

2013 Newark Bicycle Plan

Appendix A

Public Outreach and Comments



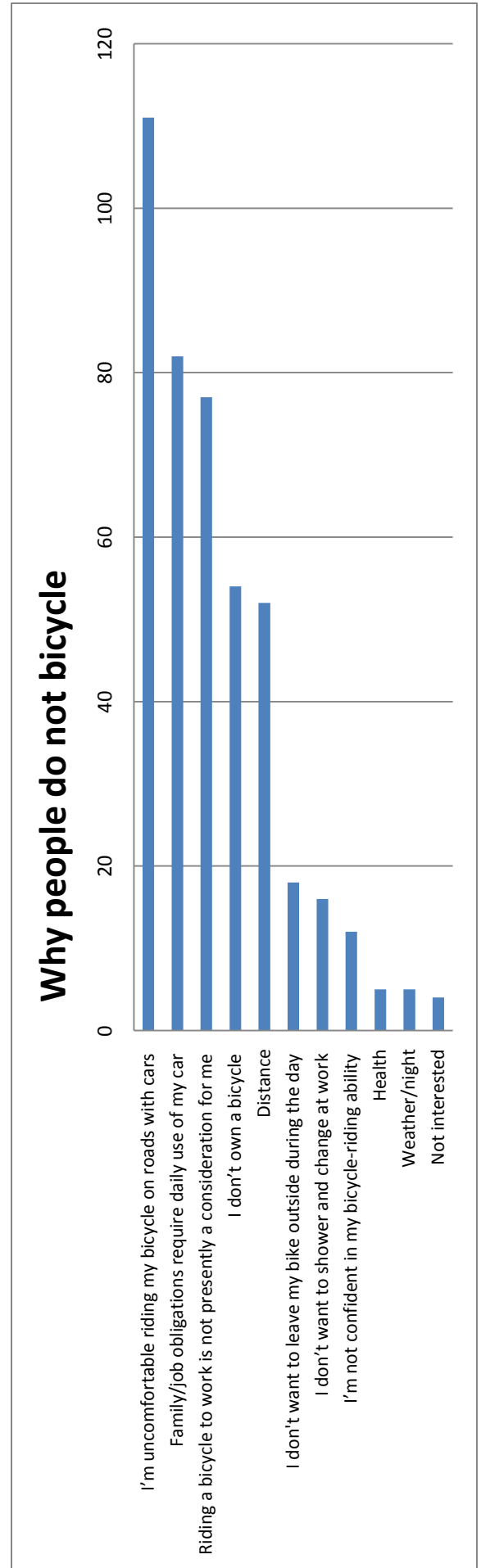
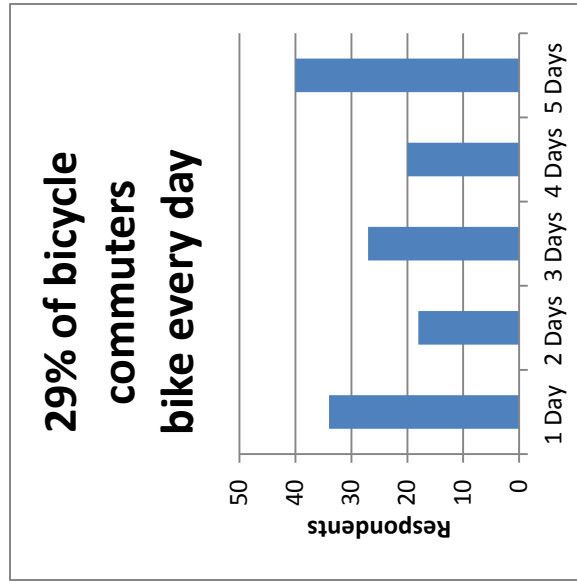
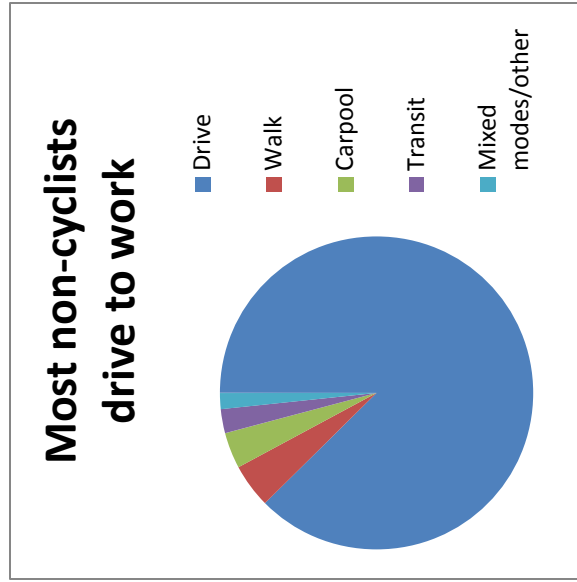
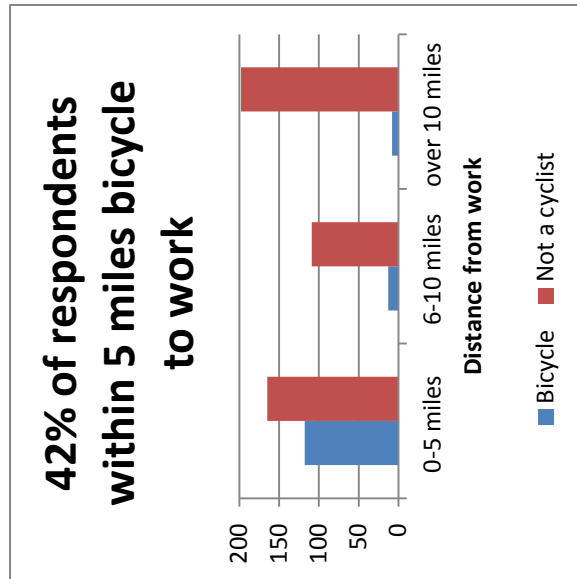
Word Cloud of responses from
University of Delaware
Commute Survey

Note that the need for community engagement in the planning process does not end with the adoption of the 2013 Newark Bicycle Plan. Continued community input is needed to review and monitor implementation of the plan.

The Newark Bicycle Committee would like your continued input. Learn more about the Newark Bicycle Committee at www.wilmapco.org/BikeNewark.

UD Bike Commuting Survey

The UD Bike Commuting Survey was conducted between November 17, 2011 and January 14, 2012 with 613 responses received. Survey was conducted through a partnership between the University of Delaware Wellness Program and the Newark Bicycle Committee to gauge current commuting patterns and gain a better understanding of why people bicycle to campus or uses other forms of transportation.



Example Written Comments

I don't ride my bicycle to work because:

- There are no showers at work.
- Roads are unsafe along every feasible route, and shower/parking facilities are inadequate at U.D.
- bicycle not in working order . . . limited funds to get it fixed.
- My bike was stolen on campus
- the clothing I would need to wear in order to ride a bike are not consistent with the "image" expected by the current administration
- There are not enough bicycle racks near the places I work and it would be nice if they were covered.
- Use of changing facilities in our building has been discouraged. We cannot leave a towel to dry in the restroom and have been denied a request to install lockers.
- I'd love to, but it's too hard to get cleaned up afterwards with no shower in the building. The closest one (that I'm aware of) is a 10 minute walk and it's tough to find THAT MUCH time.
- There is no place available to shower/change
- Would consider riding if I could shower/change fairly conveniently
- theft and damage high

What factors would help or encourage you to ride your bicycle to work more / often?

- A less expensive commuter bike.
- I might need a place to shower and change, if I came in via bike.
- I'd also want a place to store my bike on rainy days.
- Business casual attire permitted for those riding to work (an incentive);
- More centrally located bike storage areas (interior/secure areas for bikes);
- More clearly designated & safe bike paths/routes in/around campus i.e. build upon the Hall trail concept but have the bike path trail traverse the campus from North to South
- A free lot where I could park and ride in
- permission to use the shower in my building with flexible time to make it easier
- bike paths in and around campus-that don't require me to ride on the Green (which is terrible-shouldn't be able to ride on the Green-too much pedestrian traffic)
- A place to store my bike in my office- would not leave my bike outside due to high theft rate
- A pleasant environment, rather than having to ride up South College Avenue south of the tracks.
- a safe storage for my bicycle, it would have to be locked and secure.
- Bicycles left locked in open areas are in too high risk of being stolen.
- nicer shower/changing area at work.
- The University giving those who ride a bike to work, a safe bicycle lock that is recommended.
- More bicycle racks - sometimes I have to lock my bike to trees. Ability to put bicycles on all shuttle buses as well - to be able to cycle to bus stops.
- Covered areas in the parking garages for bicycles in bad weather.
- More bike lanes getting to and around campus. A place to keep my bike in inclement weather.
- Financial incentives to ride bike.
- More bike racks in places that need them: Outside SPL, near CCM, CLB also. Academy street is in bad shape for bikers. The bike lane always has standing water especially when it has rained within a few days, in some places the bike lane lines have faded, and in other places the rode is crumbling in the bike lane.
- more convenient and more secure (cameras?) bike racks
- More covered bike parking.
- Better signage on roads to encourage bike-friendly behavior from drivers.
- facilities which would easily lend themselves to changing; more places for bike storage, bigger bike lanes.
- I also know some offices (CHS in Willard Hall) does not allow employees or students to store their bicycles onsite.
- More places to lock bike and more covered shelters to lock bikes under.
- more places to shower and change clothes at UD, and more direct benefits to employees who ride bikes versus drive cars.
- More security around bicycle storage. It would also help if the police caught those responsible for bike thefts. Right now, their attitude is

What factors would help or encourage you to ride your bicycle to work more / often?

