CITY OF CAMBRIDGE PATH WIDTH CRITERIA & REFERENCES

MULTI-USE PATH WIDTH - REFERENCES

- 1. Achieving Multimodal Networks Applying Design Flexibility & Reducing Conflicts. U.S. Dept of Transportation. Federal Highway Administration (FHWA). August 2016.
 - https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/multimodal_networks/fhwahep16055.

 pdf
- 2. Guide for the Development of Bicycle Facilities. American Association of State Highway Transportation Officials (AASHTO). Fourth Edition. 2012.
 - https://nacto.org/wp-content/uploads/2015/04/AASHTO_Bicycle-Facilities-Guide_2012-toc.pdf
- Shared Use Path Level of Service Calculator A User's Guide. U.S. Dept of Transportation. Federal Highway Administration (FHWA). July 2006.
 - https://www.fhwa.dot.gov/publications/research/safety/pedbike/05138/05138.pdf

General Path Width Research Summary

| Path Width | Level of Service | Should be used in |
|--------------|---|---|
| 8 – 10 feet | Can only accommodate few pedestrians or runners. Poor Level of Service. | Rare instances. |
| 11 – 15 feet | Improved Level of Service for higher volumes and more balanced user mixes than narrower widths. | Conditions with substantial use by joggers, pedestrians, skaters, and bicyclists. |

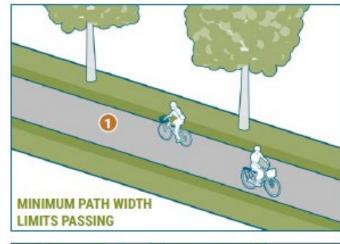
#1. Achieving Multimodal Networks – Applying Design Flexibility & Reducing Conflicts. U.S. Dept of Transportation. Federal Highway Administration (FHWA). August 2016.

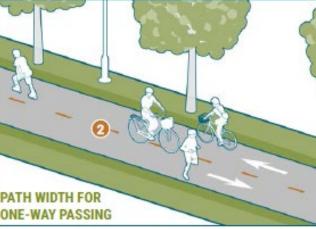
Path width should be determined by the number of users, the types of users, and the differences in their speeds

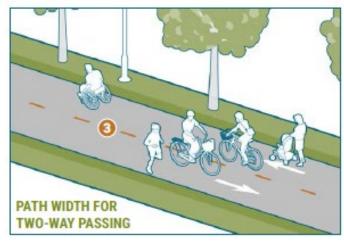
- "By widening the path to provide space to accommodate passing movements, conflicts can be reduced." (pg. 100)
 - (A width of 14 feet is better at reducing conflicts than a width of 12 feet.)
- "<u>Wider pathways</u> are recommended in areas with <u>higher user volumes</u> and where a <u>high percentage of pedestrians</u> are expected." (pg. 100)
- "In urban areas where high use is anticipated, the desired path width is a minimum of 14 ft." (pg. 100)

SEE GRAPHIC AT RIGHT:

- 1. A path width of 10 feet allows one user in each direction to safely travel.
- 2. A path width of 11 feet allows one person to pass a slower path user and narrowly avoid a path user traveling in the opposite direction.
- 3. Wider pathways are recommended in areas with higher user volumes and where a high percentage of pedestrians are expected.







#2. Guide for the Development of Bicycle Facilities. American Association of State Highway Transportation Officials (AASHTO). Fourth Edition. 2012.

Wider pathways, 11 feet to 14 feet, are recommended in locations that are anticipated to serve a high percentage of pedestrians.

- The minimum paved width for a two-directional shared use path is 10 ft. Typically, widths range from 10 feet to 14 feet, with the wider values applicable to areas with high use and/or a wider variety of user groups.
- Wider paths are advisable when:
 - Where there is significant use by inline skaters, adult tricycles, children, or other users that need more operating width.
 - Where the path is used by larger maintenance vehicles.

#3. Shared Use Path Level of Service Calculator – A User's Guide. U.S. Dept of Transportation. Federal Highway Administration. July 2006.

Shared-Use Path Level of Service

Summary: "Grades A-C can be considered acceptable levels of service and D-F can be considered degraded levels of service."

At Linear Park

- The existing Level of Service is a "D"
- With an increase in path users, and no change in width, Level of Service may drop to an "E"
- With an increase in path users, and a slight increase in path width, Level of Service could change to a "C"

| Grade | Interpretation |
|-------|---|
| A | Excellent . A high-quality user experience. Trail has ample space to absorb more users of all modes. |
| В | Good . Trail has god bicycling conditions and retains significant room to absorb more users. Has ability to provide high quality experience. |
| С | Fair . Trails width meets current demand. Basic service for bicyclists. More slow-moving users will diminish Level of Service for bicyclists. |
| D | Poor . Trail is nearing functional capacity. Peak-period travel speed likely reduced by crowding. Addition of more users will result in significant service degradation. |
| E | Very Poor . Trail has reached its functional capacity. Bicyclists and skaters may adjust expectations or avoid. |
| F | Failing . Trail significantly diminishes the experience for at least one, and most likely for all user groups. Significant user conflict is expected. |