

# BREAKING AWAY: JOURNEY TO PLATINUM



BLOOMINGTON PLATINUM BICYCLE TASK FORCE

BLOOMINGTON, INDIANA

FINAL REPORT: NOVEMBER 30, 2011

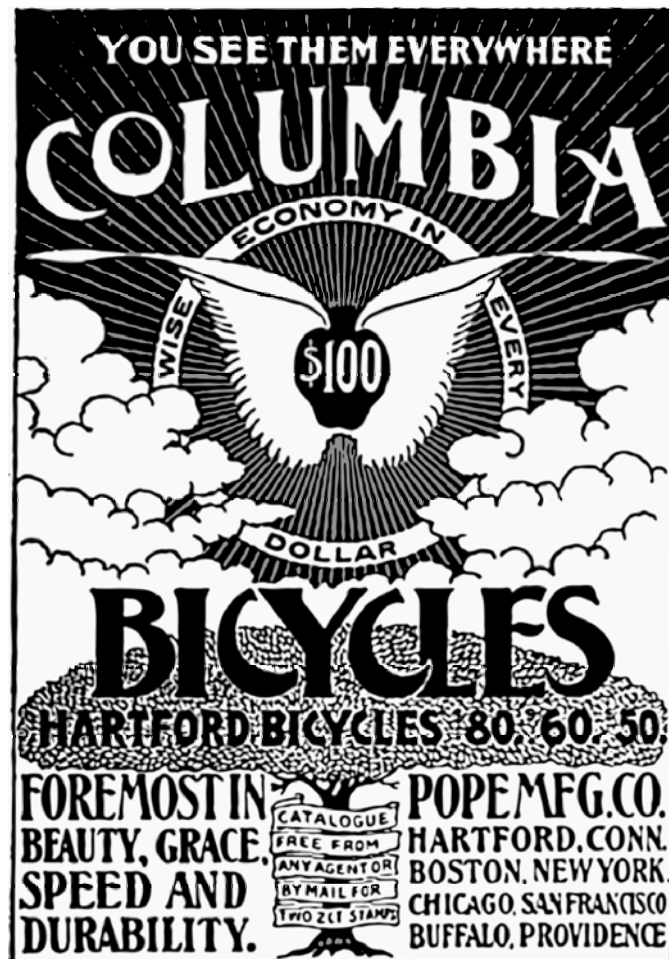


# TABLE OF CONTENTS

ACKNOWLEDGEMENTS .....	iii
LITTLE 500: PROLOGUE .....	iv
The Platinum Biking Task Force .....	v
The Platinum Process .....	vi
Report Organization .....	vii
Bloomington's Legacy .....	viii
QUALIFICATIONS: WHY PLATINUM? .....	1-1
Why Platinum .....	1-2
Quality of Life .....	1-5
Health Promotion .....	1-7
Environmental Harmony .....	1-9
Economic Resiliency .....	1-12
INDIVIDUAL TIME TRIALS: FIVE PRIORITIES .....	2-1
The Five Es & Bloomington's Framework .....	2-2
Engineering .....	2-8
Education .....	2-11
Encouragement .....	2-13
Enforcement .....	2-17
Evaluation and Planning .....	2-19
MISS-N-OUT: IMPLEMENTATION STRATEGY .....	3-1
Tactics .....	3-2
Action Charts .....	3-3
Summary .....	3-21



TEAM PURSUIT: PLATINUM BFC RESOURCES .....	4-1
Terminology .....	4-2
Further Reading.....	4-4
The Platinum Bike Summit .....	4-6
Redefining Prosperity Report .....	4-8
Vulnerable Road User Resolution .....	4-10
Resolution 11-15: Approving “Breaking Away: Journey to Platinum” Report.....	4-11



*A Columbia Bicycles company advertisement from 1886.*

Source: Wikipedia, “Pope Manufacturing Company”, [http://en.wikipedia.org/wiki/Pope\\_Manufacturing\\_Company](http://en.wikipedia.org/wiki/Pope_Manufacturing_Company) (accessed 12/2010).



# ACKNOWLEDGEMENTS

## MAYOR CITY OF BLOOMINGTON

Honorable Mark Kruzan

## BLOOMINGTON COMMON COUNCIL

Susan Sandberg (At Large) President  
Andy Ruff (At Large) Vice-President  
Tim Mayer (At Large) Parliamentarian  
Chris Sturbaum (District 1)  
Brad Wisler (District 2)  
Mike Satterfield (District 3)  
Dave Rollo (District 4)  
Isabel Piedmont-Smith (District 5)  
Steve Volan (District 6)

## BLOOMINGTON PLATINUM BIKING TASK FORCE

Dave Rollo (Co-Chair/Common Council Representative)  
Michael Wallis Jr. (Co-Chair/Common Council Appointment)  
Chad Roeder (Common Council Appointment)  
Kerry Greer (Mayoral Appointment)  
Wendy Saffell-Clemmer (Mayoral Appointment)  
Chris Tietz (Mayoral Appointment)  
Jim Rosenbarger (Bicycle and Pedestrian Safety Commission Representative)

## BLOOMINGTON CITIZENS AND AGENCIES

Special thanks to the citizens of Bloomington, the members of the Bloomington Bicycle Club, and the members of Bloomington Transportation Options for People who regularly attended Platinum Biking Task Force Meetings and provided meaningful comments.

Special thanks to the Platinum Bike Summit participants and event sponsors for their energy, time, and resources that made this a successful workshop where bicycle-friendly input and direction was given to the Platinum Biking Task Force and their process.

## BLOOMINGTON PLANNING DEPARTMENT STAFF SUPPORT

Scott Robinson, AICP, Long Range/Transportation Manager  
Raymond Hess, AICP, Senior Transportation Planner  
Vince Caristo, Bicycle and Pedestrian Coordinator

# LITTLE 500: PROLOGUE

It is with great pleasure that the Bloomington Platinum Biking Task Force (also known as the Platinum Task Force) presents this report, *Breaking Away: Journey to Platinum* to the City of Bloomington Common Council, the citizens of Bloomington, and specifically to the “interested but concerned” bicycle demographic<sup>1</sup>. It is the “interested but concerned” who are the key to Bloomington’s Platinum success. The “interested but concerned” bicycle demographic casts the widest net when considering bicyclists’ needs and interests. Therefore, we all stand to benefit when the actions detailed herein are grounded to this key demographic. With this in mind, this report details an action plan for the City of Bloomington to become a platinum level Bicycle Friendly Community by 2016, as determined by the League of American Bicyclists (the League evaluates communities on their bicycle friendliness and ranks them as: honorable mention; bronze; silver; gold; or platinum—the highest level). We appreciate the foresight of Common Council to set this very important goal, and it has been our honor to execute our charge by crafting an action plan to achieve this ambitious milestone.

Care has been taken to form a strategy that efficiently addresses the most critical needs in order to dramatically improve the state of bicycling in Bloomington over the next five years. The result is a BOLD and balanced action plan that sets clear, measurable, and achievable targets that will propel Bloomington to the pinnacle of bicycle friendliness.

The challenge of our mission is certain - currently there are only three platinum level Bicycle Friendly Communities in the United States (Davis, CA; Portland, OR; and Boulder, CO). However, our pursuit of bicycle friendliness goes far beyond checklists and accolades. It will enliven our community’s never-ending endeavor to embody its deepest values, and will be part of what makes Bloomington so special.

The Platinum Task Force makes these findings and recommendations with great confidence that the result will be a Platinum level Bicycle Friendly Community and a truly balanced transportation network that is safe and accessible for all users. Enjoy the ride to Platinum - and beyond!

