Final Report and Recommendations City of Kettering Bicycle Advisory Task Force



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Introduction

In the 1970's, Kettering had signed, on-street bicycle routes. These routes were used mostly for recreation. Over the past two decades, the signed routes disappeared. While the use of bicycles for recreation, transportation and fitness has increased nationwide, Kettering has created a network of bicycle infrastructure including separated bicycle paths, protected on-street bicycle lanes and onstreet bicycle routes. Currently, the City has about 4 miles of bicycle shared-use network and over 6 miles of path were installed as part of the latest park improvements. There are another 6 miles of network already planned for construction. Because of the existing and planned growth of the bicycle network and the increased interest by the citizens, a task force was needed to research, investigate and explore bicycle and pedestrian issues in Kettering.



Kettering City Council identified a need to research, investigate and explore multiple aspects of bikeway systems and alternative transportation in Kettering. An important and valuable part of such research, investigation and exploration will be the input of persons in the City that are interested in bikeway systems and transportation. Council adopted a resolution to create a Bicycle Advisory Task Force made up of at least ten persons tasked to make recommendations to Council regarding potential bike and pedestrian oriented programs and facilities to consider as part of future City initiatives. This document will serve as the final recommendations to Council.

Since its inception in May, 2011, the Bicycle Advisory Task Force (TF) has received valuable input from various City of Kettering departments and programs: Police, Park, Recreation and Cultural Arts, Engineering, Planning, Safety Patrol and Traffic Engineering. Bike planning documents and recommendations from the past fifteen years were also reviewed. Input also came from outside sources such as The Miami Valley Regional Planning Commission (MVRPC), League of American Bicyclists (LAB) and various public domain publications.

Another significant undertaking was the submission in February, 2012 of an application to the LAB for the City to obtain national recognition as a Bicycle Friendly Community (BFC). The LAB is widely recognized as an authority on advancing bicycling in communities around the United States and has conducted this BFC program for many years.

A significant amount of information was required for the application. Completing the application required the TF to conduct in depth research about our community and this was an aide to our own assessment and understanding of the City's existing programs and infrastructure.

Unfortunately, Kettering did not achieve recognition as a BFC. We did however receive significant feedback from the LAB, and that is included in Appendix II. It is worth Council's time to review that feedback as Council deliberates future bicycling programs for our community.

The TF believed it important to solicit public input from the community during this process and our efforts here evolved to include encouragement activities. This was accomplished by a variety of activities: hosting a TF float in the 2011 Holiday at Home (HAH) parade; providing biking and walking paraphernalia at a 2011 HAH informational

booth; establishing the first annual community bike ride at the 2012 Kettering Block Party which included participation by the officers in the Police Bike Patrol as well as performing quick bike safety checks and distribution/fitting of children's bike helmets; partnering with the MVRPC to provide bike parking at the 2012 \$2 Tuesday Concert Series at the Fraze; several TF members attended the biennial 2011 Miami Valley Regional bike summit hosted by the City of Dayton in 2011; and several TF members received training from the League of American Bicyclists in the spring of 2012 to become certified bike instructors.

These outreach activities provided input to the TF and acted as conduits for feedback from the community as well as giving the TF a way to provide the public with information about Kettering's biking and walking planning process and progress.

The following policies, issues and strategies will follow the 5 Es as spelled out by the League of American Bicyclists. The 5 Es are: Evaluation, Engineering, Education, Enforcement and Encouragement. These are discussed in more detail on the League web site:

http://www.bikeleague.org/programs/bicyclefriendlyamerica/communities/bfc_five-Es.php

The main goal is to become a Bicycle Friendly Community. http://www.bikeleague.org/programs/bicyclefriendlyamerica/communities/

The League of American Bicyclists was founded in 1880 and its mission is to promote bicycling for fun, fitness, and transportation thru advocacy and education to build a bicycle friendly America. Its BFC program provides communities with recognition that their communities meet those mission goals. Communities that achieve BFC status thru the LAB are always on the short lists of the best places to live, work, study, and retire (BFCs are six of the top ten communities in the latest US News and World Report choices).

The TF encourages Council to continue lending their support so that these outreach activities continue to develop and flourish in our community. We recommend Council adopt the policies that follow.

City of Kettering, Bicycle Advisory Task Force, Final Report and Recommendations

Evaluation

Evaluation can help measure the achievement of objectives, provides accountability to the public (and those who fund projects or programs) as well as increase community support.

1. Policy:

Determine ways to evaluate the alternative transportation needs of those populations outside the typical walker/biker including elderly, youth and disabled.

Issue:

There are no current ways to evaluate and measure the needs of these populations.

Strategies:

- a. Explore ways to address the site-specific transportation needs of elderly, youth and disabled populations, eg. Nursing homes, schools, hospitals, extended care facilities, etc.
- b. Identify sources of data specific to Kettering (such as RTA, Lathrem, Project Mobility, MVRPC drive less live more, senior living facilities, etc.).

2. Policy:

Gather current bicycle/pedestrian baseline data.

Issue:

No current data exists (Five Rivers Metroparks and MVRPC collect data regionally) that can be used to evaluate bicycling/pedestrian use in Kettering.

