



# Traffic Stress Assessment

Level of Traffic Stress Concept

Bicyclists have varying levels of tolerance for traffic stress created by volume, speed, and proximity of adjacent traffic. Their tolerance may vary by time of day or trip purpose. A person's tolerance is likely to change over time and with bicycling experience.

## Level of Traffic Stress Scoring

The Fort Collins Level of Traffic Stress Assessment is based on the Dutch concept of increased separation from traffic as volume and speed increase and the provision of safe crossings of major roadways. Examples of bicycle facilities relative to traffic stress are shown in the adjacent table.

#### **Level of Traffic Stress 1**

Tolerable for users from 8 (children) to 80 (seniors)

#### Level of Traffic Stress 2

Tolerable for the mainstream adult population ('interested but concerned')

#### Level of Traffic Stress 3

Tolerable for adult population comfortable in shared traffic but who may prefer some separation ('enthused and confident')

#### **Level of Traffic Stress 4**

Tolerable for adult population comfortable in shared traffic with no separation ('strong and fearless')

#### Level of Traffic Stress 5

Uncomfortable for almost all adult bicyclists

shared lanes

bike lanes

intersections

trails

protected bike lanes

## Traffic Stress











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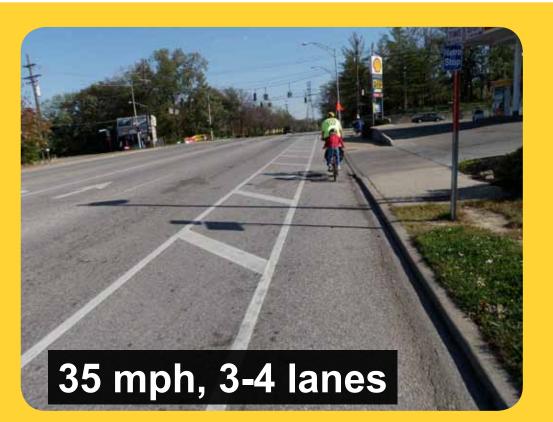






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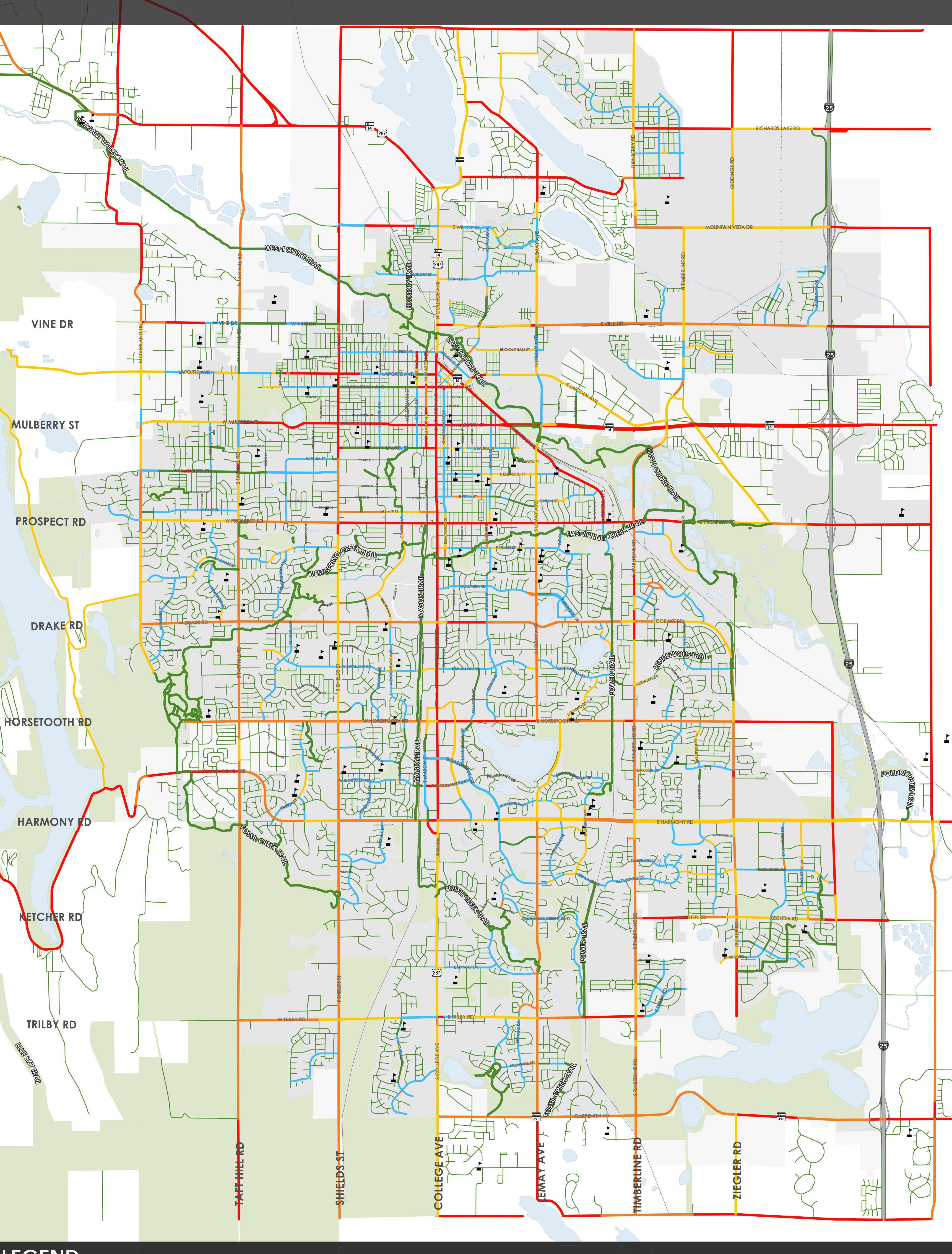