<i><b>Bicycle Demographic<sup>1</sup></b></i>	<i><b>Description</b></i>	<i><b>Population Est.</b></i>
<b>Strong and Fearless</b>	Will ride regardless of roadway conditions or facilities.	<1%
<b>Enthused and Confident</b>	Comfortable with riding in traffic with bike lanes or similar facilities.	7%
<b>Interested but Concerned</b>	Curious about bicycling, but have some safety concerns. Generally are inexperienced when riding with vehicular traffic. Prefer to ride on low volume streets and separated paths.	60%
<b>Now Way No How</b>	Have no interest in bicycling for transportation.	33%

*Increasingly, the above demographics are used as a way to roughly categorize people based on their relationship to bicycling. These categories help to better understand the “market” for bicycling in Bloomington. The “interested but concerned” make up the largest segment of population and have the greatest potential to increase bicycling. Based on: Portland Bureau of Transportation, “Four Types of Cyclists”. <http://www.portlandonline.com/transportation/index.cfm?&a=237507&c=44597>.*

# THE PLATINUM BIKING TASK FORCE

On May 12, 2010, the Bloomington Common Council passed Resolution 10-10, which created the Bloomington Platinum Biking Task Force in order to “assess Bloomington's strengths and weaknesses in regard to bicycling, and to plan how the City can achieve a platinum designation from the League of American Bicyclists' Bicycle Friendly Community Program by 2016”. The official charge of the Task Force is to:

- 🚲 Acquire information about and study the current state of bicycling in Bloomington;
- 🚲 Seek community feedback on vulnerabilities and possible solutions;
- 🚲 Research best practices in urban bicycling that encourage bicycling;
- 🚲 Coordinate efforts with various agencies that advocate bicycling; and
- 🚲 Develop a plan to attain a platinum designation by 2016.



*West 3rd Street— a March 2009 reflection upon a roadway context not conducive to active transportation. How things have changed...*

The Platinum Task Force was commissioned to complete their work one year after their first meeting and this report executes that charge.

The Platinum Task Force was composed of seven community members: three appointed by the Mayor; three by the Common Council; and one representative of the Bloomington Bicycle and Pedestrian Safety Commission. Members were selected to represent a variety of interests, backgrounds, and viewpoints. This included a member of Bloomington's Common Council, a board member of the Bloomington Bicycle Club and Bicycle Indiana, two local small business owners, a graduate student at Indiana University, and an employee of Campus Bus and a Westside life sciences employee. Our Bloomington tenure ranged from a few years to over thirty. Some are avid bike commuters, while others are more recreation focused; some are currently parents with young children, while others have more of an empty nester or young professional mindset. We indeed had the skills, experience, and interest to fulfill our charge.

Beginning on September 3, 2010, the Platinum Task Force convened public meetings on the second and fourth Thursday of each month over the last year. The City of Bloomington Planning Department provided the core staff support, but was joined at various times by the departments of Engineering, Legal, Parks and Recreation, Police, and Economic and Sustainable Development. The public was welcome and their comments were always sought.



# THE PLATINUM PROCESS

Seeking community feedback was an important component of the process. The Platinum Task Force valued meaningful public input and it was gathered from a variety of forums that included:



*Platinum Bike Summit—participants work on selecting the best bicycle-friendly ideas for Bloomington to pursue.*

🚲 Every Platinum Task Force meeting was attended by several members of the public, and time for their comments was always provided.

🚲 The April 28<sup>th</sup>, 2011, Platinum Bike Summit offered more than 60 people an interactive workshop to learn about the work of the Platinum Task Force and to vote on bicycle friendly priorities.

🚲 On several occasions in May 2011, feedback on the draft recommendations of the PTF was solicited at the Monroe County Public Library and at a Bike to Work Day celebration by Bloomington<sup>1</sup>.

🚲 Staff maintained a webpage dedicated to the Platinum Task Force and its efforts. The webpage served as a repository of meeting agendas and summaries as well as information on best practices.

Together with invited guests, staff presentations, and public comments, Bloomington's strengths and weaknesses were evaluated through a process of constructive dialogue and information sharing, debate, and sound professional judgment. The Platinum Task Force, through personal experiences, background research, staff presentations, public feedback, and their combined efforts, guided the Planning Department in the production of this report.

---

1. Planning Department Staff used a non-scientific survey to gauge the public's level of interest and concerns regarding bicycle transportation and related topics. The results can be found on page 4-6 and 4-7 of Chapter 4—Team Pursuit: Platinum BFC Resources.

# REPORT ORGANIZATION

**M**ost everyday citizens around the country have heard of, and probably have seen, the 1979 Academy award winning film *Breaking Away*. The film is based on the locally grown Little 500 Race, and most of *Breaking Away* was actually filmed in Bloomington and the surrounding area. Even some lucky Bloomington citizens were extras in the film. It's all Bloomington. A bike race, a change of perspectives, and the underdog wins in the end - this is why we've chosen to organize our report on the journey to platinum around *Breaking Away* and the Little 500 bicycle race.

Started in 1951, the annual Little 500 bicycle race consists of several rounds of competitions - qualifications, three series races, and the main race. This report frames an action plan for achieving Platinum around the featured events of today's Little 500:

- 🚲 **Little 500: Prologue** – while the Little 500 is the main event, this chapter gives the reader the necessary background and main event behind *Breaking Away: Journey to Platinum*.
- 🚲 **Qualifications: Why Platinum?** – the next chapter details some bigger picture issues and qualifies them as reasons to pursue a platinum status from the League of American Bicyclists. Big picture milestones are set for Quality of Life, Health Promotion, Environmental Sustainability, and Economic Benefits.
- 🚲 **Individual Time Trials: Five Priorities** – this chapter defines the individual areas Bloomington that will be used to evaluate against its bicycle friendly peers known as the Five E's. A self evaluation of past success and future needs is highlighted. Bloomington's Framework is introduced, which identifies through targets and action items, essential steps needed to achieve platinum status. Priority targets and associated action items are identified as the most important to attain.
- 🚲 **Miss-N-Out: Implementation Strategy** – this chapter takes the targets and action items from the framework and organizes them into a time series strategy. This strategy will allow Bloomington to measure progress leading up to 2016 using various benchmarks and indicators. The annual Platinum Bike Summit will be the venue where progress and areas of improvement will be shared with the public in order to keep this strategy fine-tuned and relevant. The mission is Platinum and as the chapter title may suggest, lack of action would lessen our chances of success.
- 🚲 **Team Pursuit: Platinum Bicycle Friendly Community (BFC) Resources** – the last chapter acknowledges that becoming Platinum will take a community effort beyond City Hall. This chapter contains a variety of resources and information for use by bicycle-friendly community partners.

# BLOOMINGTON'S LEGACY

Bicycling lies deep in the heart of Bloomington's local heritage. Since the Little 500 began, the Bloomington area has increasingly become a magnet for bicycle lovers. The film *Breaking Away* magnified Bloomington's bicycling heritage in popular culture, and accelerated our development into one of the Midwest's most bicycle-friendly cities.

In April 2011, Bill Nesper, Director of the Bicycle Friendly America Program for the League of American Bicyclists, declared Bloomington a “cluster of bicycle-friendliness”. His comment reflected several decades of the community's focus on creating a thriving bicycling culture and top-notch infrastructure, resulting in several individual Bicycle Friendly Community awards:

- 🚲 City of Bloomington (Silver – Bicycle Friendly Community)
- 🚲 Indiana University (Bronze – Bicycle Friendly University)
- 🚲 Bloomington Bicycle Club (Bicycle Club of the Year)
- 🚲 Bloomingfoods (Bronze – Bicycle Friendly Business)
- 🚲 Bloomington City Hall (Silver – Bicycle Friendly Business)

Bicycling has thrived in Bloomington because the community has established an important set of values that includes the health and well-being of its people, unique and vibrant local businesses, equitable access and stewardship of public resources, quality of life for all its citizens, protecting and enhancing the natural environment, and sensible solutions for global, national, and locally recognized problems. These values will continue to propel our future endeavors and will contribute to becoming a more bicycle-friendly community.