- Ability to get a cold-season parking pass (Oct-Mar) and still get a few parking passes for doctor appts and such.
- more available bike racks, space to park for free and bike in.
- Ability to save dollars on parking
- dry and safe place to park my bike
- facilities to shower/change near office.
- An inexpensive parking pass that would allow me to park on campus when it rains or snows and I cannot ride my bike to UD. The disincentive to bicycle right now is if I park my car in the Perkins parking garage it costs over \$12 and that eats up the savings of one week bicycling to campus. So in the end the incentive is to purchase a Gold pass and drive into work every day instead on bicycling. Does not make sense
- Better bike parking outside my building, with cover
- provision of showers.
- Better bike parking.
- Better bus system. Bike lockers at satellite bus stops or easy-to-use racks for transporting bike on bus.
- Better salary . . .
- Better security and parking options for bikes
- bicycle racks! DBI just removed their racks making it impossible to bike there and store a bike, and they don't allow bikes inside.
- Bike friendly lanes on campus, especially navigating Laird off of New London Road. I would also like better places to lock up the bikes. I see so many bikes locked incorrectly on the poles provided.
- Bike racks near ALL campus buildings (there aren't any near CCM). Better shelters for current bike racks.
- Better (i.e. continuous!) bike lanes on College Ave at least from Park to Main
- better bike racks, ideally bike lockers to keep the bike more secure and dry during downpours and allow for storing extra stuff like helmets and saddle bags.
- having a covered place to store my bike on rainy days.
- Children/ Work necessity to go to meetings. If UD had a fleet of company cars, then I could probably bike to work.
- Computers (in addition to digital projectors) in all classrooms so I wouldn't have to bring mine in to use Sakai
- connect the James Hall trail through to Del Tech Park --- so as not to have to cut through the grass for about 20 feet behind the BioTech building
- basically, "Tough luck. If the thief ever returns your bike, it would be nice if it was registered with us." I'm not going to risk losing another \$600 bicycle... that's nearly 1.5 years of a central permit.
- Options for faculty to lock their bikes inside the buildings or elsewhere so they don't get damaged by students on the bike racks outside.
- Pay me. Have more flexible start work hours.
- Poor storage facilities--racks are broken and insecure.
- better security for bikes on campus
- Covered bike areas on campus.
- Secure covered place to leave my bike, guarantee of immediate transportation home in the event of a family need, shorter work day (don't want to ride home in the dark)
- Sheltered bike racks
- shower/changing facilities open to staff throughout campus
- Showers at work
- Signage that says to car drivers "Watch out for bicyclers" and a true bike lane that is clearly marked as such
- Some kind of flex parking permit where it's not all or nothing (buy an annual permit or the headache of a day pass if I need to drive). Seriously if I could get a half price park permit for half of the days I would bike commute the rest
- Some kind of give back program or getting something in return
- lease don't pile snow in the areas where bikes park. Though I may not bike on the day it snows, the piles linger into the good bike days. Thanks.
- We need covered bike parking
- Weather is the dominant factor, but incentives to ride would be nice.
- Well, I already ride in everyday. I think more bike racks outside buildings would help--for example, there really should be double the number outside of the Little Bob. UD should work with the City of Newark on getting bike racks put on Main Street. These are not an expensive things to do and will increase the likelihood of more people biking. Also, make sure bike lanes are well-painted and maintained on campus roads.
- Would be nice to have wellness incentives.
- would like to see some type of reduction in parking fees for days i bike to work vs drive to work.
- indoor bike storage during the day would be a definite plus.
- If I mostly bike except during inclement weather, I don't want to pay full price for a permit I'm only going to use rarely. A CHEAP "Cyclist" permit

What factors would help or encourage you to ride your bicycle to work more / often?

- consider the municipal bikes that are found in Paris to get around campus - and a helmet "gift" to encourage safe riding
- Covered bicycle storage areas near my office (413 Academy Street), discounts on parking passes for partial bicycle commuters.
- Covered bike stands at DuPont Hall!
- covered place to lock my bike, more bike trails so I wouldn't have to ride on major roads, safer way to cross Elkton Road
- Create a safe bike lanes in Newark and on campus.
- Designated (wide) bike lanes and shower facilities at work. Visitor's Center.
- During winter the snow if often carelessly piled up blocking the bicycle spaces. It stays in frozen mounds for weeks blocking the parking spaces. If UD really wants to encourage bicycle riding- you need to start treating the bicycle parking areas the same way you treat the car lots- by clearing them. This has been a huge oversight year after year.
- Fewer stolen bikes on campus!!
- Financial incentives
- Free parking passes so that I could bike (or walk) normally but bring a car on the occasions when I need it.
- Getting a bike, having secure places to park/lock it during the day
- Have heard of other companies/organizations providing incentive programs with different levels - i.e. cycling X amount of miles to/from work earns you prize/recognition Y. Could be fun idea :)
- I don't want to leave my (expensive) bike out in the open for anyone to take a look at, and there's no where in my office to store it.
- I could be encouraged to park on south campus and ride my bike up, if Newark were more bike-friendly.
- I do ride my bike around campus to meetings. I would like to know more about the bicycle rules/laws in Newark. I have heard various things--that it's okay to ride on the sidewalk except Main St; that you can't ride on any sidewalks...It would help to know what's really true.
- I don't own a bike, but would be interested in renting one (Paris, France has a great model for this). I also am nervous about riding a bike in the middle of Newark, as I had two friends that were hit by cars while riding their bikes on campus. If there was a place that I could park off campus, (for free or cheaper than the parking garage), rent a bike, and be able to safely ride into campus, I'd be very interested in that.
- If the state and UD focused on bike safety, I would commute more
- I might consider riding a bike to work if showers/locker room facilities that allows 30 or so daily passes per year to be used during freezing/inclement weather would go a long way toward encouraging cycling, I think. Or, a "cyclist" hang tag that is valid only during inclement/freezing weather.
- I will bike around campus if there are indoor parking rooms for bicycles
- I would like to have a bike to take from train to office in Newark-bike hold/safe places to lock bike directly on the path from the train station down south college to my office in Alison Hall West, , bike lanes,
- I would like to see UD's Pre-Tax Mass Transit and Parking Programs make allowances for expenses related to bicycle commuting (bicycle purchase and maintenance costs).
- I would love to ride my bike more often! More places to lock my bike at various buildings and safer streets to ride my bike. Riding on campus (specifically on the Green) take some serious skill and talent--it is overly crowded.
- If free bicycles were available for employees in the blue lot to borrow and ride into campus.
- If I lived closer, I would love to ride a bike. I walk to/from blue lot to my building in nice weather. Riding a bike to/from blue lot would be great exercise and short amount of time. I don't want to bring one from home and worry about where to keep it safe.
- The only place on campus to take a shower is across campus from my office, so otherwise I'm stuck with 'bird baths' which is a bit inconvenient but not too much to cause a stink about....
- improved locker and changing facilities at work, safer and preferably covered bicycle parking facilities on campus such as set aside areas in the parking garages.
- Indoor bike storage. On gray days I often drive because there is no place to keep my bike dry.
- bicycle roadside assistance for flats and bike problems with a quick ride to work
- lockers at newark train station to save bike from weather damage
- Lockers to store a change of clothing and helmet.
- Make showers more accessible in more buildings
- more bicycle lanes. more bicycle racks. covered bicycle racks. changing the attitude towards bicycles in this community.

HELP SHAPE THE FUTURE OF BICYCLING IN NEWARK

Share your ideas for a more bicycle friendly community

December 6, 4–7 p.m., Newark Municipal Building

The City of Newark, WILMAPCO and the Newark Bicycle Committee are developing a **Newark Bicycle Plan** and need your ideas!

We are developing the Plan to make bicycling a more safe and convenient choice for transportation and recreation.

Tell us:

- What keeps you from bicycling, or riding more often?
- How would you like the roads to better accommodate bicycling?
- Where would you like more bicycle racks?
- Where do you like to ride, or find it challenging to ride?
- What programs & policies can encourage safe cycling and driving?

For more information visit www.wilmapco.org/bikenewark or call **302.737.6205**



WELCOME!

Comprehensive Development Plan
Workshop: *Help Shape the Future of
Bicycling in Newark*

Hosted by the Newark Bicycle Committee, City of Newark and WILMAPCO

Purpose of Workshop

- We are developing the **Newark Bicycle Plan** to make bicycling a more safe and convenient choice for transportation and recreation. Recommendations will include bicycle routes and other infrastructure, bicycle education and safety program, programs to encourage cycling, and maintenance programs.
- Workshop is seeking community feedback on recommended projects and programs, and strengths, weaknesses, opportunities and threats as they relate to bicycling in Newark.
- Plan will become part of the updated **Comprehensive Development Plan**, scheduled for completion in September 2013.

Past Planning

- Newark has a long history of planning for bicycling. Past Newark Bicycle Plans were completed in 1973, 1996 and 2002.
- Highlights of accomplishments since 2002 include completed the Hall and Pomeroy Trails, installed bike racks on Main Street, implemented bicycle safety checkpoint program, Newark Bike Project formed, bike racks added to most DART and University buses, and bike lanes improved on Elkton and Paper Mill roads.
- In 2010, Newark was designated a “Bronze” Bicycle Friendly Community through a process that provided feedback on what we are doing well, and areas for improvement.

