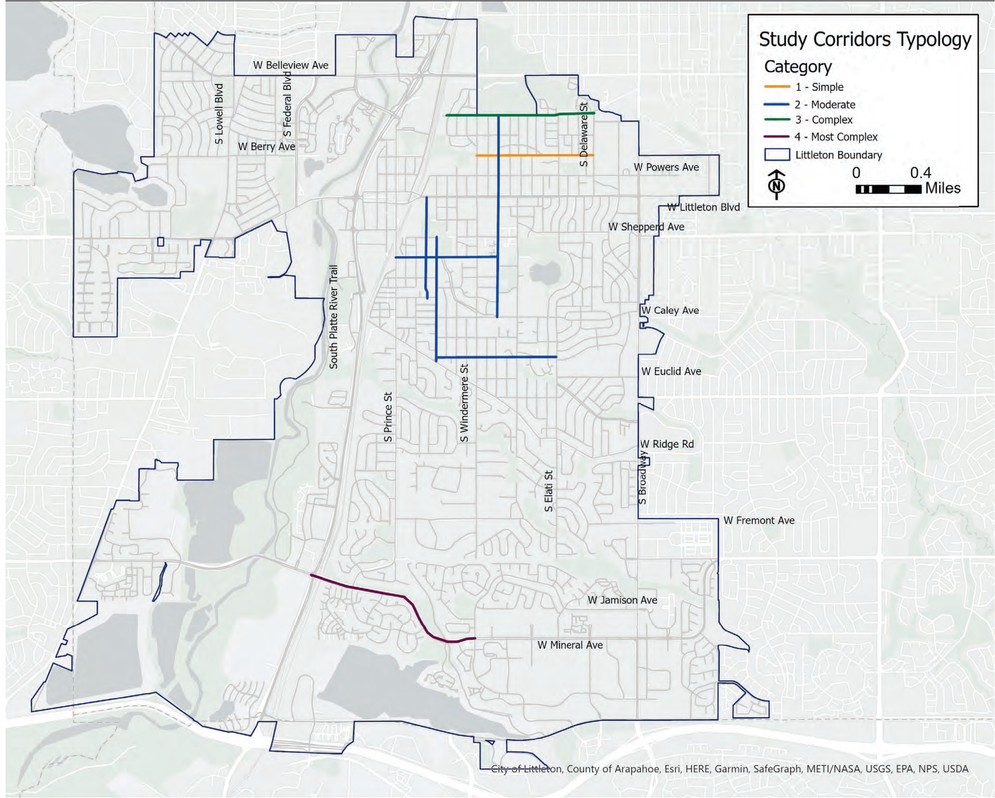
Through Bike Lane: allows cyclists priority when crossing complex intersections

Image from katu.com

Cross Bike: provide a crossing for cyclists where they do not need to dismount

Image from NACTO

Curb Extension: narrow the roadway at an intersection to slow vehicles



Master of Urban and Regional Planning
COLLEGE OF ARCHITECTURE AND PLANNING
UNIVERSITY OF COLORADO DENVER