Striving to do better and be the best is the Bloomington and the American way. By setting its sights on Platinum, Bloomington is embarking on the difficult task of leaping from “good” to “the best”. It will require the utmost persistence, patience, and innovation, but the Journey to Platinum is more than cycling and bicycles. It will balance and diversify our transportation system by increasing efficiency and accessibility, while simultaneously strengthening our relationship to the natural world.





BREAKING AWAY: JOURNEY TO PLATINUM

# QUALIFICATIONS: WHY PLATINUM?



WHY PLATINUM?

QUALITY OF LIFE

HEALTH PROMOTION

ENVIRONMENTAL HARMONY

ECONOMIC RESILIENCY

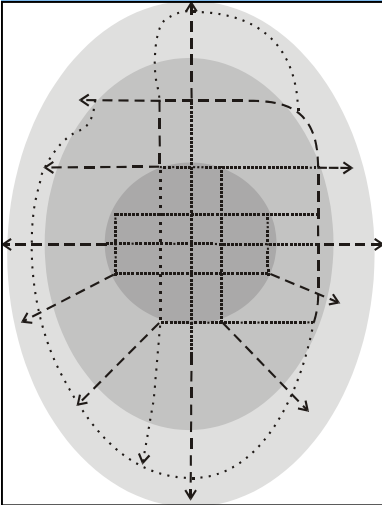
1



## WHY PLATINUM?

**F**irst Bronze in 2003, then Silver in 2010, and now Platinum in 2016? Is this just another award for Bloomington to chalk-up on our list of achievements? Isn't Silver enough or should we just settle for Gold?

### CHARACTER AREAS



Three character areas as illustrated in the Bloomington Bicycle and Pedestrian Transportation and Greenways System Plan.



The Cutters claim victory in the Little 500 Hundred - as depicted in the film "Breaking Away". This movie won a 1979 Academy Award for Original Screenplay and is ranked eighth on America's 100 Most Inspiring Movies by the American Film Institute<sup>3</sup>

At face value, a Platinum Bicycle Friendly Community designation should be no different than a local sports team, artist, or citizen receiving a national championship, a Grammy, or prestigious award. All energize local pride and give us something more to boast about. However, achieving Platinum is much more than an award for one great season or a hit album – it's the culmination of our community's deep commitment to its core values of equality, health, the environment, sustainability, and overall quality of life<sup>1</sup>.

A closer look into these core values and our respective efforts reveals similarities to achieving Platinum. Bicycle Friendly Community Platinum designation furthers our community's commitment to equality, health, the environment, and welfare. The bicycle was once referred to as the "freedom machine" by 19<sup>th</sup> century women because it liberated women by giving them mobility, freedom and self-reliance<sup>2</sup>. Times may have changed, but the freedom machine offers a similar elixir, in part at least, to 21<sup>st</sup> century problems such as obesity, congestion, global warming, limited disposable income, and oil dependency.

A not so distant look into the future for a typical Bloomingtonian is not that hard to visualize. Now picture a typical family – we'll call them the Stoller family. The year is 2018; two years after Bloomington reached Platinum status. The Stoller family, who reside within a "10-minute neighborhood", was not even aware of the Platinum Task Force effort back in 2011 and the *Breaking Away: Journey to Platinum* report. The Stoller family would have thought this was just an award. In 2018, bicycling has become part of their everyday life. The City and Bicycle Friendly Community partners continue to implement actions well beyond 2016. Work continues and the Stoller's now understand, as do so many more, what Platinum really means. A realistic look to the future can reveal benefits of becoming Platinum. Let's imagine for a moment...

1. City of Bloomington Common Council, *Resolution 10-10*, May 12, 2010.

2. Wikipedia, *History of the Bicycle*, [http://en.wikipedia.org/wiki/History\\_of\\_the\\_bicycle](http://en.wikipedia.org/wiki/History_of_the_bicycle) (accessed April 1, 2011).

3. The American Film Institute, *100 Most Inspiring Films of All Time*, AFI, <http://www.afi.com/docs/about/press/2006/100inspiring.pdf> (accessed August 2, 2011).



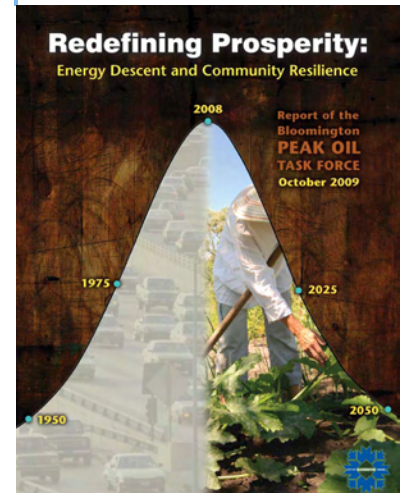


Mrs. Stoller is an Emergency Room doctor at IU Health Bloomington Hospital; Mr. Stoller teaches at Ivy Tech; their children attend Summit Elementary School; an exchange student attends Bloomington High School South; their niece attends Indiana University; and Mrs. Stoller's parents just retired in Bloomington. Each one's lifestyle into itself captures the array of Bloomington's community of villages. Their typical Bicycle Friendly life with regards to *Breaking Away: Journey to Platinum* entails:

🚲 Mr. Stoller participates with Ivy Tech's employee wellness program that includes active transportation commuter incentives. He rides his "fixie" for a short 10 minute/1 mile ride where he then catches the "free" #3 Bloomington Transit bus and finishes the commute to Ivy Tech on his fixie for the last mile on part of the Karst Farm Greenway Trail. From home to work and back, he travels through several 10-minute neighborhoods<sup>4</sup>. He does this two days a week with peace of mind knowing he has a guaranteed ride home benefit with Rural Transit or Bloomington Transit in the event of inclement weather. Since he started in 2016, he lost 15 pounds, and his total cholesterol dropped 40 units. He regularly volunteers for the Little 500 which stokes his youthful spirit. He is eagerly awaiting the construction of safety improvements at intersections along the State Road 37 corridor and even more eager for a bicycle pedestrian bridge that will soon span this barrier. Once completed, he will be less dependant on motorized travel with more active transportation options to consider. Safety improvements have rejuvenated west-side activity centers. The Bloomington Economic Development Corporation reports strong national market interests for commercial and industrial properties within Bloomington too. The strongest ever seen, but this is a whole other story...

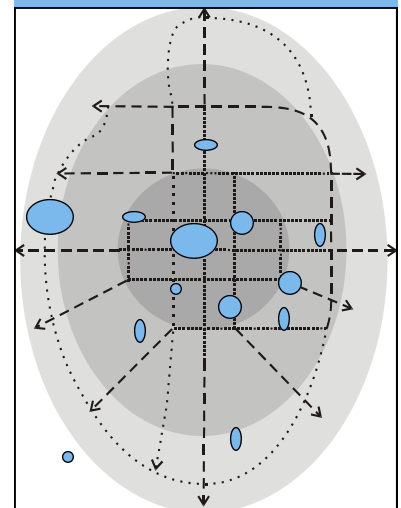
🚲 Mrs. Stoller, who has seen many crash victims in the Emergency Room, volunteers with the Summit Elementary Parent Teacher Organization, Bloomington Police Department, and Monroe County Community School Corporation (MCCSC) on International Walk to School Day, Bikes Week, and other designated bike/walk days within her neighborhood to educate everyone on safe and civil transportation behaviors. Since her first year volunteering in 2011, she has seen an exponential growth in active modes of transportation and likewise an increased awareness by everyone. Her role as educator has lessened and now has evolved into the "MC" on event days. This role evolution is energizing, fun, and rewarding for Mrs. Stoller. Her friendships and neighborly bonds run deeper and stronger than before. She also gets comfort in knowing her "children" are also learning healthy lifelong lessons that can combat the obesity epidemic – something she really never thought about before. But she has taken notice of the trend that significantly fewer cyclists have been showing up in the Emergency Room. She was skeptical when she heard others speak about the safety in numbers concept, but now is a believer. There is hope.