- a. Analyze current bicycle/pedestrian modeshare to track the change over time (surveys, employer data, user counts, etc.).
- b. Inventory existing bicycle/walking facilities in Kettering. Quantify the City's amenities such as bike racks, bike paths, side paths, sidewalks, etc.
- c. Create budgetary tools to measure and evaluate the amount of money spent by the City on bicycle and pedestrian related projects.



Engineering

"Kettering recently implemented a policy to engineer streets with the consideration of bicyclists and is beginning to develop a trail network. The community has adopted good tools to implement their Complete Streets policy. Community and transportation planners, and civil engineers receive training in bicycle and pedestrian planning and engineering. Most public buses are equipped with bike racks. The community uses road diets to make roads safer for all road users." League of American Bicyclists – Feedback from Bicycle Friendly Community Application



The most successful bicycling cities around the world include a comprehensive bicycling network which provides a variety of bicycle

facilities to address the level of comfort and abilities of various types of riders. Components of a bicycle network system include bicycle facilities, bicycle parking, operation assessment, maintenance standards, and wayfinding.

1. Policy:

The City should address, within its Comprehensive Plan, guidance for bicycle and pedestrian infrastructure investment.

Issue:

The existing Comprehensive Plan, Zoning Code and Subdivision Regulation are outdated and do not address bicycle or pedestrian issues.

- a. Create a bicycle/pedestrian Master Plan and integrate it into the Comprehensive Plan.
- b. Update the parking/zoning/subdivision ordinances to mandate bike parking facilities and multimodal sidewalks at all commercial development for connecting to bike bus routes and main streets.
- c. Require the installation of bicycle racks at existing businesses and private property and in public places as part of parking standards in the zoning code.
- d. Establish criteria for bicycle/pedestrian short-term and long-term infrastructure improvements.

2. Policy:

Bicycle and pedestrian routes need to be created and clearly identifiable to the general public.

Issue:

There are very few signed or numbered routes in the City. The lack of signage discourages users who are unfamiliar with our City.

Strategies:

- a. Develop and install bicycle/pedestrian signage for way finding and visibility to motorists.
- b. Produce bicycle and pedestrian route maps. See Appendix IV. *Map of Recommended Signed Bike Routes*
- c. Provide route data to online mapping applications (e.g. Google Maps).



3. Policy:

Develop a comprehensive, practical and equitable funding mechanism for constructing and maintaining bicycle and pedestrian infrastructure.

Issue:

There are limited current funding sources for sidewalks and bikeways.

- a. Sidewalks and bikeways should be considered part of transportation infrastructure and funded as such. Missing sidewalk connections need to be identified. See Attachment III. Map of Existing and Recommended sidewalk connections.
- b. Recommend alternative sources of financing for construction and maintenance (e.g. alternatives to sidewalk assessments, traditional public funding sources are drying up).

Education

"All elementary and middle schools have Safe Routes to School programs." League of American Bicyclists – Feedback from Bicycle Friendly Community Application

Education is a critical component of a bike-friendly community plan. It generally includes rules of the road, bicycle riding skills, and basic bicycle maintenance topics. Additionally, the general public needs to be more comfortable with bikers on the roadways. Without an educational component, both bicyclists and motorists will lack the necessary information and skills for **both** to become safe and comfortable with each other on our streets. When we teach bike education skills to all road users, we create additional advocates of safe cycling in our community.



1. Policy:

Develop an educational program to assist employers and employees in establishing bicycle commuting programs within our community.

Issue:

There are no educational programs within our community which assist employers and others interested in commuting by bicycle.

- a. Develop a program to present to employers outlining the benefits: improved health, decreased health care costs, decline in obesity, decline in motorized traffic and congestion, decline in vehicle emissions, reduced automobile parking requirements, etc.
- b. Publicly recognize organizations that establish bicycle commuting programs.
- c. Establish the concept of transportation by bicycle at an early age by adding a bicycling safety component to the Safety Village program; by including safe bicycling routes as a part of the Safe Routes to Schools program; by assisting schools and PTO's in establishing after school programs addressing bicycle safety.
- d. Work with the local AAA offices to include bicycling and motorist educational components into their training programs. Add more frequent and repetitive educational messages within their AAA publications.

2. Policy:

Develop partnering and cooperative relationships with other bike groups in and around Kettering to encourage and increase all forms of bicycle usage.

Issue:

Many motorists and the general public are not comfortable with sharing roadways and routes with bicyclists. As more cyclists are observed safely

using their bikes on Kettering roadways, motorists will become more comfortable sharing these roadways and biking will become safer.

Strategies:

- a. Host a joint event to share plans, coordinate events, and encourage regional improvements.
- b. Sponsor rides with other advocates and invite government and business leaders to participate along with their staffs and employees. Add a cycling education message to the ride.
- c. Hold an open house for the public to obtain bicycling information from invited bike clubs and biking retailers.

3. Policy:

Provide a communications program to educate our residents on the benefits of bicycling as an alternative form of transportation, as recreation, and as an aid in improving health and fitness.

Issue:

Kettering does not provide any regular bicycling related communications to residents and there is no established bicycling information source.

