Key Design-Related References

We will use the design references both for assigned readings, lecture support material, and as references for homework, labs, and the design projects. Many of them are available free online. The NACTO guides are also available in printed copy for a nominal price ($50). The “purchase required” references are only available in hard copy and expensive. I have a couple of copies that can be made available to you.

Available Online

- FHWA (2015) Separated Bike Lane Planning and Design Guide. (link)

Purchase Required


Reading List

The reading list is organized in three categories 1) “Required”, 2) “Optional Journal Articles” and 3) “Additional Resources”. It is expected that all students will read the required materials in advance of the lecture that covers the material. The optional journal articles may be of interest to students who wish to advance their knowledge independently. Graduate students should expect to read 1 or 2 additional articles from this list for assignments. The “Additional Resources” list is reports or guides that are likely to be encountered by a professional in the field. These are usually lengthy documents and you are not expected to read the material.

1 – Introduction

Required

• **Chapter 3:** FHWA (2015) Separated Bike Lane Planning and Design Guide

**Optional Journal Articles**


**Additional Resources**

- NHTSA (2008). National Survey of Bicyclist and Pedestrian Attitudes and Behavior. ([link](#))

## 2 – Safety

**Required**


**Optional Journal Articles**


Additional Resources


3 – Planning

Required

- Chapter 4: FHWA (2015) Separated Bike Lane Planning and Design Guide

**Optional Journal Articles**


**Additional Resources**


**4 – Analysis of Facility Performance**

**Required**


### Optional Journal Articles


### Additional Resources

- San Francisco Department of Public Health (2009). Bicycle Environmental Quality Index (BEQI).

### 5 – Design Characteristics For Bicycling

#### Required

- **Chapter 2 and 3**: Design Manual for Bicycle Traffic, CROW ede Rik de Groot H, editor. Design Manual for Bicycle Traffic. CROW, Ede; (2007) ([D2L-Design Manuals](http://www.crow.nl/)).
- **Chapter 10**: Monsere, C., Foster, N., Borkowitz, T., Downey, M. Kothuri, S. Bertini, R.L.

Optional Journal Articles

- Langford, Brian Casey; Chen, Jiaoli; Cherry, Christopher R. “Risky riding: Naturalistic methods comparing safety behavior from conventional bicycle riders and electric bike riders”. Accident Analysis & Prevention, Volume 82, 2015, pp 220-226 doi:10.1016/j.aap.2015.05.016

Additional Resources


6 – Bicycle Facility Design and Operation

Required

- Chapter 5: FHWA (2015) Separated Bike Lane Planning and Design Guide

Optional Journal Articles


Additional Resources


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7 – Design Characteristics of Pedestrians

Required


Optional Journal Articles


Additional Resources


8 – Pedestrian Facility Design and Operation

Required


Optional Journal Articles


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Additional Resources

• Proposed Guidelines for Pedestrian Facilities in the Public Right-of-Way (2011) (link)
• Chapter 19, Highway Capacity Manual 2010

9 – Shared Use Path Design

Required:


Optional Journal Articles


Additional Resources


Acknowledgement: This list was inspired and borrows many references from Daniel Rodriguez’s list for his course on Bicycle and Pedestrian Planning at University of North Carolina provided courtesy of PBIC.