4. Bloomington Platinum Biking Task Force, *Character Areas*, (November 2, 2011) - also see definitions in Chapter Four.



The Common Council commissioned *Peak Oil Task Force* issued this Report in 2009 to help Bloomington understand and prepare for the decline of fossil fuels.

## TAKE TWO: MANY CHARACTER AREAS



Bloomington is a collection of many places and destinations. Call them: 10-Minute Neighborhoods, Activity Nodes, College Mall and West Side, Natural Neighborhoods, or just simply Villages<sup>4</sup>.





## LIVABILITY

*“Livability means being able to take your kids to school, go to work, see a doctor, drop by the grocery store or post office, go out to dinner and a movie, and play with your kids at the park – all without having to get in your car” - US Transportation Secretary LaHood, March 2010<sup>5</sup>*

## ECLIPSED BY REALITY



*Carving out space for bike lanes within existing roadways is a challenge. It was done along Lincoln Street and others roadways in Bloomington. New York City is transforming their roadway network and is implementing bike lanes all over the city. Early on, media attention was too focused on the negative... an anti-bike lane fury. What a difference a few months and some patience can make! “It got warmer, more people started riding and the mania was eclipsed by reality... the beauty of the bike, a simple machine with two wheels and zero ideology.” - Jason Gay<sup>6</sup>*

🚲 The Stoller children attend Summit Elementary School. Summit was a recipient of a Safe Routes to School (SRTS) Grant that implemented “Boltage”, an active transportation incentive program for elementary schools. The success of Boltage, together with infrastructure improvements, has allowed MCCSC to eliminate bus service to Summit in an age of increasing fuel costs and reduced state revenues – the fifth MCCSC elementary to do so. The children have the knowledge and skills to get to school safely because the school has made bicycle safety part of the curriculum. They bike and walk to school nearly everyday which has earned them prizes and accolades – the Yellow Jersey and Golden Sneaker awards - from the Boltage program. Both admit they are less dependant upon mom and dad and more confident getting around their village—perhaps the best prize of all!

🚲 The Stoller exchange student is not licensed to drive, but carpools with friends who are active in the BHSS Bicycle Club. The Club membership has grown over the last few years. They hold regular rides every week-end and every Wednesday, the “short day”, before school. The exchange student took a liking to the regular Club rides and sees it as a good training program because she is signed-up with DeCycles (a local youth cyclist group). This year’s tour is the first time the group is leaving American soil. The ride begins in Bloomington as they ride off to the Indianapolis airport where the tour group will commence riding some of the famous routes of the Tour de France. Many Club members benefit from the rides, like the Stoller exchange student, by getting around in a safe and independent way. Club members now field an honorary Little 500 team and participate local cycling events such as the Hilly Hundred, the Scholars Inn Bakehouse Cycling Festival, and the Brown County Breakdown, to name a few.

🚲 The Stoller’s niece lives in the most notable village, “Downtown”, and realized after only a month she does not need her car. Her student status gives her plenty of transportation options with transit and a community-wide car sharing program. She also walks and bikes to many places and relies on her friends from time to time for a ride. She gets a kick when the Stoller gang comes to visit via the B-line Trail and parks their bikes at the new bike station at the “Ol’ Transit Station” for their pre and post-IU game revelry at Nick’s English Hut. It has turned into a family affair for many tapping into IU’s athletic and cultural events along with Downtown’s eclectic mix of restaurants. Forgoing the hassles of game-day traffic and parking was easy to trade in for a safe and fun-filled bike ride. Neighborhood connections to the B-Line and the Bicycle Boulevard network make it so convenient. Not to mention the game-day ticket plus bike helmet 10% discount program offered at most downtown merchants. This is simply the icing on the cake.

5. Tom Vanderbilt, “Living Larger Driving Less What Makes a Community Livable? How About Getting Rid of Cars?”, *Sierra*, July/August 2011.

6. Jason Gay, “The City and Bikes: Rubber Meets Road”, *The Wall Street Journal*, June 22, 2011.



🚲 Mrs. Stoller's parents retired to Bloomington in 2016 and said it was for Bloomington's quality of life. However, "Silver Centre", a new affordable downtown loft-style housing project recently opened. Units are successfully marketed to the Boomers and certainly helped with their decision to move here. No "snowbird" in this retirement plan! Silver Centre is located in the Tech-Park, just west of downtown, where an amazing renaissance is occurring. The Boomer and Millennial generations have a symbiotic thing going on that is fueling the success of this emergent 10-minute neighborhood. Her parents regularly participate in the Sunday Open Streets (SOS) or Ciclovía (see page 1-6). Grandma roller skates with a senior contingent of the Bleeding Heartland Rollergirls along the SOS route showcasing Animal Shelter pets to adopt. Grandpa plays bass with a jazz band at one of the many stops along the SOS. Both love how each month the SOS features and connects a few of the many villages within Bloomington. Two years later, neither need their arthritis medication and they feel better than ever. Too bad for the "Snowbird" states, Bloomington has lots of grandparents like the Stollers.

## QUALITY OF LIFE

Quality of Life is understood to mean the well-being of individuals, cities, and societies. When places are dialed in and doing it well it is a visceral feeling that most anyone can feel. It is what makes our neighborhoods unique and Bloomington "livable". Livability can be measured using a range of metrics consisting of qualitative and quantitative measures. Like our communities' core values livability measures areas covering: stability, healthcare, culture and the environment, education and infrastructure. This report touches upon these many areas with subsequent targets and benchmarks for Quality of Life, Health Promotion, Environmental Harmony, and Economic Resiliency.

Quality of Life is the overall purpose behind our Bicycle Friendly Community efforts. Without a doubt, actions taken to improve our Bicycle Friendly Community status benefit the Quality of Life metric. It will strengthen bonds within and between our many activity nodes. Implementing the Bicycle Friendly Community program might be the best proxy to measure Quality of Life, especially in regards to equality in mobility and the bicycle.

### LEARN TO RIDE



"Learn to Ride", as shown by this photo, are events Bloomington holds to teach young children safe bicycling techniques. Something new to add to the mix? "Boltage", formerly known as "Frierker" (a moniker for Frequent Biker) has a simple mission to make walking and biking to school a way of life. Born from another Platinum Community, Boulder, CO, the program has evolved technologically and programmatically. Boltage offers impressive results for walking and biking to school. Similar incentive programs exist within the Safe Routes to School context that make active transportation an easy choice for school children. For more information about Boltage please visit <http://www.boltage.org/> and for Safe Routes to School please visit the National Center for Safe Routes to School <http://www.saferoutesinfo.org/>





Most would agree that having transportation options is the most resilient and preferred choice. The recommendations contained in this report aim towards a balanced transportation network such that people have viable choices in how they travel regardless of mode choice(s). The report sets forth the following overall Quality of Life targets and benchmarks (*please see sidebar on page 1-7 for definitions on targets, benchmarks, and indicators*):

- ◎ Quality of Life Target: Platinum Bicycle Friendly Community by 2016
  - ⇒ Quality of Life Benchmark: Silver Bicycle Friendly Community 2010
- ◎ Quality of Life Target: Gold Bicycle Friendly Community by 2014
  - ⇒ Quality of Life Benchmark: Silver Bicycle Friendly Community 2010

### SOS: SUNDAY OPEN STREETS

*How about a car-free street for a just one day every month? “Ciclovía” events originated in Bogotá, Columbia and are called different things around the world and in the United States. The events typically close some streets to vehicular traffic for a limited time and have events and programs to encourage active transportation—they are not just for bicyclists as this photo might suggest... For Bloomington, we suggest calling them “Sunday Open Streets”. SOS may be coming to a village near you!*





## HEALTH PROMOTION

**B**icycling brings innumerable benefits to an individual's physical, mental, and even emotional well-being. As we become increasingly aware of the connection between our transportation choices and our health, bicycling looks more and more like an important public health solution. One's personal health is dependent on natural, human made, social, and economic factors. Likewise, controlling for these factors relies on many interrelated elements – such as personal preferences, geographic locations, professional, and public and private resources. Fortunately, with Health Promotion there is the ability to control, guide, and manage. Wellness programs speak best to this point. However, obesity rates indicate we are losing the battle and more can be done to improve one's health.