- a. Establish a bicycling article in each issue of "Contact with Kettering".
- b. Set up and maintain a page on the city's website where interested residents can access biking information, maps, scheduled bicycling events, educational and safety information, etc.
- c. Sponsor targeted educational programs for bicyclists of various ages and abilities.
- d. Develop a periodic bicycle related topic to present on cable channel 6, GATV.
- e. Develop brochure or poster materials to place in local bike shops, with realtors, at chambers of commerce, etc.
- f. Use city publications to residents as a means of providing periodic reports and educational information regarding safety and road usage.



Enforcement

"A police officer is an active member of the bicycle advisory committee. Officers have received specific training on the relationship between bicycling and law enforcement. There is a ban on texting while driving." League of American Bicyclists – Feedback from Bicycle Friendly Community Application

Traffic enforcement efforts are integral to bicycle traffic safety and should encourage safe and lawful travel. This can be achieved by strategically maximizing education benefits and focusing on partnerships and communication. Balancing traffic enforcement with bicycle safety education and encouragement efforts has been shown to improve road safety for bicyclists, motorists and pedestrians.



1. Policy:

Take advantage of Police Department Police School Resource Officers in schools.

Issue:

Existing bicycle and pedestrian safety training in schools need to be reviewed to encourage biking and walking to school.

- a. Explore ways to get police officers into the schools to talk about bicycling/pedestrian safety issues.
- b. Work with schools to develop appropriate curriculum, materials, etc.
- c. All bike training should promote safe riding and helmet use.

2. Policy:

Develop a Volunteer "Bike Patrol" or "Bike Ambassador" Program.

Issue:

No current patrol exists for existing bicycle facilities in Kettering. Police Officers only patrol facilities on an as needed or called basis.



Strategies:

- a. Create a "Bike Patrol" program in cooperation with the Police Department. A volunteer Bike Patrol would enhance the "eyes on the pavement" and would increase safety on secluded bike facilities. These voluteers would act as ambassadors for our community as well as being familiar with Kettering's bicycling infrastructure.
- b. Study how other communities have created patrols.
- c. Recruit and train individuals to participate.
- d. Increase the number of Police Officers patrolling multi-use paths *and* streets on bike, as it gives officers a better understanding of the conditions for cyclists and keeps secluded multi-use paths safe.

3. Policy:

Create a security plan for secluded portions of bike trail.

Issue:

Many existing sections of our bike paths are secluded and may not be frequently used because of a perceived lack of safety.

- a. Explore multiple ways to provide security on secluded sections of path.
- b. Explore manpower options including both police and volunteer efforts.
- c. Explore technical method which could include lighting, cameras or emergency call boxes.

Encouragement

This category concentrates on how the community promotes and encourages bicycling. Good promotional measures are Bike Month and Bike to Work Week events as well as community bike maps, route finding signage, community bike rides, commuter incentive programs, and having a Safe Routes to School program.

1. Policy:

Promote a wide range of bicycle friendly events.

Issue:

The City is not known for encouraging bicycle events within the City. Promotion has been irregular and inconsistent.

Strategies:

 Develop an annual "signature" event that promotes bicycling and walking in Kettering.



- b. The Holiday at Home Festival, as the city's premier annual festival, should always have an activity that involves some aspect of bicycling and walking in the City of Kettering.
- c. Make the City known as a bicycle and pedestrian friendly community by defining a "fast-track" process for supporting bicycle and pedestrian friendly initiatives.
- d. Invite state-wide and national rides to visit Kettering. Look at rides such as The Great Ohio Bicycle Adventure (GOBA) and Across Ohio Bicycle Adventure (XOBA).
- e. Consider the feasibility of attracting a bicycle race/event in Kettering. Private not for profit (NFP) organizations (e.g., Bicycles for All, Dayton Cycling Club) can sponsor organized rides that occur and/or originate within the City.
- f. Partner with neighboring Cities to map out joint tours of points of interest within the Cities. Host one of these events.

2. Policy:

Encourage bicycling and pedestrian friendly initiatives by businesses and other private entities.

Issue:

Businesses and other private entities have substantial influence with specific constituencies. Kettering does not have a program to connect private resources to further its goal to become recognized as a bicycle and pedestrian friendly city.

Strategies:

- a. Survey and identify employers who share bicycle friendly values.
- b. Establish a Kettering Bicycle Friendly Business award (preliminary steps toward the League's Bicycle Friendly status).
- c. Encourage a few leading businesses to apply for Bicycle Friendly Business status.
- d. Create incentives and recognition for local businesses who adopt policies encouraging their employees to commute by bicycle and other alternative forms of commuting. Kettering's Neighborhood Pride program is a good example of recognition possibilities.

3. Policy:

Develop a process for useful disposal of abandoned and unclaimed bikes.

Issue:

The City Police Department obtains many bicycles on an ongoing basis. The City has citizens and children who need bicycles that are in working order and safe. The City has no process for connecting this supply of bicycles with those who need/want them.

- a. This would work best if done in cooperation with neighboring cities.
- b. Develop an application process for allocating excess bicycles to Not-For-Profit (NFP) organizations who are qualified to prepare, distribute and train the recipients of these bicycles.
- c. Develop a pre-approved list of qualified NFP organizations so they can be pre-approved to request bicycles.
- d. Authorize the NFP organizations to charge nominal fees for these bicycles to defray their operating costs. (e.g., prepping, repair and training).