While You're Here

- **Learn about draft recommendations.**
- **Talk with the planning team from the Newark Bicycle Committee, City of Newark and WILMAPCO.**
- **Share your ideas by commenting on displays, taking the “Sticker Surveys” and drawing on the maps.**
- **Fill out a Newark Bicycle Plan Community Survey.**

THANK YOU!

Bicycle Infrastructure and Innovations

Bicycle route types



Bike lane is defined as a portion of the road that has been designated by striping, signage, and pavement markings for the preferential or exclusive use of bicyclists. Bike lanes enable bicyclists to ride at their preferred speed without interference from prevailing traffic conditions and facilitate predictable behavior and movements between bicyclists and motorists.



Contra-flow bicycle lanes are bicycle lanes designed to allow bicycles to ride in the opposite direction of motor vehicle traffic. They convert a one-way traffic street into a two-way street: one direction for motor vehicles and bikes, and the other for bikes only.



Buffered bike lanes are conventional bicycle lanes paired with a designated buffer space separating the bicycle lane from the adjacent motor vehicle travel lane and/or parking lane.



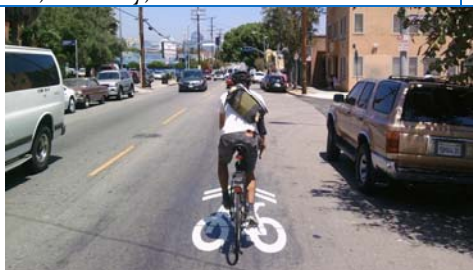
Colored pavement increases the visibility of the bicycle facility, identifies potential areas of conflict, and reinforces priority to bicyclists in conflict areas and in areas with pressure for illegal parking. Colored pavement can be used along the length of a bike route, or in priority areas i.e. bike box, driveway, or intersection.



Bicycle boulevards are local streets with low motorized traffic volumes and speeds, designated and designed to give bicycle travel priority. Bicycle Boulevards use signs, pavement markings, and traffic calming measures to discourage through trips by motor vehicles.



Cycle track is an exclusive bike facility that combines the user experience of a separated path with the on-street infrastructure of a conventional bike lane. A cycle track is physically separated from motor traffic and distinct from the sidewalk. Cycle tracks have different forms but all share common elements—they provide space that is intended to be exclusively or primarily used for bicycles, and are separated from motor vehicle travel lanes, parking lanes, and sidewalks. In situations where on-street parking is allowed cycle tracks are located to the curb-side of the parking (in contrast to bike lanes).



Shared Lane Markings or "sharrows" are road markings used to indicate a shared lane environment for bicycles and automobiles. Among other benefits shared lane markings reinforce the legitimacy of bicycle traffic on the street and recommend proper bicyclist positioning.



A **bicycle and pedestrian path** is separated from motorized vehicular traffic by an open space, barrier or curb. Paths may parallel the road or be within an independent right-of-way, such as on an abandoned railway or along a stream. Multi-use paths typically accommodate two-way travel and are open to pedestrians, bicyclists, in-line skaters, wheelchair users, joggers and other non-motorized users. They are typically surfaced in asphalt or concrete, but may have hard-packed/all-weather gravel or dirt surfaces. To safely accommodate a range of users, multi-use paths should be a minimum of 10' wide (but may be less in constrained conditions).

Intersections



A **bike box** is a designated area in front of the traffic lane stop bar at a signalized intersection that provides bicyclists with a safe and visible way to get ahead of queuing traffic during the red signal phase.



Intersection crossing markings indicate the intended path of bicyclists across intersections to guide bicyclists on a safe and direct path through intersections, including driveways and ramps. They provide a clear boundary between the paths of through bicyclists and either through or crossing motor vehicles in the adjacent lane.



A **bicycle signal** is typically used to provide guidance for bicyclists at intersections where they may have different needs from other road users (e.g., bicycle only movements, leading bicycle intervals).



Pathway crossings should include a variety of enhanced signage, pavement markings, lights etc., depending upon volume of pedestrian, bicycle and motor vehicle traffic at intersection

Other facilities



Bicycle parking should include both short-term outdoor bike racks for trips to shopping, dining and school and long-term secure parking at workplaces. Bike racks have been added along Main Street with the intent to place bike parking close to the entrances to key destinations.



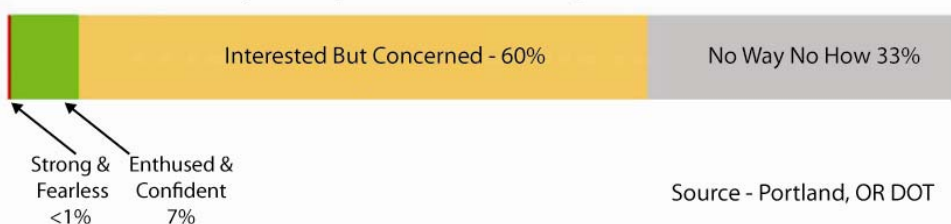
Coordination with transit allows for longer trips combining bus/train and bicycle, as well as the flexibility to bike one direction and take transit the other due to weather or time constraints. Coordination may

include expanding bike racks on buses all University and Unicity vehicles, adding bike storage to SEPTA vehicles, and publicizing the availability of lockers and racks at park and rides.



Bicycle **wayfinding** consists of signs and/or pavement markings to guide bicyclists to destinations along the preferred bicycle routes. In addition to destination directions, signs may include travel time and distance.

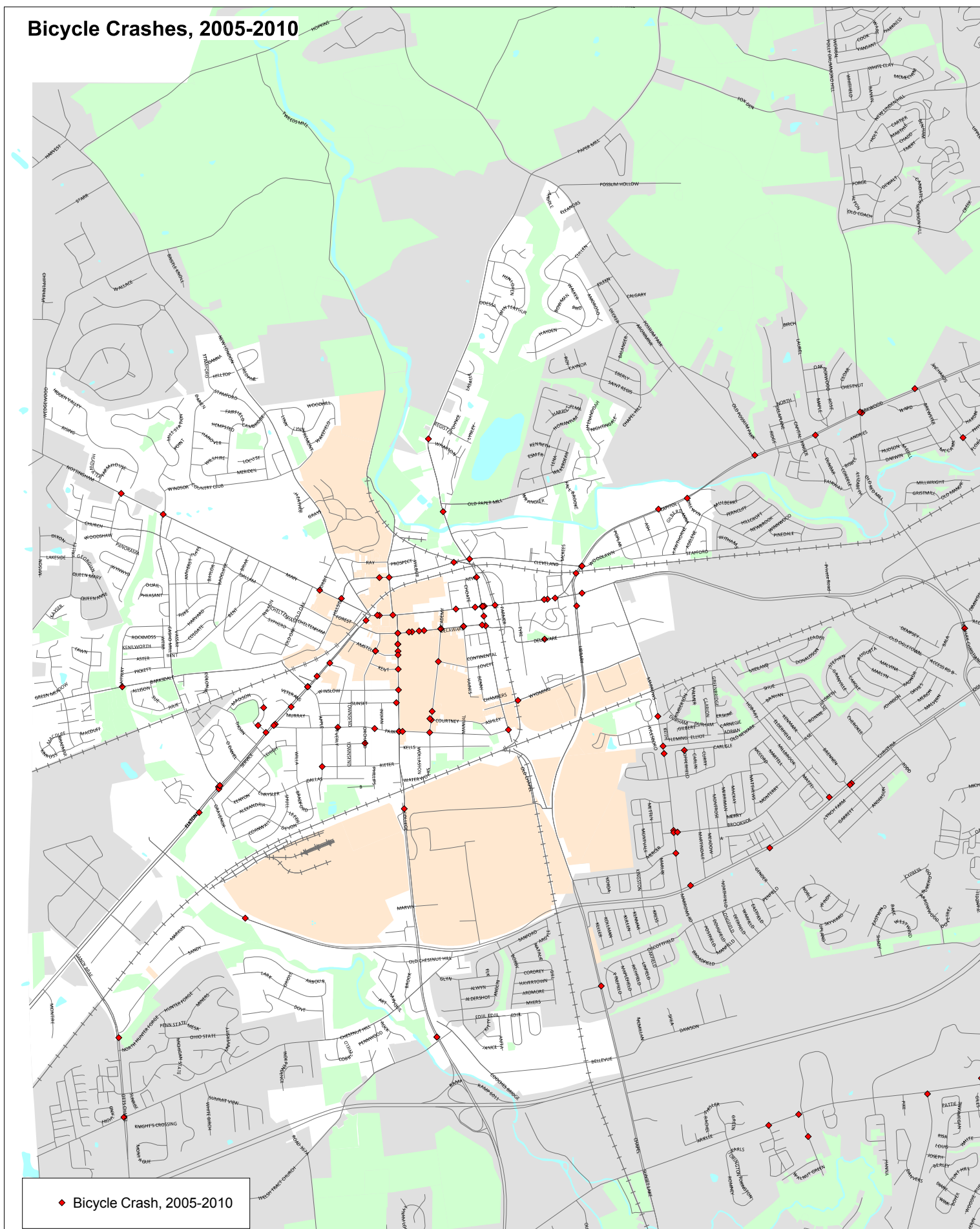
Four Types of Cyclists By Proportion of Population



Source - Portland, OR DOT

Our Challenge: Designing facilities that feel safe, comfortable and convenient to the 60% of people who would like to bike more but have concerns.