Obesity is an epidemic. Inactivity is at an all time high. One's ability to work and maintain his or her fiscal stability is closely tied to one's well-being. Medical costs are often the number one reason for personal bankruptcy today<sup>7</sup>. Eating well, exercising, and preventative medicine are typical countermeasures within the wellness rubric in combating sickness and unhealthy behaviors. Exercise in the form of active transportation is another countermeasure to include. Put simply, avoiding inactivity has huge wellness potentials, for virtually little personal costs. Most trips are short and are very walkable and bikeable for Bloomington's 10-minute neighborhoods.

Bicycling has positive health benefits, but also suffers from perceptions of risk that may or may not be warranted. Improved personal wellness and health promotion is a positive approach to address one community concern. Another concern, crashes, seems to get lost in the overall health and wellness dialogue. Crashes take a heavy toll on communities and tax our most precious resources: Bloomingtonians. Remember the "interested but concerned" group? Safety concerns are often their primary barrier to practicing active transportation. Today's mindset often has automobile transportation as the safest means. Motorists, cyclists and pedestrians bear physical, economic, and social costs from vehicle related crashes. These costs range from injuries and death to property damage and medical bills, and can impact one's ability to work and support one's family. Countermeasures vary. Most seek to improve safety for the motorist which fuels the perception that active transportation is not safe.

7. Catherine Arnst, "Study Links Medical Costs and Personal Bankruptcy," *Bloomberg Business Week*, June 4, 2009, [http://www.businessweek.com/bwdaily/dnflash/content/jun2009/db2009064\\_666715.htm](http://www.businessweek.com/bwdaily/dnflash/content/jun2009/db2009064_666715.htm) (accessed July 21, 2011).

8. Association of Pedestrians and Bicycle Professionals, Women Cycling Project, APBP, [http://www.apbp.org/group/women\\_cycling](http://www.apbp.org/group/women_cycling) (accessed March 2011).

9. Richard Florida, "America's Top Cities for Bike Commuting: Happier, Too", *The Atlantic*, June 22, 2011.

### MEASURING UP:

#### PLATINUM METRICS

**Targets**—are a desired outcome or goal that the Plan's actions are intended to move forward.

**Benchmarks**—are a reflection of current conditions, used as a starting point to gauge progress.

**Indicators**— are measurements used to demonstrate movement towards or away from a desired goal.

### GENDER:

#### KEYS TO SUCCESS

*Women bike because: they want to be good role models, it is more convenient for commuting and short trips, it is better for the environment, it keeps them fit and improves their health, it is a kinder mode of transportation, and it gets more counterparts out riding.— APBP Survey results of over 13,000 women.<sup>8</sup>*

### BE HAPPY

*Top bicycle commuting cities are also happy places when compared with other traits. While the results do not suggest causality, the results are nevertheless intriguing<sup>9</sup>.*



## FACT

*The Center for Disease Control's 2010 and 2020 National Healthy People targets for obesity are a 15% and 10% reduction, respectively<sup>14</sup>. See how the target has changed and is lowered? Are we losing the overweight battle? The Platinum Biking Task Force set a 20% target for Monroe County, which is in-between the national targets.*

## RATE OF RETURN\$



*"Benefit-Cost ratios of bicycle investments, based on health care and fuel cost savings are between 3.8 and 1.2 to one and an order of magnitude larger when value of statistical life is used" (53 and 20 to 1 respectively)<sup>15</sup>- Thomas Gotschi. Translation: bicycle investments more than pay for themselves when considering health care and fuel costs—about 1.2 to 3.8*

A safe transportation network benefits everyone. Taking comprehensive and equitable actions, regardless of mode choice, will improve our collective wellness. Therefore the report sets forth the following overall Health Promotion targets and benchmarks:

- ◎ Health Promotion Target: 2016 Monroe County Estimated Adult Obesity Rate 20%
  - ⇒ Health Promotion Benchmark: 2008 Monroe County Estimated Adult Obesity Rate 26.5%<sup>10</sup>
- ◎ Health Promotion Target: 2016 Monroe County Estimated Child and Adolescent Obesity Rate <10%
  - ⇒ Health Promotion Benchmark: 2008 National Estimated Child and Adolescent Obesity Rate 16.9%<sup>11</sup>
- ◎ Health Promotion Target: 2016 Monroe County Obesity Rate Estimate Adult Inactivity Rate 20%
  - ⇒ Health Promotion Benchmark: 2008 Monroe County Estimated Adult Inactivity Rate 24.8%<sup>12</sup>
- ◎ Health Promotion Target: Zero bicycle, pedestrian, and automobile related crash fatalities annually for Monroe County by 2016
  - ⇒ Health Promotion Benchmark: Average of 9.1 bicycle, pedestrian and automobile fatalities annually from 2003-2009 for Monroe County<sup>13</sup>

*The average obesity rate for Bicycle Friendly Communities is 19.8% and ranges from 10.1% to 33.4%. The national average is 26.2%, and ranges from 10.1% to 43%. A closer look from a precious metal standing on the upper limits reveals:*

**Bronze 33.4%**  
**Silver 24.8% (Monroe County)**  
**Gold 19.7%**  
**Platinum 17.2%**



10. Centers for Disease Control and Prevention, Diabetes Public Health Resources, *Facts about County-Level Estimates of Leisure-time Physical Inactivity*, 2008.

11. Centers for Disease Control and Prevention, National Center for Health Statistics, *Prevalence of Obesity Among Children and Adolescents: United States, Trends 1963-1965 Through 2007-2008*, July 2010.

12. Ibid., 2008.

13. Bloomington/Monroe County Metropolitan Planning Organization, *Crash Reports 2003-2009*, <http://bloomington.in.gov/mpo> (accessed July 14, 2011).

14. Centers for Disease Control and Prevention, Healthy People, [http://www.cdc.gov/nchs/healthy\\_people.htm](http://www.cdc.gov/nchs/healthy_people.htm). (accessed July 27, 2011).

15. T. Gotschi, "Costs and Benefits of Bicycling Investments in Portland, Oregon", *Journal of Physical Activity and Health*, 2011 8(Supp 1), S49-S58.



## ENVIRONMENTAL HARMONY

The most direct benefits of bicycling are related to Environmental Harmony. Earth Day has celebrated our only home, Earth, for many decades. Ancient civilizations had this stewardship conscientiousness as part of their social and intellectual upbringing. It has become a lost practice at times in our more modern societies, but we often are reminded of this fact from the simple pleasures of daily life (a bouquet of flowers) to the more complex conditions (global warming) which the world's brightest people are determined to better understand. One thing is clear: Earth is our only home and it should not be taken for granted. Like our ancestors knew so well, the more resilient and smaller our environmental footprint becomes, the better stewards we will become.