Conclusion

Our recommendations can be generally summarized in the following points.

- A. Develop a timeline and commit the financial resources for achieving construction of:
 - 1. Missing link portions of sidewalks, See Appendix III and;
 - 2. Completion of biking routes within Kettering and connections to adjoining communities. Suggested priorities are in Appendix IV.
- B. Use the resources which already exist within the Engineering and Planning Departments to accomplish the infrastructure improvements noted in A. above.
- C. Use the resources which already exist within the Parks, Recreation and Cultural Arts Department to develop and run the necessary community educational and encouragement type activities noted within the strategies sections.
- D. Council has taken the initiative by forming this Task Force. Continuing improvement in Kettering's infrastructure and community programs will be achieved if Council extends the tenure of this Task Force or one similar in focus.
- E. Apply to become a Bicycle Friendly Community (again).
- F. The recommendations contained in this report can be effectively managed within the existing organizational divisions of the City. They do not require the creation of a separate organizational structure. However, the Task Force agrees with the League of American Bicycles who recommend that accountability for the overall strategic initiative be vested in a single managerial position with budget responsibility.

The TF would like to thank City Council for the opportunity to assist the community with this valuable effort.

George Seifried - Chairman Bill Lauter – Vice-Chair David Stacy - Secretary Kendall Draeger Dave Hatton Sonia Oberlander Greg Smith Duane Wicks Greg Brumitt (resigned) – Past Chair Bruce Duke – Council Ashley Webb – Council Rich Schultz – Planning Commission Jeff Perkins – Police Representative Andrew Aidt – Staff Representative

Examples of other work completed by Task Force:

- **1.** Map of Existing and Recommended Sidewalk Connections (See Appendix III for larger format)
- **2.** Map of Recommended Signed Bike Routes (See Appendix IV for larger format)
- **3.** Map of Bike Route Rankings (See Appendix V for larger format)
- **4.** Inventory of Bike Racks Throughout City (See Appendix VI for additional detail)



Appendix I

Summary of ALL brain-storming Policy ideas

The summary that follows is a result of several brain storming sessions held by the TF in preparation for the recommendations made in this report. The list is a compilation of all the ideas expressed during those sessions. All the ideas included are important and should be pursued, but we also recognized a need to prioritize those ideas. Each TF member voted for the ideas each thought to be most important, and the policies and strategies detailed in the main body of this report received the most votes and are the higher priorities.



Evaluation

- 1. Explore ways to address the site-specific transportation needs of elderly, youth and disabled populations. Identify sources of data specific to Kettering (RTA, Lathram, Project Mobility, MVRPC drive less live more, senior living facilities, etc.).
- 2. City to develop process for useful disposal of excess bikes to NFP orgs.
- 3. Analyze current bicycle/pedestrian modeshare to track the change over time (surveys, employer data, user counts, etc.). Counts at bike racks at schools, other bike facilities; 1 week a year surveys; volunteers needed.

Engineering

- 1. Create a bicycle/walking Master Plan and integrate into the City's Master Plan
- 2. Update parking/zoning/subdivision ordinances– get a copy of the zoning code, review the applicable sections mandate bike parking facilities and multi-modal sidewalks at all commercial development connecting to the bus routes, main streets.
- 3. Security devices placed along secluded path locations
- 4. Develop and install bicycle/pedestrian signage for wayfinding and visibility to motorists
- 5. Bike racks include existing businesses, private property, not just public places
- 6. Develop a schedule for bike rack maintenance.
- 7. Gather creative/distinctive bike rack ideas.
- 8. Other safety/security features.
- 9. Recommend alternative sources of financing for construction and maintenance (e.g., alternatives to sidewalk assessments; traditional public sources drying up)

Education

- 1. Use block party app to distribute bike/ped information
- 2. Marketing of alternative forms of transportation multi-media, Regular article in contact with Kettering/web site, bike/ped videos on cable access, targeted education
- 3. Coordinate with other bike groups in and around Kettering

- 4. Educate employers on benefits of bicycle commuting/alternative forms of commuting
- 5. Training on bicycle commuting
- 6. Recommend alternative transportation task force should continue as an ongoing priority of the City of Kettering.

Enforcement

- 1. Determine a way to record and report on "near-misses" not just recorded accidents.
- 2. Helmet enforcement of Kettering law. Part of education too.
- 3. Police officers in the schools promote safe riding and helmet use
- 4. Regular/frequent citizen interaction with bike police
- 5. Address security along secluded path areas
- 6. Establish volunteer bike patrols
- 7. Pedestrians and bicyclists should follow all "rules of the road".

Encouragement

- 1. Create way to report ped/bike issues web site, phone, email, other
- 2. Speakers bureau
- 3. Encourage personal security/safety practices on trails
- 4. Promote/host a variety of bike themed events (\$2 Tuesdays, HatH bike float, BlockParty ride, etc.)
- 5. Incentivize biking/walking to community events.
- 6. Encourage local businesses to be bike/ped friendly; employee and employer tax benefits on alternative forms of commuting. City of Kettering to set an example. Leverage wellness programs.