Bicycle Crashes, 2005-2010

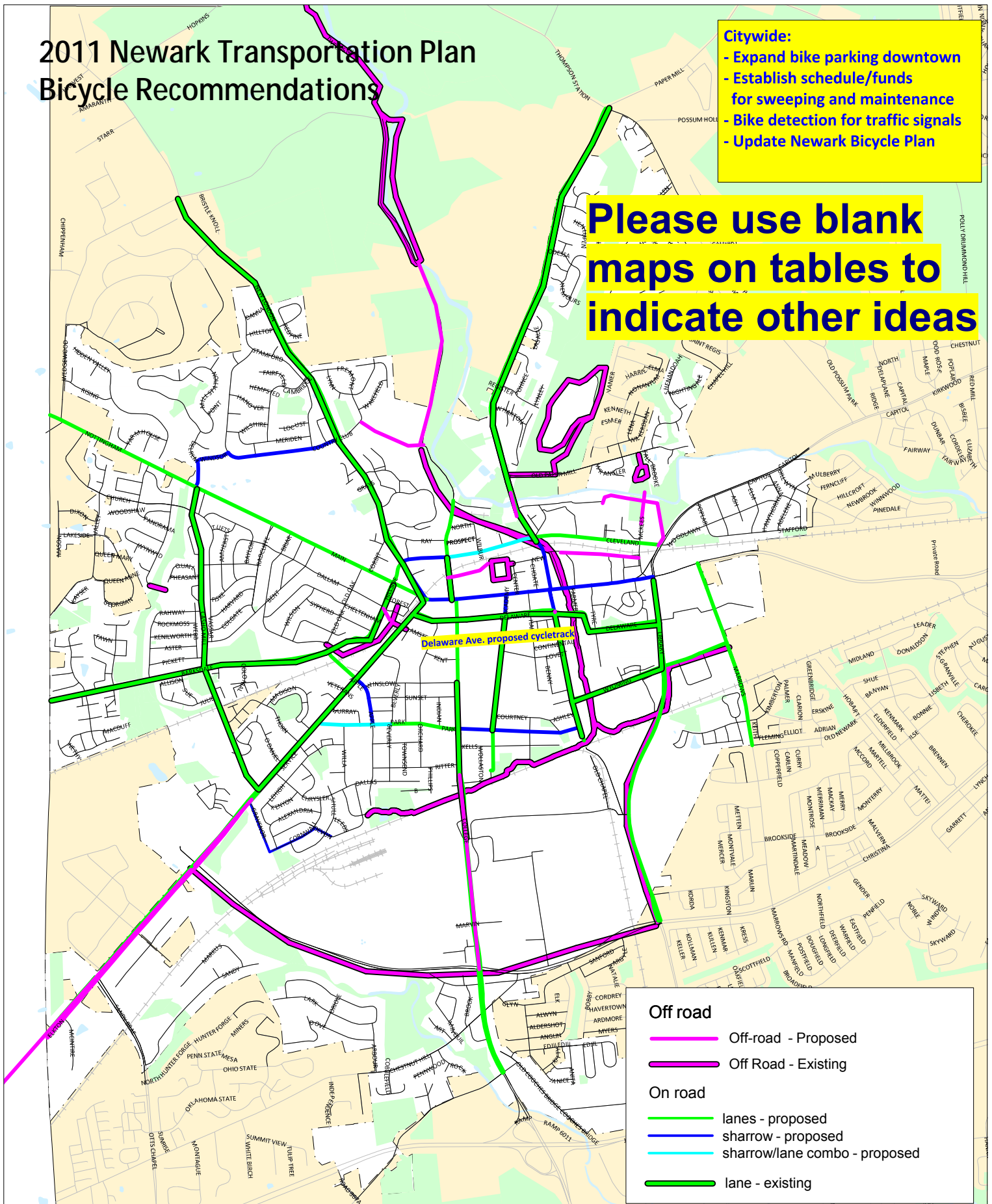


2011 Newark Transportation Plan Bicycle Recommendations

Citywide:

- Expand bike parking downtown
- Establish schedule/funds for sweeping and maintenance
- Bike detection for traffic signals
- Update Newark Bicycle Plan

Please use blank maps on tables to indicate other ideas

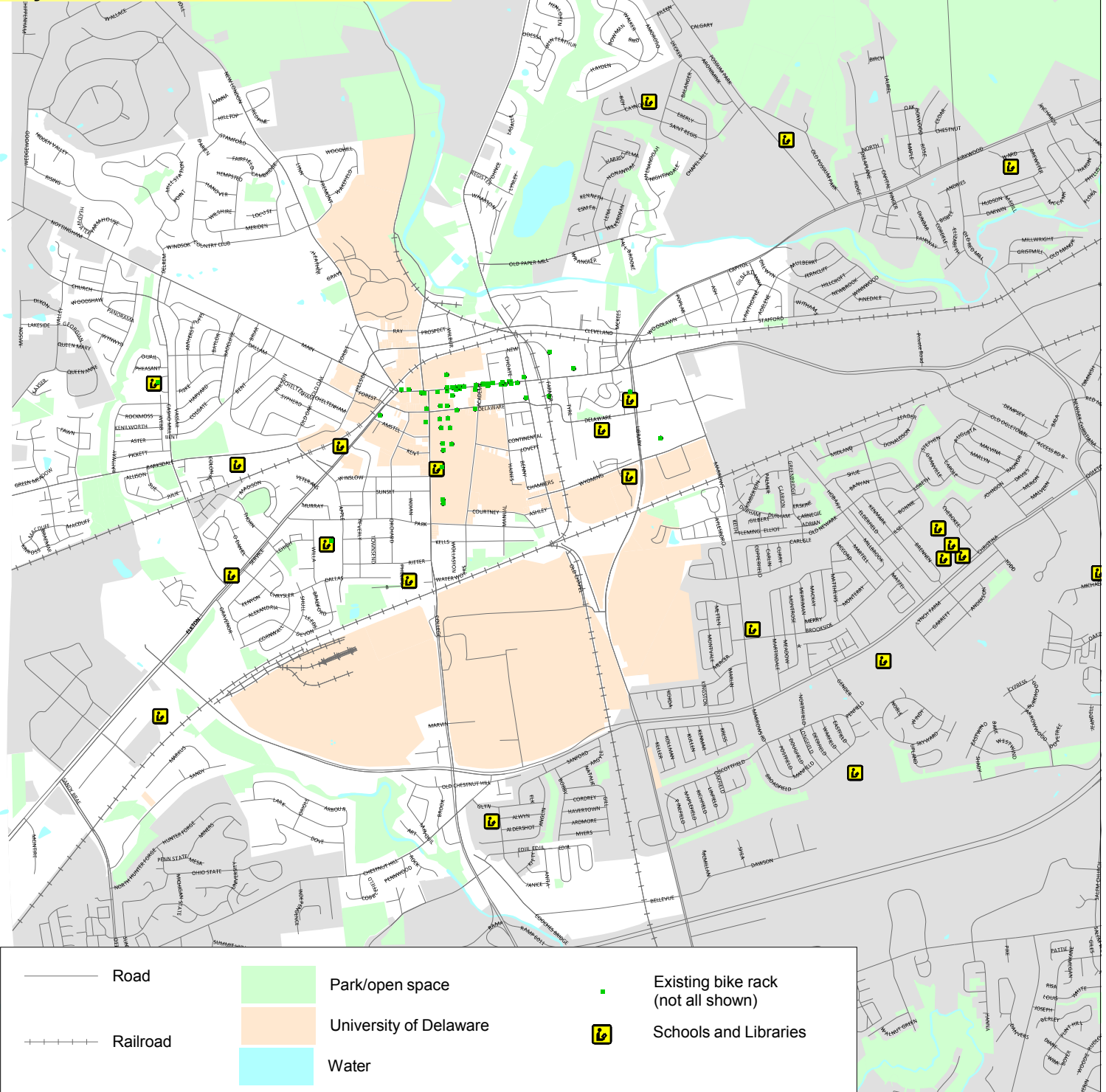


Use GREEN stickers/markers to show where would you like more BIKE RACKS?

Use RED stickers/markers to show CHALLENGING routes and intersections?

Use BLUE stickers/markers to show where SWEEPING/MAINTENANCE is needed?

Use YELLOW stickers/markers to show us your FAVORITE routes/destinations?



What are the **Qualities** that make Newark a Bicycle Friendly Community?

- Many stores are within biking distance (1)
- Lots of bike lanes and new trail
- Existing bike routes (2)
- Designated bike lanes on Del ave. and now Elkton Road (2)
- Many destinations accessible by bike (2)
- Hall Trail and Pomeroy Trail
- The increased consciousness and acceptance of motorists to bicyclers as a result of the large number of bicyclist on the city roads.
- UD off-street pathways and parking lots.
- Hall and Pomeroy ((3)
- Bike racks on Main Street.
- University of Delaware, students that bike. (2)
- Hall and Pomeroy, quiet low traffic neighborhoods.
- Not popular as cut through for E-W or N-S thru-traffic, mostly local drivers
- Not strict w/stop sign/red light “violations”

What are aspects that make Newark less Bicycle Friendly?