One can conclude automobiles are a necessity of our modern society just as one can conclude the bicycle is too. The question that really remains is the frequency, amount, and purpose in which we choose to use either. Having a balanced transportation network is the most resilient option regardless of personal preference and/or the current social condition. A balanced network fosters one's ability to make environmentally sound choices, especially when considering necessity and convenience for trip mode selection.

Furthermore, considering the transportation sector contributes a significant proportion of greenhouse gas emissions (approximately 1/3), the characterization of our transportation network takes on a much different meaning<sup>16</sup>. Now, convenience and necessity are not the only reasons to make a mode choice, and we begin to factor in external costs and benefits of our network. Fossil fuels are a finite resource. Greenhouse gas emissions and other costs to fossil fuels have consequences<sup>17</sup>. How we manage our resources and minimize our consequences is the logical action<sup>18</sup>. Changing our definition of necessity and making active transportation a viable choice is key to changing trends and becoming more harmonious with the Earth.

16. Cambridge Systematics Inc. and Urban Land Institute, *Moving Cooler An Analysis of Transportation Strategies for Reducing Greenhouse Gas Emissions*, July 2009.

17. Bloomington Environmental Commission, Bloomington Commission on Sustainability, and City of Bloomington Office of the Mayor, *The 2009 Greenhouse Gas Inventory for the City of Bloomington, Indiana: Footprint, Projections, and Recommendations*, May 2009, [http://bloomington.in.gov/documents/viewDocument.php?document\\_id=3800](http://bloomington.in.gov/documents/viewDocument.php?document_id=3800) (accessed April 22, 2011).

18. City of Bloomington Peak Oil Task Force, *Redefining Prosperity: Energy Descent and Community Resilience*, December 2009, <http://bloomington.in.gov/peakoil> (accessed May 20, 2011).

### BIKE ROUTE



*The bicycle is a tool most can use and helps work towards the City's commitment and its core values.*

*Illustration courtesy of: Ross Zietz, 2006 [www.threadless.com/product/562/infinity-mpg](http://www.threadless.com/product/562/infinity-mpg)*

### MOST WANTED

*In surveys conducted by the Bloomington Parks and Recreation Department, residents always put walking and cycling paths at the top of their list as the most desired facility.*



## VMT CONTEXT

*Past reports by the City have estimated the following Total Annual Vehicle Miles Traveled, or "VMT" for the urban area:*

*1978— 258,428,747*

*1990— 307,100,000*

*2006— 446,021,570*

*This is roughly a 1.7 times increase or about 2.4 percent increase per year in VMT. Over approximately the same time period, Bloomington's Population change is about 1.8 percent increase per year.*

## CO<sub>2</sub> - GOT GAS?

*ONE ton of CO<sub>2</sub> has the volume to fill over **FOUR** IU outdoor swimming pools.*

*Combustion of **ONE** gallon of gasoline produces 8.75 kg, or just over **19 Lbs.** of CO<sub>2</sub>.*

*About **ONE** ton of CO<sub>2</sub> emissions has been produced soon after your **EIGHTH** fill-up at the pump.*

*A **FIVE** percent VMT offset equates to about 310 mile reduction in per person VMT. This in turn equates to riding your bike to work just **TWO** days a week for a round-trip of only **THREE** miles.*

*If you're an Interested but Concerned bicyclist, riding just **SIX** miles a week, for any trip, can prevent about **400** pounds in CO<sub>2</sub> emissions. Everything counts!<sup>26</sup>*

Understanding our real necessities and balancing these with our transportation choices gives a perspective where everyone stands to benefit. Cleaner air, less traffic congestion, conservation, and better transportation choices are sure to come. Folding the bicycle into this Environmental Harmony context is a must do if we choose to succeed. Therefore the following overall Environmental Harmony targets and benchmarks are set:

- Environmental Harmony Target: 2016 Total Annual Vehicle Miles Traveled (VMT) 307,100,000 (1990 levels)<sup>19</sup>
  - ⇒ Environmental Harmony Benchmarks: 2006 Total Annual Vehicle Miles Traveled 446,021,570<sup>20</sup>
- Environmental Harmony Target: 310 VMT offset/reduction per person per year from active transportation and total CO<sub>2</sub>-equivalent emissions reduction of 7,370 tons per year by 2016<sup>21</sup>
  - ⇒ Environmental Harmony Benchmark: 6,150 VMT total per person per year (2006 levels) and total CO<sub>2</sub>-equivalent emissions of 291,317 tons<sup>22</sup>
- Environmental Harmony Target: Bike Commuter Mode Split 10% by 2016
  - ⇒ Environmental Harmony Benchmark: 3.4% 2010 Bike Commuter Mode Split<sup>23</sup>
- Environmental Harmony Target: 50% of all trips are 2 miles or less and 25% of these are taken by the bicycle by 2016.
  - ⇒ Environmental Harmony Benchmark: 2009, 40% of all trips are 2 miles or less: only 2.0% of these trips are taken by bicycle<sup>24</sup>.
- Environmental Harmony Target: 9 Million Total Annual Transit Ridership by 2016
  - ⇒ Environmental Harmony Benchmark: 6.4 Million Total Annual Transit Ridership 2009<sup>25</sup>

19. Bloomington Environmental Commission, *2009 Greenhouse Gas Inventory*, May 2009.

20. Ibid., May 2009.

21. Ibid., May 2009.

22. Ibid., May 2009.

23. American Community Survey, U.S. Census Bureau, *Selected Economic Characteristics: 2005-2009 American Community Survey 5-Year Estimates* <http://www.census.gov/> (accessed August 4, 2011).

24. America Bikes and League of American Bicyclists: *2009 National Household Travel Survey*, Federal Highway Administration Office of Policy, <http://www.bikeleague.org/resources/reports/pdfs/nhts09.pdf> (accessed August 4, 2011).

25. Bloomington Transit and Campus Bus, *Annual Ridership Data*, May 2011.

26. International Carbon Bank and Exchange, *CO<sub>2</sub> Volume Calculation*, <http://www.icbe.com/carbondatabase/CO2volume calculation.asp> (accessed August, 15, 2011).

