

All Ages and Abilities Cycling Facilities

All ages and abilities (AAA) cycling facilities are safe and comfortable for all people riding bicycles, regardless of their age or ability. To increase cycling trips, bicycle facilities must meet the needs of potential cyclists. There are many people of all ages and abilities interested in riding their bicycle that are not comfortable riding in mixed traffic on busy streets, and their needs must be considered when designing a bicycle facility.

Developing an AAA bicycle network was identified during the Active Transportation Plan (AT Plan) engagement process as one of the top ways to encourage more cycling trips in Saskatoon. Encouraging more cycling trips and providing facility types that are comfortable for new and less experienced riders is one of the main ways to reach the mode share target set by City Council to double the amount of trips made by bicycle established by the AT Plan.

All Ages and Abilities Facility Types

The AAA bicycle network includes three types of bicycle facilities that are most effective at increasing ridership: shared-use paths, protected bicycle lanes, and neighbourhood bikeways. Developing an AAA network that utilizes a combination of these facility types will provide high standards of safety and comfort throughout the network.

The AT Plan proposed approximately 280 kilometres of new all ages and abilities bicycle routes, which includes a mix of protected bike lane, shared-use path and neighbourhood bikeway facility types. The type of facility selected is highly dependent on the street classification and context.

Shared-use paths and protected bicycle lanes are facilities that are separated from motor vehicle traffic and best suited for streets with high traffic volumes and speeds. In retrofit situations, protected bicycle lanes and shared-use paths can be costly to implement and can impact driving lane capacity and on-street parking, whereas neighbourhood bikeways have minimal impacts to the existing street configuration and on-street parking. Neighbourhood bikeways are an essential part of implementing the proposed AT Plan network where routes are proposed on local roads.

Neighbourhood Bikeways

Neighbourhood bikeways feature people riding their bikes in mixed traffic and are best suited for streets with low traffic volumes and speeds. According to the Transportation Association of Canada's Geometric Design Guide for Canadian Roads, unseparated bikeways such as neighbourhood bikeways provide suitable conditions for bicyclists where motor vehicle speeds are 30 km/h or less and where motor vehicle volumes are less than 2,500 vehicles per day.

The National Association of City Transportation Officials (NACTO) Designing for All Ages & Abilities: Contextual Guidance for High-Comfort Bicycle Facilities indicates that:

- Motor vehicle speed and volume increase stress on bicyclists.
- Most people are not comfortable riding a bicycle immediately next to motor vehicles driving at speeds over 25 mph (40 km/h).
- When vehicular volumes and speeds are low, most people feel more comfortable bicycling in the shared roadway as they are able to maintain steady paths and riding speeds with limited pressure to move over for passing motor vehicles. However, as motor vehicle volume increases past 1,000 to 2,000 vehicles per day (or roughly 50 vehicles in the peak direction per peak hour), most people biking will only feel comfortable if vehicle speeds are kept below 20 mph (32 km/h).

Neighbourhood bikeways are a cost-effective way to provide a cycling facility on a local street that complements the surrounding land uses and street function. Many local streets already offer the basic components of a safe cycling environment. These streets can be enhanced using a range of design treatments, tailored to existing conditions and desired outcomes, to create a neighbourhood bikeway. Design treatments include signs, pavement markings, traffic calming measures, and specialized crossing treatments to calm traffic and discourage through-trips by motor vehicles.

These measures are needed to allow bicycles and vehicles to safely and comfortably operate in mixed traffic. Traffic calming and crossing treatments are tailored to each corridor's context to address localized traffic concerns. Signs and pavement markings are applied for all neighbourhood bikeways.

Implementing a 30 km/h speed limit is the final step for a street to be considered a neighbourhood bikeway and should be implemented after the traffic calming and crossing treatments have been installed.

All design elements including the reduced speed limit must be in place for a neighbourhood bikeway to be considered as a cycling facility appropriate for people of all ages and abilities.