- Narrow streets with lots of cars (i.e.: Nottingham Rd., West Main Street) (1)
- Few bike racks (2)
- Construction projects that do not take cyclists into account specifically signage in the shoulder that blocks bicycles.
- Lest favorite intersection: Where James Hall (Pomeroy) trail crosses Cleveland Ave.
- Approach to Newark from Maryland – debris on shoulder and dangerous intersections @ Rt 4 and Otts Chapel.
- Lack of space on Main Street for safe bike travel. (1)
- Uneducated motorists, bicyclists and pedestrians (1)
- Speeding on Hall Trail
- Potential development of Country Club site – more congestion on 273 and 896.
- Chapel Street is difficult to bike narrow roadway. (1)
- Not Enough Bike Parking: Especially in Shopping Centers. (1)
- Leaf piles in bike lane. (1)

- Vehicle speed in general
- Cleveland Ave (1)
- Main Street lacks bike lane (2)
- UD needs safe indoor or covered parking so students will be willing to bring bikes
- \Aggressive drivers especially on Main Street. Drivers think bikes should be on sidewalk.
- Insufficient roadway lighting.
- Roadway construction, eg SR 2, SR 273, SR 72, Christina Parkway (1)
- No bicycle treatment at intersections (1)
- Road trash, gravel, potholes (1)

What are Opportunities to improve Bicycling in Newark?

- I like the proposed bike lane plans. (1)
- We need a bike lane on Main Street Take a look at U. Wisconsin at Madison, WI (2)
- The following features would be great:
 - Bike lanes as dedicated bike lanes (i.e. not turning into turning lanes!) – Physical separation might help keep cars out of bike lanes.
 - Bike lanes at key railroad crossing such as Apple Rd and Main Street
 - Bike lanes on popular biking roads like Park Place.
- A specific problem location is the Casho Mill underpass, especially for cyclists who are south bound and whose lane just runs into a guardrail. Northbound the bike lane is frequently blocked by cars extending the right-hand lane at the light all the way back to the underpass.
- Delaware Ave cycle track !! (2)
- Redevelopment of the Chrysler property w/ trails
- Extension of Hall trail/Pomeroy Trail off-road network – east and west
- Wayfinding Signage
- More Bike Parking
- Another specific suggestion is to connect the bridge across the Christina at the end of Timberline Drive to some path to the street (Casho Mill)
- East-West travel on Main Street – allow bikes on sidewalks E of Newark Shopping Center.
- Access to Redd Park and Reservoir w/o going up Papermill – ie cross Cleveland Ave and Creek
- Green paint bike lanes heavily trafficked intersections

- Lighting
- Connectivity bike lanes and trails
- Paving the path/ trail from Fremont Road to Creek Road (to provide access to the Pomeroy from residents in the NW portion of Newark – without riding on 896)
- Safely cross Cleveland/Chapel St Intersection – very intimidating intersection for the casual rider. (1)
- Extend lighting to end of Pomeroy Trail (North End)

What are **Threats** to improving Bicycling in Newark?

- Lack of funds and Agree
- Opposition from car dealers on Cleveland Ave Plans
- People throwing beer cans at bikers
- More development – too many cars
- Focus on vehicular traffic during road design (2)
- Available space is limited in existing corridors (1)
- General speeding by motorists on all streets – need to calm traffic on selected routes.
- Assumption that cars are and will be sole transportation. PRIORITY = AUTOS
- Continuing to encourage traffic flow for more cars moving faster.
- Businesses not perceiving bicycle traffic as adding to their business quality/value
- Bump-outs for pedestrians on Main Street – hard for bicyclists.
- No good bike lanes on Main Street or Cleveland Ave/ good in opposite direction on Del Ave.

Newark Bicycle Workshop: 12/06/2012

Results:

Programs to Encourage Bicycling		Vote for favorites
Promoting more bicycling	# of Votes	
Promote Bike to Work Day	5	
Community events such as charity bike rides, costume rides, bike fairs and bicycle rodeos.	0	
Workplace promotion of bike commuting such as contests, rewards to bike commuters, and provision for lockers, bike parking and showers	5	
Public awareness campaign emphasizing the individual and community benefits of using a bicycle for daily trips., i.e. a city-wide contest for most miles bicycled, oldest bicyclist, farthest commuter, etc.	1	
Offer easy social rides and family fun rides	2	
Promote existing facilities and programs	3	
Bike share program	2	
Business promotions through Downtown Newark Partnership	1	
Changes to development code for bicycle parking and facilities	3	
Covered/indoor bicycle parking for commuters	0	
Others listed: Need covered bike parking area at the university and bike racks at the Senior Center. Design safety enhancement for major approaches into town from major residential centers (e.g. 72,896,,2		

Maintenance Plan	
Street sweeping priority to bike routes	4
Publicize road maintenance reporting	1
Pothole repair priority to bike routes	2
Include improved bicycle facilities when paving and improving roadways	10

How did you Learn about today's workshop?	
Newspaper	0
Radio	0
City email	2
City website	2
Newark Bike Project	0
Bike Delaware	1
WILMAPCO Newsletter	5
University of Delaware	4
Other: Newark Bicycle Committee	1

Bicycle Educating and Safety Programs

Vote for
favorites

Child bicyclists	# of Votes
Safe Routes to School	5
Safety town	0
Bicycle Rodeos	1
Helmet distribution program	0
Recycle a bike program - kids fix up bikes and keep them or Earn-a-bike program through community service	3
Bicycle trips for kids program	1
Educate parent groups and adult groups that supervised children, i.e. PTA	2
Other: Recycle bikes for older folks too - not just kids	

Adult Bicyclists	
Bicycle Safety Checkpoints	0
Public awareness campaign on responsible behavior directed to bicyclists and drivers.	11
Work with bicycle shops to provide incentives for purchase of helmets and lights	0
Develop materials and programs addressing the cycling needs of seniors, i.e. a tricycle program	1
Work with/encourage UD to educate students about proper, effective cycling and distribute bike safety pamphlets to students as part of registration.	7
Effective Cycling course by the League of American Bicyclists (LAB)	0
UD effective cycling as a physical education course	0
Offer classes through the Senior Center and Parks and Recreation	0
Provide articles in community publications, newsletter	0
Encourage the medical industry to recommend cycling as a means of exercise	3
Other: UD Wellness education of staff about safe cycling opportunities (Many don't cycle because of safety perceptions) Education might open doors. Encourage projects such as Newark Bike Project	

Motorists	
Campaigns to educate motorists on how to safely share the road with bicyclists and overall awareness of bicyclists rights and responsibly.	8
Use public service space from newspapers, television, radio, bus advertising, posters and flyers mailed in utility bills and with parking permits.	2
Signage on roadways, such as "Share the Road" or "Bikes may use full lane"	8

Law Enforcement Officials	
Training for Newark and UD police on bicyclists rights/responsibilities, how best to approach the bicyclist offender, and on what bicycling and motor vehicle offenses pose the greatest risk to cyclists	8
City should develop its own bicycle fine structure so that bicycle fines will not be excessive and officers will be more willing to impose them	3
Citation alternative program -- attend education program, similar to auto traffic school, would allow fees to be waived.	0
Posted speed limits should be enforced. High auto speeds make bicyclists feel unsafe, discourage people from cycling, and increase the severity of collisions	7
Bike registration program and bike shops to register bikes when they are sold	1

HELP SHAPE THE FUTURE OF BICYCLING IN NEWARK

Share your ideas for a more bicycle friendly community

June 26, 7 p.m. at Newark Bike Project 7 South Main St. (formerly Elkton Rd.), Newark, DE

The City of Newark, WILMAPCO and the Newark Bicycle Committee are developing a **Newark Bicycle Plan** and need your ideas! **We invite you to join us for Public Meeting hosted by the Newark Bike Project.**

At the Public Meeting:

- 🚲 Get an overview of the draft of the Newark Bicycle Plan
- 🚲 Discuss what programs and policies can promote safer bicycling
- 🚲 Brainstorm ways to encourage more people to bicycle and educate the community about where and how to ride
- 🚲 Learn what we've heard about suggested bike routes and other improvements and offer additional ideas
- 🚲 Tell us your top priorities for improvements

For more information visit www.wilmapco.org/bikenewark or call **302.737.6205**. Learn more about the Newark Bike Project by attending their community meeting at 6 p.m.

CAN'T MAKE IT IN PERSON?

COMMENT ONLINE AT

WWW.WILMAPCO.ORG/BIKENEWARK

What we're planning

We are developing the Newark Bicycle Plan to make bicycling a more safe and convenient choice for transportation and recreation for people of all ages and abilities.

Recommendations will include bicycle routes and other infrastructure, education and safety programs, programs to encourage cycling, and maintenance programs.

