EXECUTIVE SUMMARY

WHAT IS BICYCLE PLANNING?

Bicycle planning is the process of assessing and addressing the needs of a community in the area of bicycle infrastructure, programs, and policies. It involves taking an inventory of the community's existing bicycle resources, and identifying strategies to build upon those resources. Bicycle planning means consulting with the citizens of the community to facilitate their vision of future transportation networks—understanding their concerns, addressing their needs, and crafting a road map to a more bicycle-friendly community. It means assessing the strengths and weaknesses of bicycle resources through on-the-ground observations and public outreach, and finding ways to capitalize on their strengths and minimize their weaknesses.

Ultimately, bicycle planning is about giving a community a viable transportation alternative that complements the existing network—an alternative that encourages lively streetscapes, a healthy population, and a more livable and sustainable environment.

WHY PLAN?

Whether for health, economy, utility, the environment, or pure joy, the bicycle offers an incredibly simple solution to some of society's most vexing problems. After decades of declining use, and being pushed to the margins of society—and our roadways—people are increasingly returning to bicycling in record numbers. This may be attributed to any number of related factors, but it mostly demonstrates the growing need to accommodate bicycling in our communities' physical and social fabric. Indeed, those towns and cities that accommodate bicycling the best are also our country's most healthy, economically competitive, and desirable places in which to live, work, and visit.

In response to this growth in cycling has come the recognition that bicycling is valuable to the community of Westminster, and that it is time for the City of Westminster to undertake its first Bicycle Master Plan.

Moreover, the bicycling industry brings more than \$1 billion dollars to the Colorado's state economy each year. Whether for tourism, sales, events, or maintenance and repair, it's clear that bicycling brings economic benefits to Colorado. However, bicycling also helps keep Colorado communities vibrant, active, and livable—traits that support its reputation as the nation's healthiest state. As Colorado's 7th largest city, The City of Westminster has a vital role to play in sustaining and advancing the health of its local economy, the natural and built environment, and its 110,000 residents. However, because the City does not exist in a vacuum, it must also look outward in contributing to an increasingly dynamic metro-Denver region, and the overall livability of the State of Colorado.

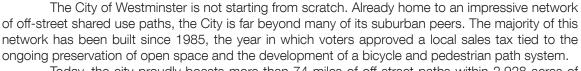
As Westminster's first comprehensive bicycle planning effort, the 2030 Bicycle Master Plan is intended to guide the City in fostering bicycling as a viable, safe, and sustainable form of transportation and recreation. More importantly, the Plan provides a critical foundation for further positioning Westminster as a highly livable, safe, and forward-looking City in which to live, recreate, or do business.

The Westminster 2030 Bicycle Master Plan is comprised of 6 main components. They include:

- 1. Background and Existing Conditions Analysis
- 2. Public Involvement Program
- 3. On-Street Bikeway Network Plan
- 4. Bikeway Network Wayfinding and Signing Plan
- 5. Bicycle Parking Plan
- 6. Education, Encouragement, Enforcement and Evaluation Plan

The realization of the goals set forth in this Plan will require the City to re-balance its local and regional transportation network by altering the way it currently plans, designs, funds, and implements roadway projects. Indeed, the City should first consider its streets and public rights of way not as corridors of auto mobility, but as corridors that enable accessibility—streets that serve people walking, bicycling, taking transit, and driving to their destinations.

BACKGROUND & EXISTING CONDITIONS ANALYSIS



Today, the city proudly boasts more than 74 miles of off-street paths within 2,928 acres of preserved open space. Combined with dozens of parks and its golf courses, green space comprises 1/3 of Westminster's total land area—one of the highest percentages in Colorado. The Farmers' High Line Canal, Little Dry Creek, Big Dry Creek trails, and the future Walnut Creek Trail, effectively serve as recreational trunk lines for numerous other paths that extend like branches into residential subdivisions, and to nearby schools and commercial centers. By consistently voting to extend the local ¼ cent open space tax, the City's residents clearly continue to value the ongoing development of their open space network.

Despite its success in developing a path system, the City of Westminster has not actively pursued the implementation of a commensurate on-street bikeway network. As a result, the city lacks direct, identifiable, and safe on-street bikeways. The creation of this 2030 Bicycle Master Plan should help motivate the City to put as much effort into developing the proposed on-street network as it did in developing the off-street network. If this is accomplished, Westminster will be a healthier, livable, and economically competitive city.

A summary of Westminster's existing bikeways reveals the current imbalance between the City's on- and off-street bikeways.

- Existing Bikeway Network Miles: ~ 74 miles
- Percentage of City Street Network with Bikeways: 0%
- Number of Bikeways: 4, with numerous branches
- Bikeway Types: 2 (shared us paths, bicycle lanes)
- Bicycle Lanes Miles: > .1 miles
- Shared Use Paths: ~ 74 miles

PUBLIC INVOLVEMENT PROGRAM

A robust public input and communications process was developed to best guide the development of the Westminster 2030 Bicycle Master Plan. Numerous innovative and time-tested communication tools were utilized to obtain input from the City of Westminster's elected officials and municipal employees; local bicycle advocates; the greater Westminster community; and neighboring municipalities and regional governments. They include:

- Two Westminster Bicycle Summits
- Multiple-day Handlebar Survey
- Web and Paper Existing Conditions Survey
- Westminster Corporate Employer Outreach Survey
- Key Stakeholder Interviews
- Neighboring City and County Outreach
- Web-based Social Media Tools (Facebook, Twitter, Project Website).



The Big Dry Creek Trail winds its way through Westminster's extensive open space system.

All input gathered provided the planning team with a deeper understanding of public sentiment towards Westminster's existing bicycling conditions. The input gathered was then used to inform the final recommendations included in this 2030 Bicycle Master Plan.