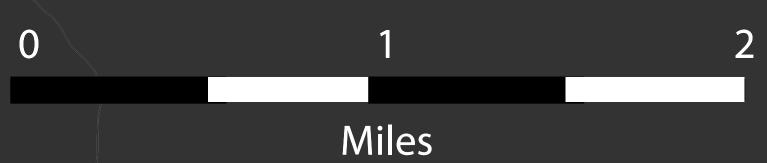






# 2014 LEVEL OF COMFORT ANALYSIS

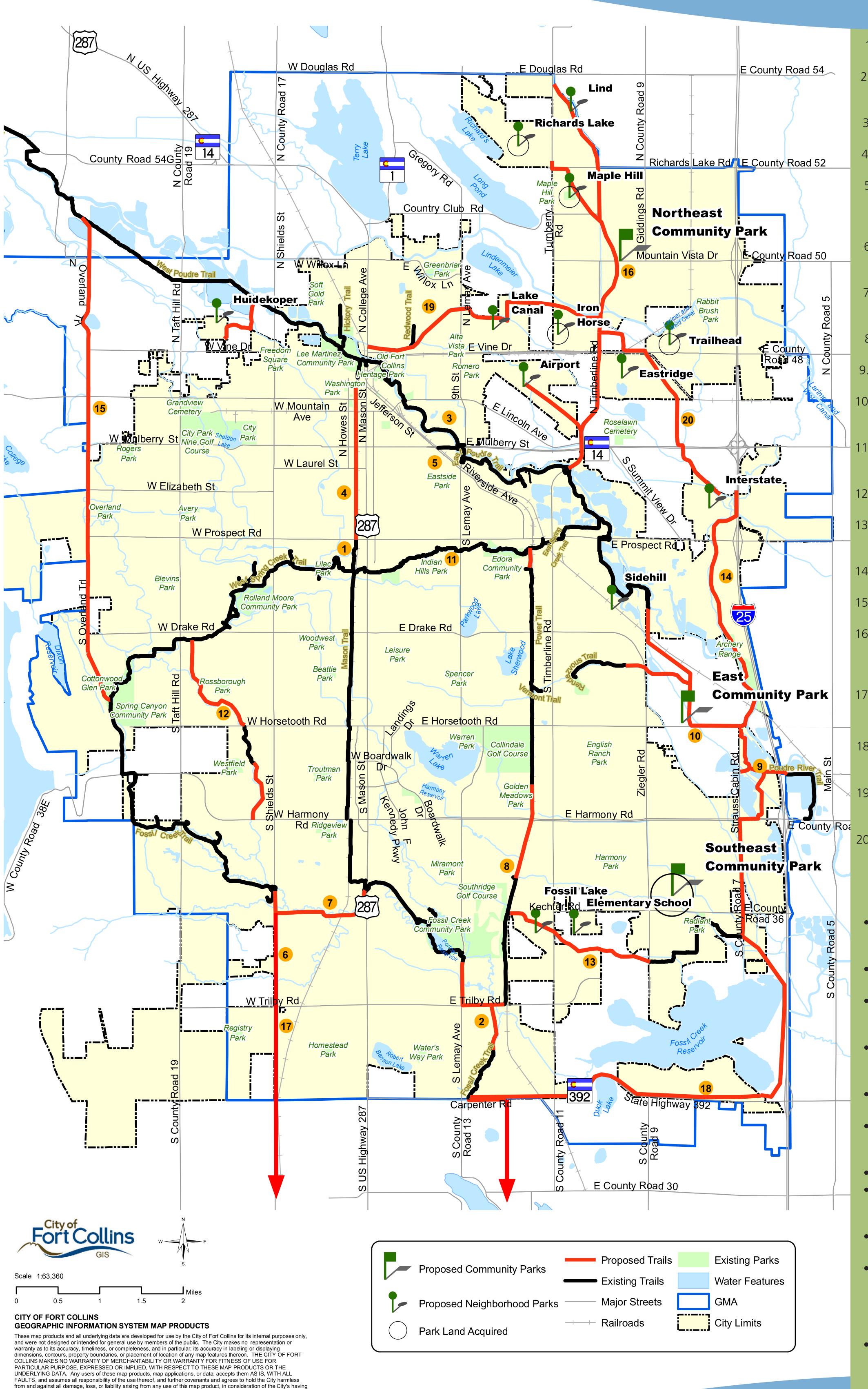






# 2013 Paved Recreational Trails Master Plan





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- 1. Replace and realign the Spring Creek Trail east of Centre Avenue; (funded)
- 2. Construct the Trilby Road underpass east of Lemay Avenue and finish the trail from Trilby to Carpenter Road; (funded)
- 3. Replace and realign the Poudre River Trail on the Woodward Technology Center site; (funded)
- 4. Complete the Mason Trail from Prospect Street to Laurel Street; (funded)
- 5. Realign the Poudre River Trail at Lemay Avenue including a new bridge downstream from Lemay in conjunction with the CDOT Mulberry Bridge replacement project; (funded)
- 6. Extend the Fossil Creek Trail at Shields Street to Trilby Road after the installment of the Xcel pipeline; (funded)
- 7. Construct the Fossil Creek Trail between College Avenue and Shields Street, including an underpass of the railroad tracks; (funded)
- 8. Construct the Power Trail railroad underpass at Keenland Drive; (partially funded)
- 9. Construct the Poudre River Trail from Arapaho Bend Natural Area across I-25 to Timnath; (funded)
- 10. Construct the Poudre River Trail from CSU Environmental Learning Center to Arapaho Bend Natural Area; (partially funded)
- 1. Widen, repair/replace the Spring Creek Trail between Welch Street and Shields Street; (unfunded)
- 12. Construct the Canal Trail from Horsetooth Road to the Spring Creek Trail; (partially funded)
- 13. Construct the Fossil Creek Trail from Ziegler Road to near the Power Trail; (as R.O.W. is obtained, partially funded)
- 14. Construct the Boxelder Trail from the Poudre River Trail north to Mulberry Street (unfunded)
- 15. Construct the new Overland Trail from Drake Road to the Poudre River Trail; (unfunded)
- 16. Construct the main spur of the northeast trail system from the Poudre River Trail north near Timberline Road to Turnberry Road near Richards Lake Road; (partially funded)
- 17. Construct the Shields Street Trail from Trilby Road south to Loveland in partnership with Larimer County and the City of Loveland; (partially funded)
- 18. Construct the south branch of the Fossil Creek Trail east along Carpenter Road to near I-25 and north to Harmony Road; (partially funded)
- 19. Construct the east-west spur of the northeast trail system, north of Vine Drive from College Avenue to Timberline Road; (partially funded)
- 20. Construct the south spur of the northeast trail from Timberline Road to Mulberry Street; (unfunded)