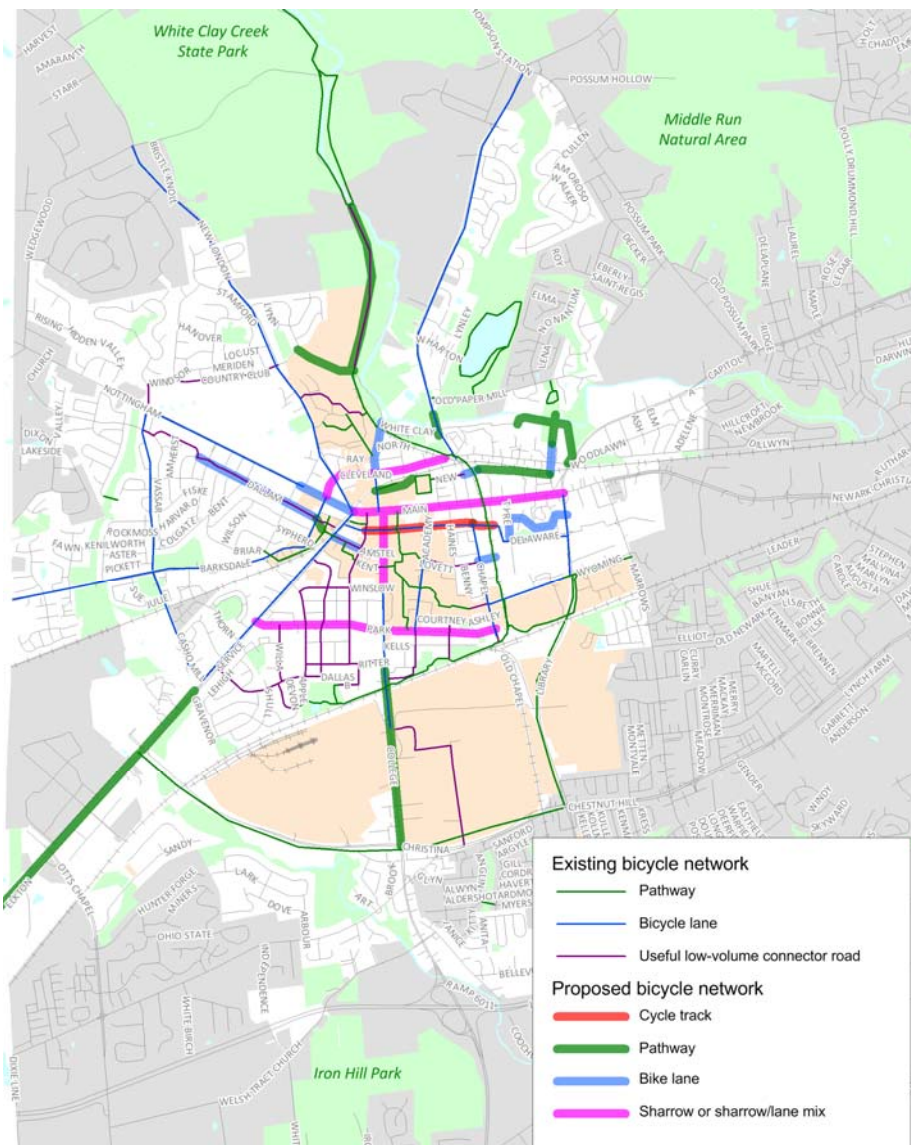


Planning for All Ages and Abilities

Research shows that the largest share of the community is “interested but concerned” about bicycling; this group may be nervous riding with traffic or may lack confidence in their cycling skills. The Plan seeks to increase the ease of bicycling for these citizens with improvements to off-road routes, low-volume streets and educational programs to boost confidence and skills.



Highlights from the Draft Routes



Example Goals & Objectives

Improve bicycle transportation network.

- Provide access within ¼ miles for all residents.
- Identify and address key gaps and areas of safety concern.
- Consider needs of all user groups.
- Identify key links needed to connect low-traffic, low-stress routes.

Improve bicycle access to transit.

- Provide adequate and secure parking at bus stops and train stations.
- Identify safe and convenient routes to and from transit stations and stops.

Encourage adequate and secure bicycle parking at all major trip destinations.

- Review and revised bicycle parking requirements in zoning codes.
- Identify where bicycle parking should be provided.

Improve safety for bicycling through design, maintenance, and enforcement practices.

- Recommend safe design and maintenance best practices, including lighting and signage.
- Recommend measures to support enforcement of the rights and responsibilities of bicyclists, targeting violations that cause the most injuries and fatalities for selective enforcement.
- Identify possible resources for training to local enforcement agencies.
- Develop signage and promotional programs aimed at drivers.

Incorporate bicycle elements into land use and development planning.

- Consider bicycle accommodations in development review procedures.
- Integrate the consideration of non-motorized facilities into all planning, design, construction, and maintenance activities.

Develop implementation plan.

- Prioritize recommended infrastructure projects, programs and policies.
- Identify funding programs for implementation.

Community Discusses Ideas for Newark Bicycle Plan

On June 26, the community gathered at the Newark Bicycle to share ideas for bicycling in Newark. The Newark Bicycle Plan is being developed by the City of Newark, WILMAPCO and the Newark Bicycle Committee to make bicycling a more safe and convenient choice for transportation and recreation for people of all ages and abilities.

At the public meeting, the community:

- Got an overview of the Draft Newark Bicycle Plan
- Discussed what programs & policies can promote safer bicycling
- Brainstormed ways to encourage more people to bicycle and education the community about where and how to ride
- Learned about suggested bike routes and other improvements and offer additional ideas
- Told planners their top priorities for improvements

Suggestions that were discussed included:

- Conduct additional public outreach for draft Plan including coordination with the Trailspinners and White Clay Bike Club
- Coordinate bicycle education with drivers education classes at Newark High School. Drivers education improvement is a current project of the Delaware Bicycle Council and Newark High School could serve as a pilot location.
- Challenging location where discussed, particularly access to Newark from points east along DE 273 and Kirkwood Highway. DelDOT planning for a Newark to Wilmington bicycle route is currently underway but feasible routes and timing for implementation is still not known.
- Cleveland Avenue/Paper Mill/Pomeroy Trail intersection is a significant challenge and makes the Pomeroy less suitable for children. Suggestions included wayfinding signs to guide people across the intersection and working with DelDOT and the City on signal and crosswalk improvements. A mountable curb was also suggested to ease the transition for cyclists who wish to take the lane.
- The poor condition of roads near University construction sites was discussed including Lovett, Academy and Wyoming. Around these locations it was also noted that crossing Chapel Street at Wyoming and Lovett streets is challenging.
- Delaware Avenue has an issue with vehicles parking on the bicycle lane.
- Signs should indicate continuation of Pomeroy Trail onto Creek Road.
- Concerns exist about the proposed South Main Street WAWA's potential impact on bicycle safety. It was noted that a Traffic Impact Study is required and will examine the impacts.
- South Main Street should have additional bicycle racks installed at existing residential and commercial.

Top priority projects identified included:

- Go after low-hanging fruit—project done along with paving and rehabilitation, land use development, etc.
- Prioritize connecting gaps to create low-stress routes where people feel safe.
- Leverage low cost connections to complete the network.

- Complete Frazer Field connections and permanently retain link added during Carpenter Sports Building construction.
- Address safety and convenience of Papermill/Cleveland/Pomeroy intersection.
- Expand youth education including greater promotion of Bike to School Day.
- Provide information for drivers with signs and other means to improve bicycle/driver cooperation.
- Provide sharrow information to overall community using brochures, posters, variable message signs.

In addition to the public meeting, an ongoing Bicycle Plan Online Workshop is at www.wilmapco.org/bikenewark. Here, participants can review the draft plan, see the presentation from June 26, fill out a survey, and add ideas to the map including where they would like more bike racks, locations where it is challenging to ride and recommended bike routes.

Recommendations will include bicycle routes and other infrastructure, education and safety programs, programs to encourage cycling, and maintenance programs. Development of the plan is being done in coordination with the update of Newark's Comprehensive Plan with an anticipated completion this fall.

Example goals and recommendations include:

Improve bicycle transportation network.

Recommendations include a mix of on-street and pathway projects. This May, City of Newark implemented the top priority short term recommendation of adding sharrows (shared pavement markings) to Main Street.

Encourage adequate and secure bicycle parking at all major trip destinations.

Bicycle racks throughout the downtown and University are being added or upgraded based on public and committee input. In addition, Newark is currently revising bicycle parking requirements in the zoning codes based on the draft plan.

Improve safety for bicycling through design, maintenance, and enforcement practices.

The draft plan recommends safe design and maintenance best practices, enforcement measures and educational and promotional programs. Programs like the DelDOT led bicycle safety checkpoints and Newark Bike Project are helping to ensure that bicycles are fully functioning, have lights for nighttime use, and that cyclists are better informed about the laws and techniques for safer cycling.

The City of Newark is the region's only League of American Bicyclists Bicycle Friendly Community and is a place where bicycling is popular for both transportation and recreation. Four percent of Newark residents bicycle to work (2007-2011 American Community Survey) and 65 percent in Newark households engage in bicycling for recreation (Delaware Statewide Comprehensive Outdoor Recreation Plan survey).

For more information, visit www.wilmapco.org/bikenewark or call 302.737.6205.

SHARE YOUR IDEAS!