Appendix II

Feedback – Bicycle Friendly Community Application, Spring 2012

Though **Kettering, OH** has not yet reached Bicycle Friendly Community status, the reviewers felt that notable steps are being made in the right direction:

- Engineering: Kettering recently implemented a policy to engineer streets with the consideration of bicyclists and is beginning to develop a trail network. The community has adopted good tools to implement their Complete Streets policy. Community and transportation planners, and civil engineers receive training in bicycle and pedestrian planning and engineering. Most public buses are equipped with bike racks. The community uses road diets to make roads safer for all road users.
- Education: All elementary and middle schools have Safe Routes to School programs.
- Encouragement: Kettering has a BMX track.
- *Enforcement:* A police officer is an active member of the bicycle advisory committee. Officers have received specific training on the relationship between bicycling and law enforcement. There is a ban on texting while driving.

A particular **highlight** was the "Bike Float" in the annual Holiday at Home parade.

The BFC review team expects good things in the future given the good local team.

Below, reviewers provided recommendations to promote bicycling in Kettering in the short and long term. Increasing bicycle use can **improve the environment** by reducing the impact on residents of pollution and noise, limiting greenhouse gases, and improving the quality of public spaces; **Reduce congestion** by shifting short trips (the majority of trips in cities) out of cars. This will also make cities more accessible for public transport, walking, essential car travel, emergency services, and deliveries; **Save lives** by creating safer conditions for bicyclists and as a direct consequence improve the safety of all other road users. Research shows that increasing the number of bicyclists on the street improves bicycle safety; **Increase opportunities** for residents of all ages to participate socially and economically in the community, regardless of income or ability. Greater choice of travel modes also increases independence, especially among seniors and children; **Boost the economy** by creating a community that is an attractive destination for new residents, tourists and businesses; **Enhance recreational opportunities**, especially for children, and further contribute to the quality of life in the community; **Save city funds** by increasing the efficient use of public space, reducing the need for costly new road infrastructure, preventing crashes, improving the health of the community, and increasing the use of public transport; **Enhance public safety and security** by increasing the number of "eyes on the street" and providing more options for movement in the event of emergencies, natural disasters, and major public events; **Improve the health and well being** of the population by promoting routine physical activity.

The key measures Kettering should take to improve cycling in the community are:

- Expanding the bicycle and pedestrian manager's time focused on bike projects would help in scaling up your BFC efforts. Current work of the BPAC and TDM staff could be complemented by a staff person devoted to acquiring bike/ ped grants and making the community bicycle-friendly. See this report on the importance of Bicycle & Pedestrian program staff. http://www.bikeleague.org/resources/reports/pdfs/why_bike_ped_staff_april_2010.pdf
- Continue to expand the bike network and increase network connectivity through the use of bike lanes, bike tracks, shared lane arrows, signed routes and bicycle cut-throughs. On-street improvements coupled with the expansion of the off-street system will continue to increase use and improve safety. These improvements will also increase the

effectiveness of encouragement efforts by providing a broader range of facility choices for users of various abilities and comfort levels.

- Offer bicycling skills classes, Traffic Skills 101 classes and commuter classes on a *frequent* basis or encourage a local bicycle advocacy group, club or shop to do so. You could invite a League Cycling Instructor (LCI) to conduct the classes. Ideally the instruction would incorporate a classroom portion as well as on-road training. For examples of educational materials visit: http://www.bikeleague.org/programs/education/.
- It is vital to make motorists and cyclists aware of their rights and responsibilities on the road. Continue to expand public education campaigns to promote the share the road message and the rights and responsibilities of all users, e.g. through public service announcements, share the road street signs or a dedicated bike page on community website. Consider taking advantage of your local bicycle advocates for content and strategy development and manpower. See a motorist education video at http://www.bikelib.org/safety-education/motorists/driver-education/. Also, see the excellent Look Campaign from New York City: http://www.nyc.gov/html/look/html/about/about_us_text.shtml.
- Expand encouragement efforts during National Bike Month in partnership with local bicycle advocacy groups. Have the Mayor and/or the City Council proclaim May as Bike Month. Host, sponsor and/or encourage bicycle-themed community events such as community rides, a bicycle festival or a commuter challenge. Ensure to widely advertise all bicycle-themed community events. You and the local bicycle community can increase your efforts on Bike to Work Day/Week, for example by offering breakfast for bike commuters or by having the mayor or council member lead a commuter convoy: http://www.bikeleague.org/programs/bikemonth/

Reviewers provided the following menu of recommendations to further promote bicycling:

Engineering

- Ensure that new and improved bicycle facilities conform to current best practices and guidelines such as the NACTO Urban Bikeway Design Guide, AASHTO Guide for the Development of Bicycle Facilities and your DOT's own guidelines. Consider innovative bicycle infrastructure such as bicycle tracks, contra-flow bike lanes or colorful bike lanes.
- Ensure that the standards for bike parking conform to APBP guidelines: http://www.apbp.org/resource/resmgr/publications/bicycle_parking_guidelines.pdf
- Provide ongoing training opportunities on accommodating bicyclists for engineering, planning staff, and law enforcement. Consider hosting a *Smart Cycling* course for city staff to better understand cyclists' needs, behavior, and their right to use city streets as well as multi-use paths for transportation. Your local bicycle advocacy group are a great resource for this kind of training.
- Set up training for city staff and area consultants on bicycle facility design and planning. Consider a membership to the Association of Pedestrian and Bicycle Professionals www.apbp.org for city Bicycle and Pedestrian Staff. Training opportunities and the listserv provided by this organization are excellent resources.
- Install way-finding signage at strategic locations around the community. Here are some best practices from the Washington, DC area Council of Governments: http://www.mwcog.org/uploads/committee-documents/t1dZW1k20070516090831.pdf
- Improve the coordination and communication between city departments and state paving and rehabilitation
 projects and facilities maintenance. Consider offering oversight to state DOT staff and contractors working within
 municipal boundaries. Ensure that facility design follows current best practice and that they are properly installed.

- Consider measuring the bicycle level of service (LOS) on community roads and at intersections, to be able to identify
 the most appropriate routes for inclusion in the community bicycle network, determine "weak links" in the
 network, prioritize sites needing improvement, and evaluate alternate treatments for improving bike-friendliness of
 a roadway or intersection: http://www.bikelib.org/bike-planning/bicycle-level-of-service/ (roads) and
 http://www.bicyclinginfo.org/library/details.cfm?id=4425 (intersections).
- Accommodate bicycles at intersections and multi-use path crossings to improve efficiency and safety of all road and path users. At intersections, time traffic lights for bicycle speeds and incorporate microwave cameras, loop detectors or bicycle signal heads, and include on-street pavement markings that indicate where cyclists should locate their bicycle to trigger the signal. Consider adding bike boxes to make bicyclists more visible to motorists. Consider incorporating raised multi-use path crossings or other high-visibility treatments on medium and high traffic roads. Ensure that both path and road users are clearly informed about who has the right-of-way at every crossing.

Long Term Goals:

- Since arterial and collector roads are the backbone of every transportation network, it is essential to increase the number of wide shoulders or bike lanes along these roads to allow bicyclists of all skill levels to reach their destinations quickly and safely.
- Increase the amount of secure bicycle parking at popular destinations such as transit stops, schools, recreation and entertainment facilities, retail and office clusters and churches throughout the community. Regulations that require bike parking, e.g. as part of new developments, can secure private funding for bike parking. More and more communities also ensure that multi-family residential developments provide secure and covered bike parking. See bicycle parking ordinances of Madison, Wisconsin and Santa Cruz, California.
- Allow access to suitable public lands for mountain bicyclists. Ensure to connect any off-road trails and facilities to the overall bicycle network. Look for ways to bridge the divide between the bike community and equestrian community by creating dedicated trails for each user group and multiuse trials where feasible.
- Develop a system of bicycle boulevards that creates an attractive, convenient, and comfortable cycling environment welcoming to cyclists of all ages and skill levels. See more on how to do it at http://www.ibpi.usp.pdx.edu/guidebook.php

Education

- Ensure that bicycle-safety education is a routine part of public education and that schools and the surrounding neighborhoods are particularly safe and convenient for biking. Work with your Bicycle Advisory Committee and local bicycle advocates to develop and implement Safe Routes to School programs that emphasizes bicycling for high schools. Strongly encourage all schools to participate. In Arlington County, Virginia, Department of Public Works, Police and school officials assessed every school regarding its accessibility by bicycle. A list of problems was developed and measures were identified. Short-term projects such as painting crosswalks were implemented immediately, while larger construction projects are on-going. Funding is available through the federal transportation bill SAFETEA-LU, among several other sources at both the federal and state levels. See www.saferoutesinfo.org for more information.
- Improve the reach of the community's bicycle safety campaigns. Use valuable information from the League's Ride Better Tips in your outreach education and encouragement efforts. See the Ride Better Tips pages at http://www.bikeleague.org/resources/better/index.php, PSA's http://www.bikeleague.org/programs/bikemonth/psas.php and the downloadable Bicycle Safety Tips for Adults video at http://www.bikeleague.org/programs/education/shortversion.wmv. Again, consider taking advantage of your local bicycle advocates for content and strategy development and manpower.

- Add bicycling and motorist education messages to local routine activities such as drivers licensing and testing, or include inserts in utility bills.
- Start a bicyclist and motorist ticket diversion program. Road users given citation are offered an opportunity to waive fees for violations by attending a bicycling education course. This should include a classroom and on-road component. See what Pima County has done: http://bikeped.pima.gov/Safety%20(pdfs)/April%20-%20May%202011%20Bicycle%20Diversion%20Class%20(No%20Locations).pdf
- Education on bicycling is not only important for bicyclists but for all road users including motorists. Start a motorist education programs for professional drivers such as bus and taxi drivers in the city. See what San Francisco has done http://www.sfbike.org/?drivertraining Classes can be offered by League Cycling Instructors or local bicycle advocates and material is available through the League of American Bicyclists.
- Continue to improve bicycling education opportunities for children and adults. The essential *Smart Cycling* curriculum can be integrated into motor vehicle violation diversion programs, Safe Routes to School, as well as motorist education classes for city and private sector employees.
- Team with a local advocacy group, bicycle shop, or League Cycling Instructor to offer regular public maintenance classes to residents at public parks, libraries, community centers and in conjunction with city events. A short tutorial on how to change a flat tire can empower a person to ride their bike more often. You can find local instructors and bike shops here: https://members.bikeleague.org/members_online/members/findit.asp