#### **OTHER ACTION ITEMS**

- Update this Paved Recreational Trail Master plan as part of future updates to the Parks and Recreation Policy Plan
- Continue to seek additional funding for the trail program to keep pace with future needs
- Construct trail connections to the street system on existing and future trails at no greater than a ½ mile interval in residential and commercial areas
- Continue to employ best practices in locating, building and maintaining trails to avoid, minimize, and mitigate environmental impacts
- Add landscaping and trees to beautify the trails and provide shade for trail users where appropriate
- Continue to improve the trail system by adding such items as: trailheads, restrooms, drinking fountains, benches, etc.
- Connect trails to the brewery industry
- Continue to track trail use and survey trail users to refine project priorities and identify ways to continually improve the trail system
- Incorporate Safe Routes to Schools in future trail expansion projects where appropriate
- Analyze the feasibility and cost of constructing trail underpasses/overpasses of arterial and collector streets and determine priority locations based on feasibility, cost, safety and benefits to greatest number of trail users
- Analyze detour routes and signage around flood prone trail areas to determine if any can be improved
- Complete implementation of trail location, safety, and destination signage
- Maintain or improve best management practices related to trail maintenance



# Bicycle Plan Fort Collins innovate sustain connect

# What You've Told Us

The Fort Collins Bicycle Master Plan has been active in the community: we've attended numerous City events, connected with you through our online map, and hosted a popular Open House in March. Here is just a snapshot of what we've heard from you so far.

How would you describe bicyling in Fort Collins today?

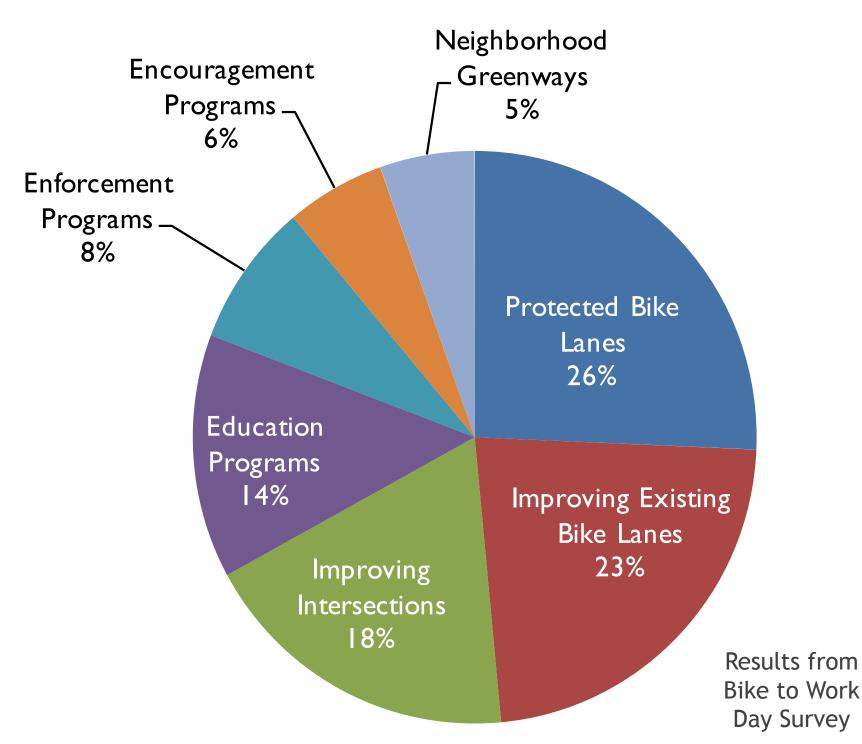


How would you <u>like</u> to describe bicycling in Fort Collins in the <u>future</u>?



What kinds of infrastructure and programs would make the

biggest impact in Fort Collins?