**Click here to visit
the Bicycle Plan Online Workshop**



Appendix A - Public Outreach and Comments

A-22

Wikimapping Virtual Public Workshop Summary

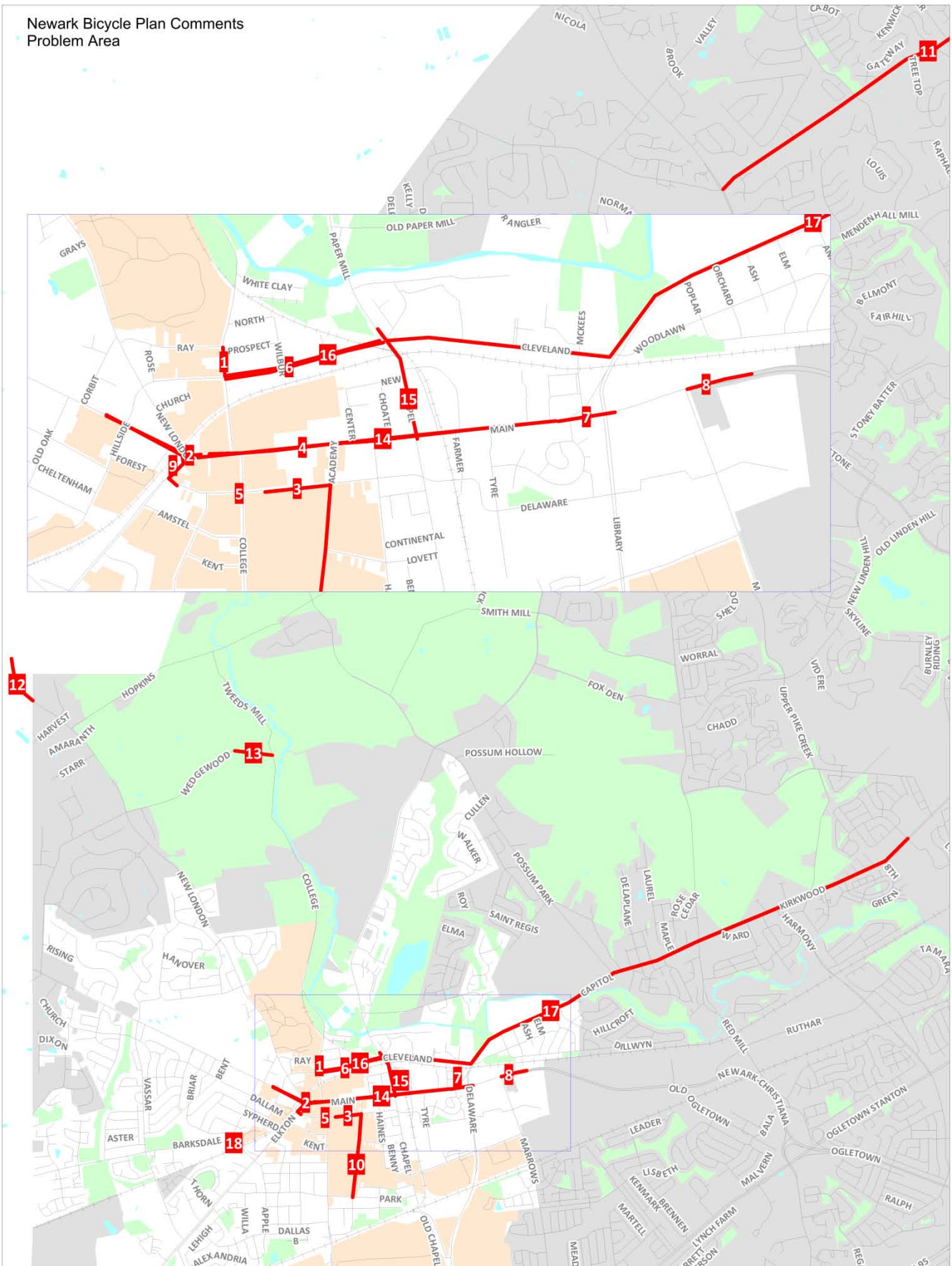
Barrier / Dangerous Area

- | ID | Description |
|----|---|
| 1 | I-95 ramps |
| 2 | Bicycles going straight from W Park Place toward E Park Place run the risk of being 'right-hooked' by cars taking the right turn lane (heading from W. Park Pl. onto S College Avenue, next to the little flower bed). The right turn lane is unmarked; a bi |
| 3 | No crossing at all here. No shoulder, either, and a lot of impatient drivers who are backed up for 2-3 lights who rush yellow lights. |
| 4 | People keep stopping in this bike lane to drop off/take on passengers between classes, forcing bicyclists to merge with traffic. |
| 5 | No shoulder here, no access to the new shoulder. A car coming around the corner from Marrows road can easily rear-end a rider heading East. |
| 6 | There is no crosswalk here. There is no shoulder to the eastbound Capitol Trail area. There is NO shoulder heading Westbound on Kirkwood Highway. |
| 7 | Shoulders narrow, and debris slides down the road onto the shoulder area where the bridges are. |
| 8 | Loop detectors don't detect bikes at this intersection. When crossing Delaware Ave in the northbound direction, the only pedestrian light button is on the left hand side. An extra light button on the right side of the road, for bicyclists, would be a fi |
| 9 | Loop detectors don't detect bicycles turning from Amstel onto bike lanes on S. Main, will not provide green light to bicyclist. |
| 10 | Some kind of signal needed at Wyoming road crossing on Pomeroy trail similar to that at Delaware Avenue. |
| 11 | Low visibility and fast moving cars at this intersection. Should be converted to an all way stop. (Currently stop for cyclists turning left onto Chrysler). |
| 12 | Unclear interface between cyclists entering/leaving campus and heading west/east on Amstel. |
| 13 | Just because you have the 'walk' doesn't mean you're safe from oncoming traffic. |
| 14 | Idiotic stop sign |
| 15 | You have to come out a little ways into the intersection for motorists to see you. |
| 16 | Extreme potholes! |
| 17 | Road is very torn up at the base of the hill. Best line is on the left side. |
| 18 | road crosses tracks at a very shallow angle |
| 19 | This is a very dangerous intersection if you are traveling East on Delaware and trying to turn Left (north) onto Chapel, you have to go over two lanes of traffic that are often speeding because of the "lost time" at the student crosswalk and its diffi |
| 20 | Watch out for UD Buses, they come really close and they dont move over if they are coming the other direction. |
| 21 | Danger! Main St is the worst street to ride on! Cars speed past and are aggressive, have seen cars cut off bikes! |
| 22 | Can be a bit challenging crossing here, during certain time of the day, lots of cars and they dont yield. |
| 23 | This intersection has been very dangerous, vision around the corner is limited and cars are not good about coming to a full stop |
| 24 | Here is the Newark Bike Project, and the road leading to this location is very dangerous. Can it be requested that cars STOP here instead of yielding? Especially with all the construction it become a very hairy place for cyclist and cars |

Problem Area

- | ID | Description |
|----|---|
| 1 | There's no bike lane here- not really, and there's a surprisingly high volume of traffic coming through this area. A bike lane would be helpful. |
| 2 | Could use painted bikeway to continue on Main St. where cars are turning right onto New London Road |
| 3 | Too much wrong way bike and skateboard traffic in bike lane |
| 4 | Could use some measure of clear road-share signage or sharrows on pavement of righthand lane |
| 5 | Too many cars use bike lane as a turn lane. |
| 6 | |
| 7 | |
| 8 | |
| 9 | traveling east, no bike lane and feeds into high traffic merge |
| 10 | Bike path marking has almost completely faded. Many potholes in the bike lane force cyclists in the path of cars. Rainwater drainage is insufficient, so that the bike paths are littered with puddles on rainy days, again forcing cyclists onto the roadway |
| 11 | no shoulder, heavy traffic, especially during rush hour |
| 12 | Lots of traffic volume and potholes. No shoulder |
| 13 | Rough terrain for a road bike! |
| 14 | No bike lanes - dangerous |
| 15 | Narrow road, pretty dangerous especially during rush hour |
| 16 | Narrow, a lot of traffic and semis; dangerous especially when turning left onto Paper Mill |
| 17 | The entirety of Kirkwood Highway/Capitol Trail and E. Cleveland Avenue are VERY dangerous except for one minor stretch of bike lane. E. Cleveland is not safe, either. |
| 18 | I ride bikes with my kids from our home in Oaklands over to the James Hall Trail. There is no bike route (or safe way) to get from the foot path coming from Oaklands to the Eastbound side of the Apple Road bridge. You cross Hillside to the island and th |