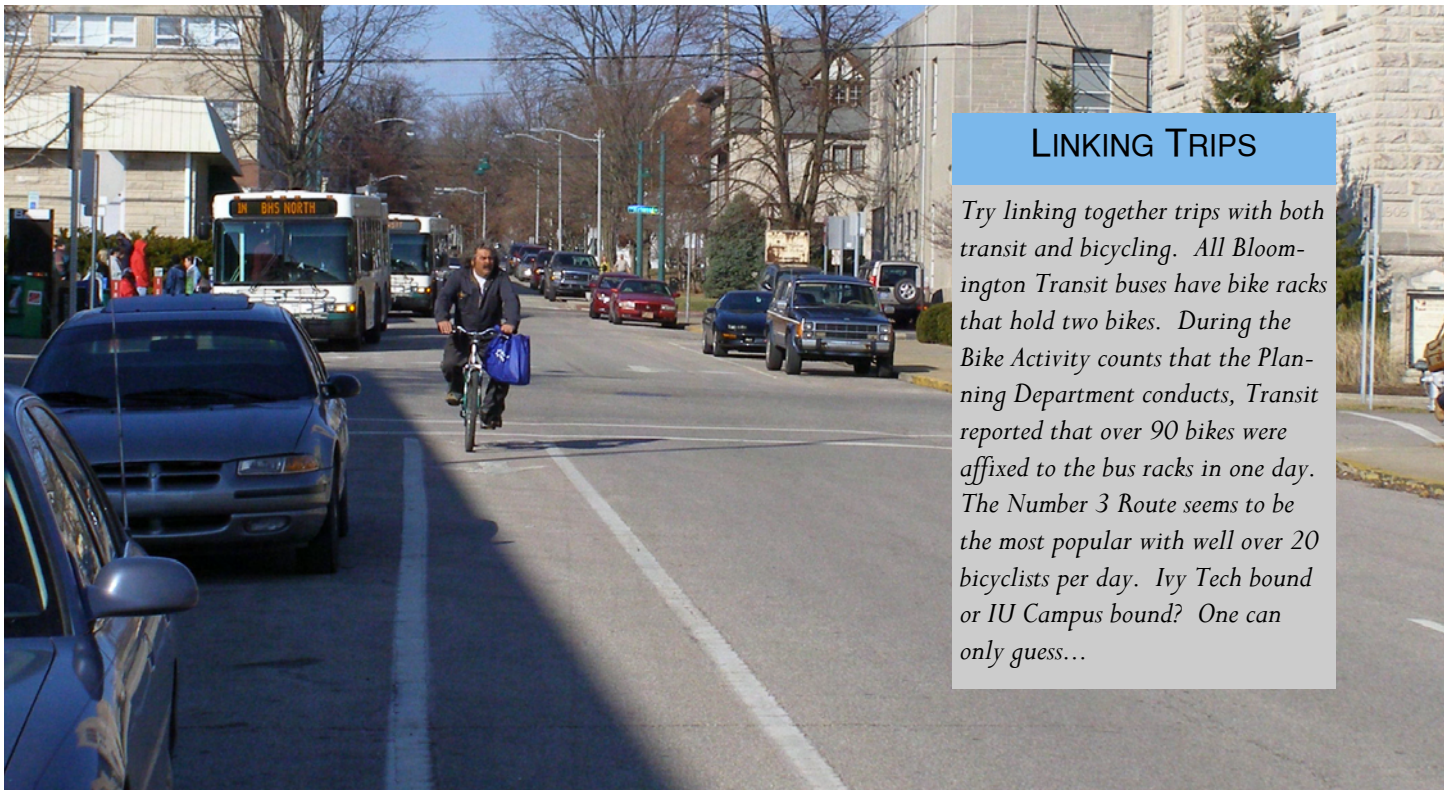




Bicycle Share of Commuters in Bicycle Friendly Communities (2009)			
City	Population	Bicycle Share	BFC Rating
Boulder, CO	100,160	12.3%	Platinum
Davis, CA	61,866	7.3%	Platinum
Portland, OR	566,606	5.8%	Platinum
Fort Collins, CO	138,722	9.9%	Gold
Madison, WI	235,410	5.0%	Gold
Minneapolis, MN	385,384	3.9%	Gold
Gainesville, FL	116,615	6.3%	Silver
<b>Bloomington, IN</b>	<b>71,318</b>	<b>3.30%</b>	<b>Silver</b>
Ann Arbor, MI	112,917	3.0%	Silver
Columbia, MO	102,332	1.5%	Silver
Iowa City, IA	69,077	3.9%	Bronze
South Bend, IN	105,036	1.1%	Bronze
Indianapolis, IN	807,640	0.5%	Bronze

## HOW WE STACK UP

*This table illustrates a simple way to see how Bloomington's peers are doing in regards to the Enthusiast and Confident (a.k.a. Bike Commuters). Bloomington is doing comparatively well. Achieving a 10% mode split is a good indicator on our bike commuter performance, but it also provides an indication that many more are riding too—just not in the pure Bike Commuter sense. Data used in this table is from the U.S. Census Bureau (2009 American Community Survey) and the League of American Bicyclists.*



## LINKING TRIPS

*Try linking together trips with both transit and bicycling. All Bloomington Transit buses have bike racks that hold two bikes. During the Bike Activity counts that the Planning Department conducts, Transit reported that over 90 bikes were affixed to the bus racks in one day. The Number 3 Route seems to be the most popular with well over 20 bicyclists per day. Ivy Tech bound or IU Campus bound? One can only guess...*



## ECONOMIC RESILIENCY

Economic Resiliency is a topic that is often a keystone of successful active transportation campaigns. The creation of jobs is often the litmus test for many economic campaigns. By this metric alone, bicycle and pedestrian infrastructure projects have shown to outperform others<sup>27</sup>. However, it is more than just jobs and infrastructure. A good metric for Economic Resiliency would capture many elements including costs of living and transportation, the impact to local economies from transportation costs, and the willingness to pay for leisure time and other Quality of Life attributes.

Taking a common sense approach for some basic costs and benefits, the economic benefits to becoming Platinum do add up. Owning and operating an automobile requires a financial commitment that should not be taken lightly. Recent volatility in gas prices has shown how much this commitment can be—with impacts on high- and low-income households alike.

Some other economic benefits would include tourism, aftermarket supplies, manufacturing, and event planning. These elements have a role in the Economic Resiliency metric for bicycles too. The economic impact of the bicycling industry is significant. After all, nationally new adult bicycle sales have been very strong for several years now<sup>28</sup>. The market already exists!

### SHORT TRIPS

### SMALL SACRIFICE



An Indiana University student rides, shops, and then walks—with health, environmental, and economic benefits, biking is a practical alternative. There are many choices to make with regards to transportation. Often decisions are focused on convenience and not absolute necessity. Now, what practical alternative would you choose? Give the bicycle a try now and then, it is more practical than most would think!



### POVERTY TRAP?

The poorest fifth of Americans spend 42% of their annual household budget on the purchase, operation, and maintenance of automobiles, more than twice as much as the national average<sup>29</sup>.

27. Political Economy Research Institute, *Pedestrian and Bicycle Infrastructure: A National Study of Employment Impacts*, University of Massachusetts, Amherst, June 2011, Heidi Garrett-Peltier.

28. National Transportation Statistics, U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *RITA Table 1-12: U.S Sales or Deliveries of New Aircraft, Vehicles, Vessels, and Other Conveyances*, January 2011.

29. Transportation and Poverty Alleviation, *Surface Transportation Policy Project (STPP)*, <http://transact.org/library/factsheets/poverty.asp>





Given direction, the Economic Resiliency of Platinum would yield positive economic impacts by reducing costs and tapping into area resources that will benefit our local economy<sup>30</sup>. A bike mindset will support our local bike shops and bike events, and help with our regional draw of tourists. All will infuse more cash into the local economy and keep it here. “Ride Local Buy Local” is the new mantra. Therefore, the following overall Economic Resiliency targets and benchmarks are set:

- Economic Resiliency Target: 500 Motor Vehicles per 1,000 people in Monroe County 2016
  - ⇒ Economic Resiliency Benchmark: 672 Motor Vehicles per 1,000 people in Monroe County 2000<sup>31</sup>
- Economic Resiliency Target: 2016 Fuel Expenses as Percent of Yearly Per Capita Income \$15,000 <10%
  - ⇒ Economic Resiliency Benchmark: 2006 Fuel Expenses as Percent of Yearly Per Capita Income of \$15,000 is 8.32%<sup>32</sup>
- Economic Resiliency Target: Triple bicycle related tourism activities for Monroe County by 2016
  - ⇒ Economic Resiliency Benchmark: Bloomington/Monroe County Convention and Visitors Bureau - Tourism accounts for nearly 4,000 jobs in the Bloomington area and \$279 million dollars each year in economic impact to the community<sup>33</sup>
- Economic Resiliency Target: Housing and Transportation Affordability Index 30% of Income 2016 for Monroe County
  - ⇒ Economic Resiliency Benchmark: Housing and Transportation Affordability Index 45% of Income 2009 for Monroe County<sup>34</sup>

30. Todd A. Litman, “Evaluating Non-Motorized Transportation Benefits and Costs”, *Victoria Transport Policy Institute*, January 2009, <http://www.vtpi.org/tca/> (accessed June, 8, 2011).