ON-STREET BIKEWAY NETWORK PLAN

Proposed 2030 Bikeway Network Summary

• Bikeway Network miles: 132 miles

Percentage of Street Network To Have Bikeways: 28

• Total Number of Bikeway Projects: 102

• Bikeway Types: 7

Countermeasure Types: 4

Beyond interacting with those already bicycling in Westminster, the Handlebar Survey was used by the planning team to understand the unique characteristics of each street and its surrounding land use context. Analysis included street width, street type, existing land use, urban form, density, traffic control devices, posted speed limits and actual travel speeds, and traffic volume. These elements were considered holistically before assigning the various on-street bikeway types. When conducting this analysis, special attention was paid to how each of these elements affects the perceived and actual comfort for all types of bicyclists.

The City of Westminster currently has three basic street types: local, collector and arterial. To more completely meet the needs of beginner, intermediate, and expert bicyclists, and to advance the viability of active transportation within the city and region, the 2030 Master Plan proposes 132 miles of on-street bikeways along Westminster's street network. The network plan is comprised of three bikeway classes, and eight unique bikeway types. They include:

Class I

- Off-street Shared Use Path
- Sidepath located within roadway right-of-way

Class II

- Conventional Curbside Bicycle Lane
- Conventional Bicycle Lane adjacent to parallel parking
- Buffered Bicycle Lane curbside

Class III

- Signed Bike Route
- Signed Bike Route with Shared Use Lane Markings (Sharrows) adjacent to parking

Additionally, four bikeway countermeasure treatments are recommended to further enhance the visibility, safety, operation, and appeal of the proposed bikeway network. These include:

- Bicycle Boxes
- Peg-a-Tracking
- Bicycle Detection and Pavement Markings
- Bicycle Turn Pockets and Bicycle Refuges



Wayfinding signs should include helpful information to aid navigation and improve the overall visibility of the bikeway network.

BIKEWAY NETWORK WAYFINDING & SIGNING PI AN

Without an existing on-street bikeway network, there are only a few on-street bicycle signs sprinkled throughout the City. Those signs that do exist are located at sporadic points throughout the city, typically where the off-street Shared Use Path system crosses or adjoins the street network. Those signs that do exist only target people driving, alerting them to the presence of bicyclists.

Westminster's robust shared use path network features a comparatively sparse and incomplete wayfinding system. While path markers are present, the greater system is inconsistent, often leaving large gaps that diminish the value of the existing signs.

Additionally, there appears to be no consistent standard as to when bicycle signs will be installed, as there are numerous possible instances of on-street/off-street interactions in which signs are not present.

To improve these conditions, the bicycle wayfinding and signing plan includes eight actions for improving the entire bikeway network. The recommendations include, but are not limited to identifying appropriate bicyclist warning signs, recommending where to install path markers, and adding clear directional signs, while removing those that are confusing.

BICYCLE PARKING PLAN

While bikeways are the most visible element within a bicycle network, cyclists must also have safe and convenient places to store their bicycles. Thus, providing bicycle parking and other "end-of-trip" facilities is critically important to supporting bicycling as a viable mode of transportation. Solutions range from the basic "inverted-U" bicycle rack, to semi-enclosed bicycle shelters, to full bicycle "stations" that often include bicycle storage and repair facilities, showers, lockers, changing rooms, rentals, and even café/social gathering space.

No matter the type, bicycle parking is commonly excluded or insufficiently addressed in the planning, urban design, and development process. As a result, accessible, attractive, and safe parking options for both short and long-term use are often under- or oversupplied, and/or poorly sited.

The Westminster 2030 Bicycle Parking Plan is intended to provide all stewards of the Westminster Bicycle Master Plan with the information needed to improve bicycle parking conditions, and by extension, the City's bikeway network.

While countless bicycle parking designs and configurations exist, there are only two basic types, which include six basic sub-types. These include:



Those who choose to bicycle should be rewarded with a safe, convenient, and dignified place to store their bicycle.

Short-Term Parking Facilities

- Bicycle racks
- Self-service bicycle sharing systems.
- Temporary event "valet" parking

Long-Term Parking Facilities

- Semi-enclosed bicycle shelters
- Fully enclosed bicycle lockers
- Fully enclosed bicycle stations/storage rooms

A discussion of the above facilities types, as well as location, performance standards, and bicycle parking ratios are included in this Plan.



Bike Denver's attractive and informative poster campaign demonstrates the many benefits associated with cycling.

EDUCATION, ENCOURAGEMENT, ENFORCEMENT, & EVALUATION PLAN

Expanding the appeal of cycling in Westminster will require the utilization of numerous strategies. These include, but are not limited to, organizing bicycling skills courses, launching motorist and bicyclist safety campaigns, promoting the benefits of bicycling, supporting local bicycle-centric events, utilizing social media and web-based advocacy communication tools, enforcing existing motor vehicle-bicyclist laws, and maintaining traditional communication strategies that position bicycling as a viable option for people who are interested in bicycling, but concerned about safety.

When education, encouragement, and enforcement campaigns are crafted, great care should be taken to appeal to cyclists and non-cyclists alike. Too often such campaigns unintentionally reinforce the widely held belief that bicycling is, and will always be, a marginal activity reserved for children and athletic, risk-adverse men. By contrast, truly successful efforts position cycling as a normal mode of transportation that does not require expensive bicycles, extreme travel patterns, and/or spandex outfits.

While the City of Westminster should take the lead on local bicycle safety issues, most education, encouragement, enforcement, and evaluation campaigns require regional cooperation.

The Westminster 2030 Bicycle Master Plan includes 17 Education, Encouragement, Enforcement, and Evaluation recommendations.