# K-12 Spotlight

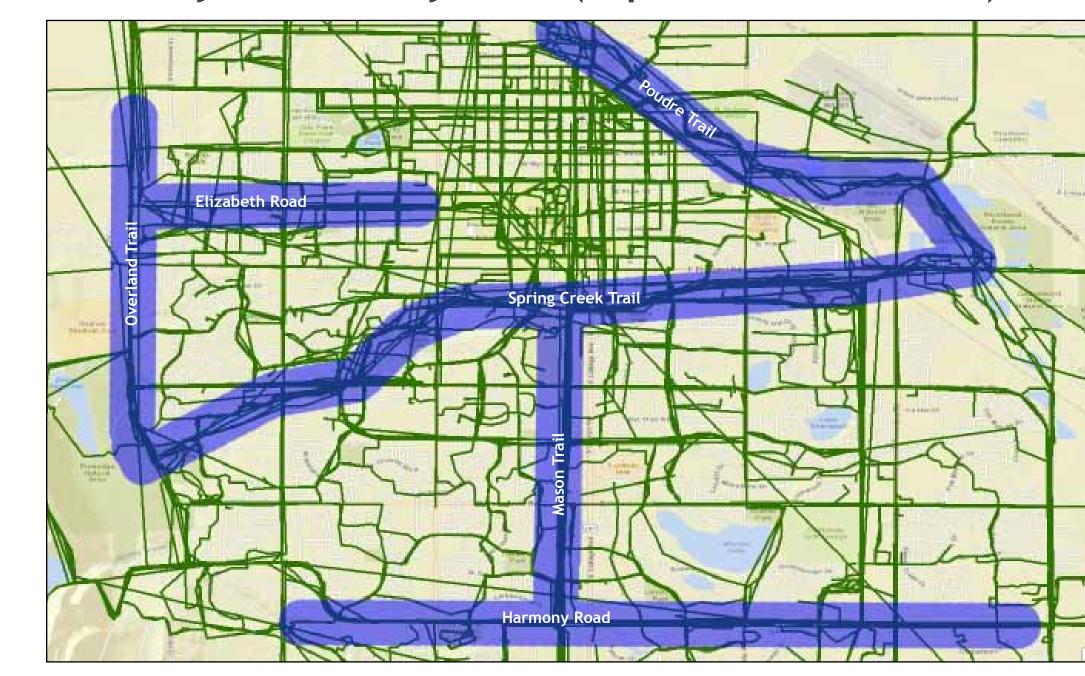
Lesher Middle School Tour de Fit - May 2014

Bike carnival attendees said that they ride along major streets to get to school, and that major street intersections are difficult to navigate.



## Online WikiMap and Survey

Where do you currently bike? (Top 3 roads and trails)



Where are the barriers to bicycling?

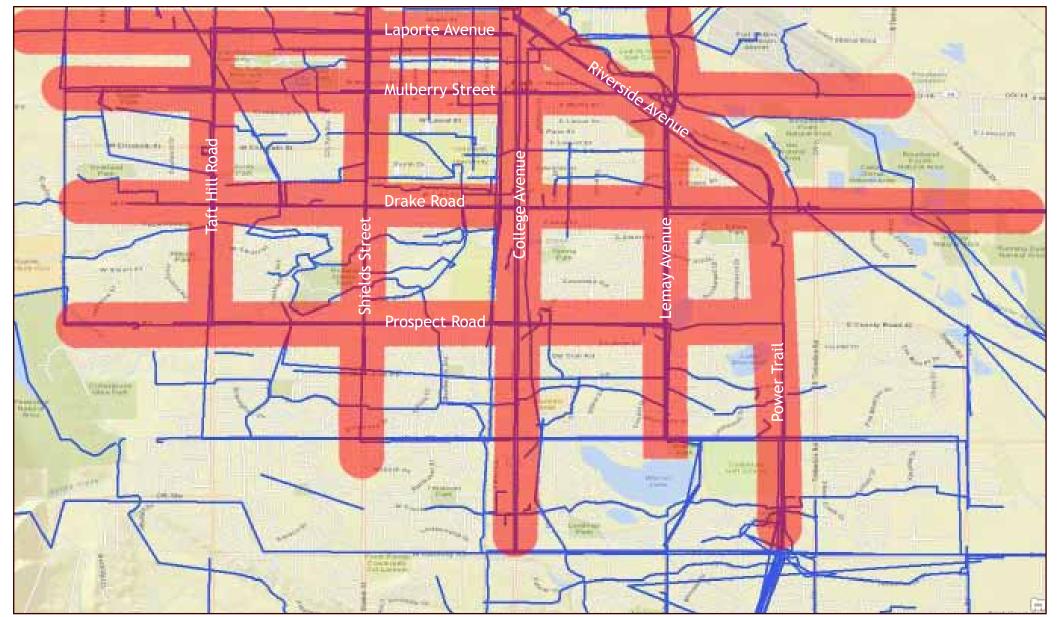
#### <u>Intersections</u>

- Horsetooth Road and College Avenue
- Shields Street and Prospect Road
- Horsetooth Road and Timberline Road

#### <u>Major Streets</u>

- N. Taft Hill Road
- W. Vine Driver
- S. Sheilds Street
- W. Horsetooth Road
- S. College Avenue

#### Where would you like to bike?



# Infrastructure Spotlight

**Protected Bike Lanes!** 

At Bike to Work Day, most of people asked said that on major streets, they would prefer a <u>protected bike lane</u> over a buffered bike lane. At the Open Streets event, attendees were asked to choose <u>one city street for a protected bike lane</u> treatment.