Encouragement

- Promote, host, sponsor and/or encourage a variety of bicycle-themed, fun and family-friendly community events year-round, such as a bike movie festival, a 4th of July bike parade, an "increase-your-appetite" Thanksgiving community ride, a dress-like-Santa community ride before Christmas, a kids triathlon, a bicycle fashion show (fashionable alternatives to lycra), a Halloween bike decoration competition, a bike to the arts event, etc.
- Work closely with local bicycle advocacy groups, bike clubs, bike shops, bike teams and schools. Provide appropriate safety measures such as road closures or police escorts.
- Encourage local businesses to promote cycling to the workplace and to seek recognition through the *Bicycle Friendly Business* program. Businesses will profit from a healthier, happier and more productive workforce while the
 community would potentially profit from some bicycle-active businesses as well: increasing the bicycle mode share,
 less commuter traffic, better air quality, public bike parking in prime locations provided by businesses, new and
 powerful partners in advocating for bike infrastructure and programs on the local, state and federal level, and public
 bike events, skills and maintenance classes hosted or sponsored by businesses. The city should be the model
 employer for the rest of the community. For more information about the free program please visit
 http://www.bikeleague.org/programs/bicyclefriendlyamerica/bicyclefriendlybusiness/.
- Consider passing an ordinance or local code that would require larger employers to provide bicycle parking, shower facilities, and other end-of-trip amenities.
- Encourage local institutions of higher education to promote cycling and to seek recognition through the Bicycle Friendly University program. College and university campuses are unique environments for their high density, stimulating atmosphere and defined boundaries. These factors make them ideal environments to incorporate bikes. Many colleges and universities have built upon these good conditions and embraced the enthusiasm for more bicycle-friendly campuses by incorporating bike share programs, bike co-ops, clubs, bicycling education classes and policies to promote bicycling as a preferred means of transportation. The community could potentially profit as well: Communities near a BFU such as Stanford or University of California at Davis have a very high number of regular bicyclists (as many students bike to campus, shops and restaurants), less congestion around campus, safer

streets and university-hosted public bicycle events, programs and classes." See what Stanford University is doing for cyclists: <u>http://www.bikeleague.org/programs/bicyclefriendlyamerica/communities/bfc_stanford_university.php</u>

- Actively involve the local bicycle community in community planning efforts, policy development and public outreach.
- Set up and promote bicycle-themed community celebrations and/or rides each time the community completes a new bicycle related project. This is a great way to show off the city's good efforts and introduces new users to the improvement.
- Consider offering a 'Ciclovia' or 'Summer Streets' type event, closing off a major corridor to auto traffic and offering the space to cyclists, pedestrians and group exercise events. <u>http://cicloviarecreativa.uniandes.edu.co/english/index.html</u>
- Consider partnering with a local bicycle advocacy group or bike club to launch a bike buddy or bicyclist mentorship
 program for inexperienced riders. A bike mentorship program that teams experienced cyclists with newcomers is a
 great way to encourage and educate novice commuters. See what Spokane, Wash. and Charlotte, N.C. are doing
 http://groups.google.com/group/bikementor, http://www.spokanebicycleclub.org/bikebuddy.htm
- Consider creating a Bicycle Ambassador program like Chicago's: http://www.bicyclingambassadors.org/
- Ensure that there is a place for visitors and community members to rent bicycles.
- Implement a mechanism that ensures that facilities, programs and encouragement efforts are implemented in traditionally underserved communities.

Long Term Goals

- Develop a series of short (2-5 mi.) (themed) loop rides around the community and provide appropriate way-finding signage. Integrate these rides into local bike maps.
- Recreational bicycling can be promoted through facilities and programs like mountain bike parks, velodromes, cyclocross course or similar bicycle amenities. Ensure that the facilities are accessible by bicycle, so that there is no need to drive to ride.

Enforcement

- Appoint a law-enforcement point person to interact with cyclists.
- Actively facilitate stronger connections between bicycle advocates, the wider bicycling community and law enforcement. Ask police officers to use targeted information and enforcement to encourage motorists *and* cyclists to share the road. This could be in the form of a brochure or tip card explaining each user's rights and responsibilities. Have information material available in Spanish, if applicable. Also increase the number of police officers patrolling multi-use paths *and* streets on bike, as it gives officers a better understanding of the conditions for cyclists and keeps secluded multi-use paths safe.
- Enforcement practices could also include positive enforcement ticketing. Police officers could team up with local stores to reward safe cycling practices by handing out gift certificates to cyclists who are "caught" following the law. See what Tewksbury, MA is doing: http://www.wickedlocal.com/tewksbury/news/lifestyle/x1837747400/Tewksbury-police-reward-young-cyclists-forwearing-their-helmets#axzz1WdjHHfMo

• Pass laws or ordinances that protect cyclists, e.g. implement specific penalties for motorists for failing to yield to a cyclist when turning, make it illegal to park or drive in a bike lane (intersections excepted), implement penalties for motor vehicle users that 'door' cyclists and ban cell phone use while driving.