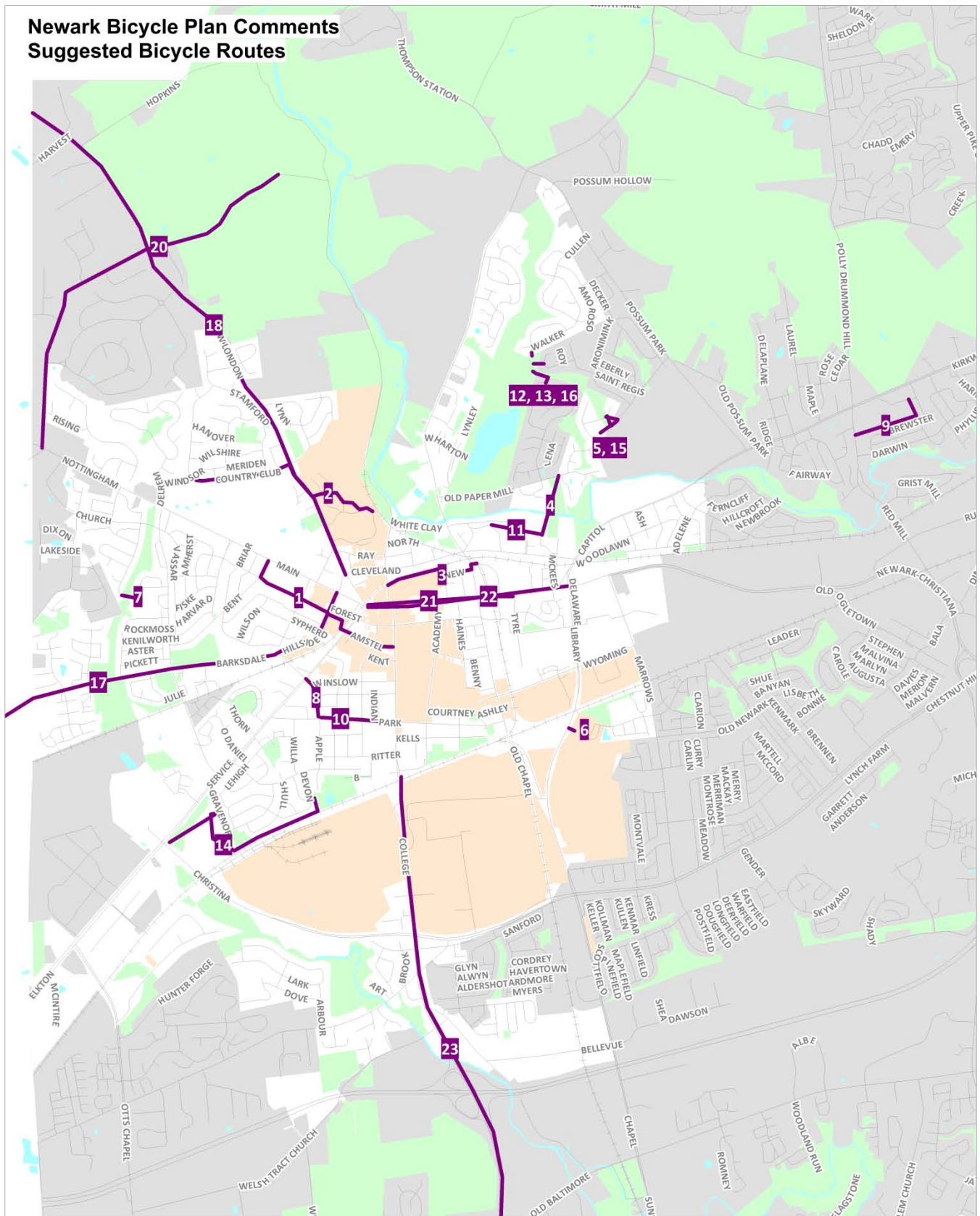
Newark Bicycle Plan Comments
Problem Area



Suggested bike route

- 1 Alternative to and from UD campus from Nottingham Rd.
- 2 Alternate route home using Pomeroy trail to Laird Campus
- 3 Conduit to/from N. College to Pomeroy Trail using paved trail behind Frazer Field
- 4 To connect hundreds of homes to downtown Newark
- 5 To connect hundreds of homes to downtown Newark.
- 6 Connect those separated by Marrows road to Newark/James F. Hall.
- 7 Connect developments to Casho Mill Rd's bike lane.
- 8 This is a pretty busy thoroughfare. It could certainly do with a painted bike lane to give riders a bit more space.
- 9 There is already a crosswalk here, and a path that runs through a school, but it is in terrible condition. It would be far enough away from the merge lane that it re-gains a rideable shoulder.
- 10 This area is wide enough for four lanes of traffic- as is, it's two lanes, and is totally unmarked. A bike lane would certainly not hurt, especially if it were to connect to Elkton Road or at least as far as Apple road, where the terminus of the James Hal
- 11 If we build that other trail that's suggested, I think if we connect it here, we'll have an E/W route, as there's no crosswalk/crossing at Capitol Trail or E. Cleveland until the Pomeroy Trail- this might fix some of the need for one.
- 12 Just a suggestion.
- 13 Connection suggested. Improving access to Redd trail for this residential cluster is important.
- 14 Connect Christiana Parkway to the trail leading to the shopping center and the James F. Hall trail.
- 15 Connect neighborhoods via bike path. ALWAYS a good idea if not done at time of development
- 16 Provide access to Redd trail
- 17 The classic way out -- heading west on Barksdale Rd. There is some traffic, but there is a wide shoulder until the MD line.
- 18 High traffic volume, but extremely smooth pavement with wide shoulder
- 19 Brackenville Rd (off of map
- 20
- 21 Please put in sharrows or a dedicated bike lane. Done!
- 22 Suggest putting sharrows Done!
- 23 896 could use a bike lane to help get cyclists past 95.

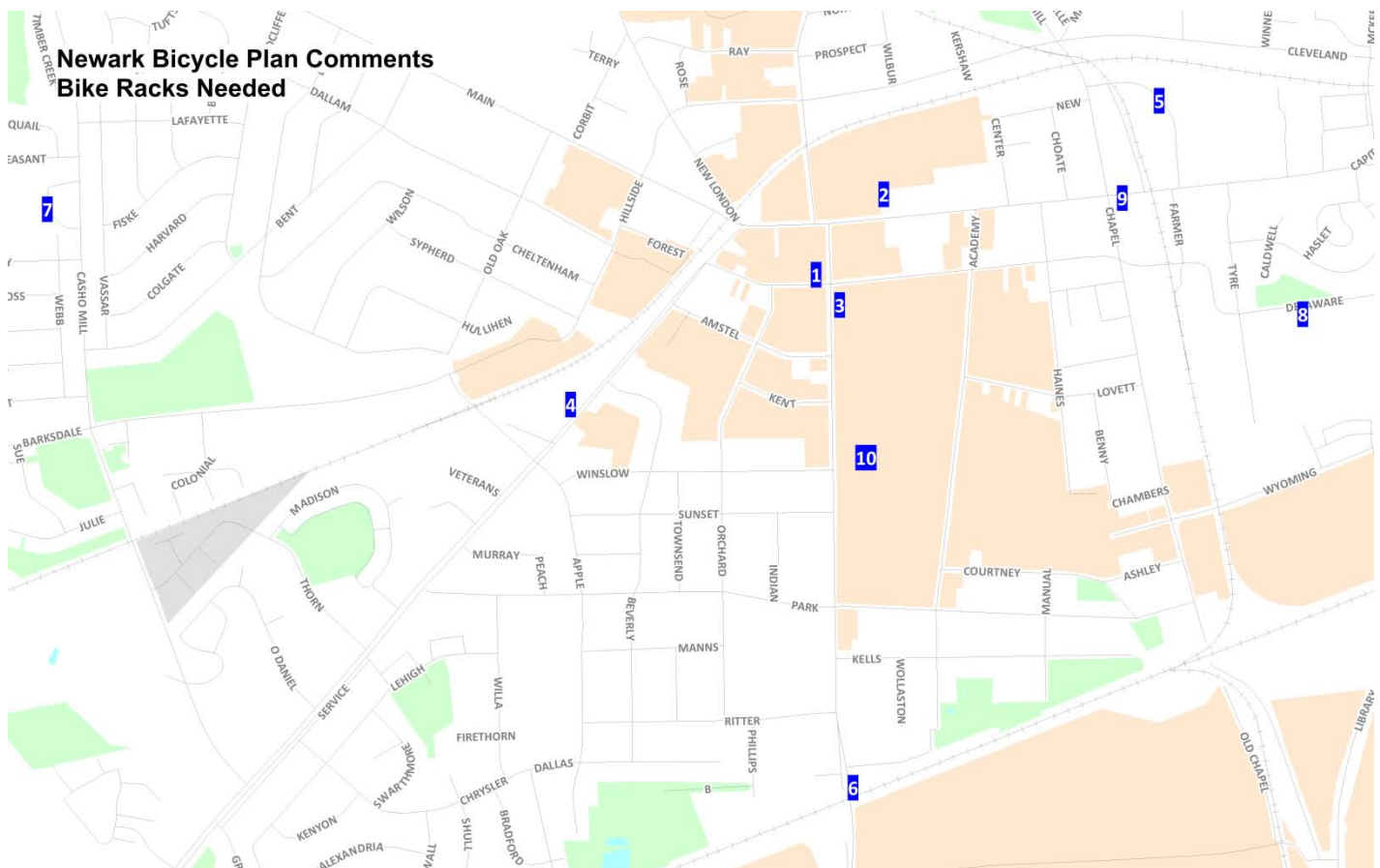
Newark Bicycle Plan Comments Suggested Bicycle Routes



Bike Racks Needed

- 1 Desperately need more bike parking here. I see bikes doubled up on the parking racks all the time out here. I think if we spread out some additional bike parking throughout the patio, it may help.
- 2 More bike parking at the gym is needed. Enough said.
- 3 Overflowing bike racks here at this lab.
- 4 We added bike lanes, but for businesses along here, we definitely need some bike racks installed.
- 5 We've got no parking here, on either side of this area. It'd be nice to chain it up the way we do on main street for our shopping.
- 6 Existing bike rack on north side of tracks has room for 2 bikes and needs to be expanded. At least a dozen are parked in the area every time I pass by here.
- 7
- 8
- 9 A bike rack in this area is pretty small and not very useful
- 10 Library is always full!!

The racks they have there now are not very secure, either.



Favorite Bicycle Routes

- 1 Straight shot into town, decent bike lane both ways up to the problem area noted
- 2
- 3 There is a bike lane!
- 4 Good straight shot with a decent bike lane, gets a bit narrow around Chapel St.