Evaluation/Planning

Low hanging fruit and fast results:

- Regularly conduct research on bicycle usage beyond the U.S. Census' Journey to Work report to more efficiently distribute resources according to demand. Conduct yearly counts using automated and manual counters in partnership with advocacy organizations. We also strongly encourage you to participate in the National Bicycle and Pedestrian Documentation Project: http://bikepeddocumentation.org/.
- Expand efforts to evaluate bicycle crash statistics and produce a specific plan to reduce the number of crashes in the community. Available tools include *Intersection Magic:* http://www.pdmagic.com/im/and PBCAT. See the report *Bicyclist Fatalities and Serious Injuries in New York City 1996-2005*
- Consider implementing a trip reduction program/ordinance. See good examples at http://bikepeddocumentation.org/ and http://www.portlandonline.com/transportation/index.cfm?c=43801
- Consider conducting an economic impact study on bicycling in your community. See what Portland, OR has done: <u>http://www.altaplanning.com/App_Content/files/fp_docs/2008%20Portland%20Bicycle-</u> <u>Related%20Economy%20Report.pdf</u>

Long Term Goals

- Develop a comprehensive bike plan in close collaboration with the community to ensure public involvement, information and ownership. Focus on developing/completing a seamless cycling network that emphasizes and creates short distances between residential areas and popular destinations such as schools, commercial areas, recreational facilities, cultural resources and transit stops. Complement infrastructure planning with encouragement, education, and enforcement programs to increase usage. Develop a clear vision statement and set ambitious but attainable targets. The overarching goal should be to increase the percentage of trips made by bicycle in the community.
- Ensure that there is dedicated funding for the implementation of the bicycle master plan.
- Integrate the implementation of the bike plan into the master plan, all land use plans, zoning ordinances and larger development projects.
- Allow and encourage a mix of uses, a well-connected street network and compact development patterns throughout the community to shorten the distances people need to bike.
- Work with the mountain biking community to develop a plan for off-road access and increase opportunities for single-track riding within the city.

Appendix III, IV & V

Map of Existing and Recommended Sidewalk Connections

Map of Recommended Signed Bike Routes

Map of Bike Route Rankings

Appendix VI

Sample Spreadsheet of Community-wide bike rack inventory

Park/Location	<u>Bike Rack</u>	Location	<u>Date</u>	<u>Time</u>
Rec Center	15 loop	39D 41 44"N, 84D 06' 52"W	11/15/12	12:17 P M
Lathrem Center	3 loop	39D 41 42'N, 84D 06' 50"W	11/15/12	12:22 P M
Water Park	10 loop	39D 41 39'N, 84D 06' 52"W	11/15/12	12:24 P M
Pugh Ball fields	None			
Blackhawk	1loop	39D 41 59'N, 84D 06' 25"W	11/15/12	12:07 P M
Pondview	None			
Berwin	None			
Delco	None			
Ernst	None			
Glaser	None			
Indian Riffle	None			
Irelan	1loop	39D 40' 48"'N, 84D 08' 31"W	11/20/12	2:20 P M
	1rack	39D 40' 47"'N, 84D 08' 41"W	11/20/12	2:29 P M
J.F. Kennedy	6 loop	39D 40' 16'N, 84D 07' 40"W	11/15/12	1:03 P M
Kantner	None			
Civic Commons	None			
Oak Creek	None			
Oak	None			
Pasadena Green Space	None			
Southdale	None			
Southern Hills	1loop	39D 43' 15'N, 84D 11' 46"W	11/21/12	1:42 P M
State Farm	None			
Tait	None			
Van Buren	None			
Walther	1loop	39D 40' 58'N, 84D 10' 49"W	11/21/12	1:13 P M
Wenzler	None			
<u>Schools</u>				
Fairmont High				
Kettering M iddle	5 racks	39D 41 40'N, 84D 6' 42"W	11/15/12	2:13 P M
		39D 41 35'N, 84D 6' 34"W	01/21/13	12:11 P M
		39D 41 33'N, 84D 6' 42"W	01/21/13	12:14 P M
		39D 41 35'N, 84D 6' 44"W	01/21/13	12:15 P M
		39D 41 35'N, 84D 6' 44"W	01/21/13	12:15 P M
Van Buren Middle	1rack	39D 41' 40'N, 84D 9' 51''W	01/21/13	1:02 P M
Beavertown Elementary	1			
Greenmont Elementary	3 racks	39D 43' 13'N, 84D 7' 47"W	01/21/13	11:58 A M
Indian Riffle Elementary	10 racks	39D 41' 33'N, 84D 6' 30"W	01/21/13	12:19 P M
John F Kennedy Elemer	4 racks	39D 40' 18'N, 84D 07' 51"W	01/21/13	12:38 P M
		39D 40' 15'N, 84D 07' 47"W	01/21/13	12:40 P M

Community-wide bike rack inventory – Sample Photos