31. City of Bloomington Peak Oil Task Force, *Redefining Prosperity*, December 2009.

32. Ibid, December 2009.

33. Bloomington Convention and Visitors Bureau, *Tourism FAQ*, <http://www.visitbloomington.com/about-us/tourism-faq/> (accessed August 4, 2011).

34. Center for Neighborhood Technology, *H+T Index*, <http://htaindex.cnt.org/> (accessed July 18, 2011).

35. John Pucher, Jennifer Dill, and Susan Dill, “Infrastructure, Programs, and Policies to Increase Bicycling: An International Review.” *Preventative Medicine* 50, September 2010: S106-S125. [http://policy.rutgers.edu/faculty/pucher/Pucher\\_Dill\\_Handy10.pdf](http://policy.rutgers.edu/faculty/pucher/Pucher_Dill_Handy10.pdf)

## ENTHUSED & CONFIDENT



*Pent up bicycling demand? If you build it, they will come! Lessons learned have demonstrated the benefits for taking a proactive approach:*

*Over 40 US cities found that for every **ONE** mile of bike lanes added per square mile resulted in **ONE** percent increase in bike commuters.*

*People living within 1 / 2 mile of a bicycle facility were **20%** more likely to bicycle at least **ONCE** per week.*

*Before and after bicycle counts show that bicycling **INCREASES** after bike lanes are installed.*

*Cities that adopt comprehensive packages of bicycle-friendly interventions show **LARGE** increases in bicycling<sup>35</sup>.*



## CONCLUSION

To the “Interested but Concerned”, this report speaks to you directly because you are the key to success. To all others: you too play a role. Together, we all can work together and achieve the impossible. The targets and benchmarks mentioned may seem impossible, and even too far removed from bicycling and becoming Platinum. They are, however, what makes us tick, and gives us all direction on making Bloomington even better. Indeed, they are bigger than Platinum, but they cannot be accomplished without the aid of cyclists. The forthcoming chapter, Individual Time Trials: Five Priorities, identifies specific targets and benchmarks that provide a more direct link to bicycling and becoming Platinum.

## CHAPTER ONE BIBLIOGRAPHAY

- Arnst, Catherine, “Study Links Medical Costs and Personal Bankruptcy,” *Bloomberg Business Week*, June 4, 2009, [http://www.businessweek.com/bwdaily/dnflash/content/jun2009/db2009064\\_666715.htm](http://www.businessweek.com/bwdaily/dnflash/content/jun2009/db2009064_666715.htm) (accessed July 21, 2011).
- America Bikes and League of American Bicyclists, *2009 National Household Travel Survey*, Federal Highway Administration Office of Policy, <http://www.bikeleague.org/resources/reports/pdfs/nhts09.pdf>, (accessed August 4, 2011).
- American Community Survey, U.S. Census Bureau, *Selected Economic Characteristics: 2005-2009 American Community Survey 5-Year Estimates*, <http://www.census.gov/>. (accessed August 4, 2011).
- Association of Pedestrians and Bicycle Professionals, *Women Cycling Project*, APBP, [http://www.apbp.org/group/women\\_cycling](http://www.apbp.org/group/women_cycling) (accessed March 2011).
- Bloomington Convention and Visitors Bureau, *Tourism FAQ*, <http://www.visitbloomington.com/about-us/tourism-faq/> (accessed August 4, 2011).
- Bloomington Environmental Commission, *2009 Greenhouse Gas Inventory*, May 2009.
- Bloomington Environmental Commission, Bloomington Commission on Sustainability, and City of Bloomington Office of the Mayor, *The 2009 Greenhouse Gas Inventory for the City of Bloomington, Indiana: Footprint, Projections, and Recommendations*, May 2009, [http://bloomington.in.gov/documents/viewDocument.php?document\\_id=3800](http://bloomington.in.gov/documents/viewDocument.php?document_id=3800). (accessed April 22, 2011).
- Bloomington/Monroe County Metropolitan Planning Organization, *Crash Reports 2003-2009*, <http://bloomington.in.gov/mpo>. (accessed July 14, 2011).
- Bloomington Platinum Biking Task Force, *Character Areas*, (November 2, 2011) - also see definitions in Chapter Four.





- Bloomington Transit and Campus Bus, *Annual Ridership Data*, May 2011.
- Cambridge Systematics Inc. and Urban Land Institute, *Moving Cooler An Analysis of Transportation Strategies for Reducing Greenhouse Gas Emissions*, July 2009.
- City of Bloomington Common Council, *Resolution 10-10*, May 12, 2010.
- City of Bloomington Peak Oil Task Force, *Redefining Prosperity: Energy Descent and Community Resilience*, December 2009, <http://bloomington.in.gov/peakoil>. (accessed May 20, 2011).
- City of Bloomington Planning Department, Bloomington Transit and Campus Bus *Annual Ridership Data*, May 2011.
- Centers for Disease Control and Prevention, *Facts about County-Level Estimates of Leisure-time Physical Inactivity*, Diabetes Public Health Resources, 2008.
- Centers for Disease Control and Prevention, *Healthy People*, [http://www.cdc.gov/nchs/healthy\\_people.htm](http://www.cdc.gov/nchs/healthy_people.htm). (accessed July 27, 2011).
- Centers for Disease Control and Prevention, *Prevalence of Obesity Among Children and Adolescents: United States, Trends 1963-1965 Through 2007-2008*, National Center for Health Statistics, July 2010.
- Center for Neighborhood Technology, *H+T Index*, <http://htaindex.cnt.org/> (accessed July 18, 2011).
- Florida, Richard., "America's Top Cities for Bike Commuting: Happier, Too", *The Atlantic*, June 22, 2011.
- Garrett-Peltier, Heidi, and Political Economy Research Institute, *Pedestrian and Bicycle Infrastructure: A National Study of Employment Impacts*, University of Massachusetts, Amherst, June 2011.
- Gay, Jason, "The City and Bikes: Rubber Meets Road", *The Wall Street Journal*, June 22, 2011.
- Gotschi, Thomas, "Costs and Benefits of Bicycling Investments in Portland, Oregon", *Journal of Physical Activity and Health*, 2011 8(Supp 1), S49-S58.
- International Carbon Bank and Exchange, *CO2 Volume Calculation*, <http://www.icbe.com/carbondatabase/CO2volumecalculation.asp>, (accessed August, 15, 2011).
- Litman, Todd A. "Evaluating Non-Motorized Transportation Benefits and Costs", *Victoria Transport Policy Institute*, January 2009, <http://www.vtpi.org/tca/>. accessed June, 8, 2011.



National Transportation Statistics, *RITA Table 1-12: U.S Sales or Deliveries of New Aircraft, Vehicles, Vessels, and Other Conveyances*, U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, January 2011.

Pucher, John, Jennifer Dill, and Susan Dill, "Infrastructure, Programs, and Policies to Increase Bicycling: An International Review." *Preventative Medicine* 50, September 2010: S106-S125. [http://policy.rutgers.edu/faculty/pucher/Pucher\\_Dill\\_Handy10.pdf](http://policy.rutgers.edu/faculty/pucher/Pucher_Dill_Handy10.pdf)

The American Film Institute, *100 Most Inspiring Films of All Time*, AFI, <http://www.afi.com/docs/about/press/2006/100inspiring.pdf> (accessed August 2, 2011).

Transportation and Poverty Alleviation. *Surface Transportation Policy Project (STPP)*. <http://transact.org/library/factsheets/poverty.asp>

Vanderbilt, T., "Living Larger Driving Less What Makes a Community Livable? How About Getting Rid of Cars?", *Sierra*, July/August 2011.

Wikipedia, *History of the Bicycle*, [http://en.wikipedia.org/wiki/History\\_of\\_the\\_bicycle](http://en.wikipedia.org/wiki/History_of_the_bicycle) (accessed April 1, 2011).





BREAKING AWAY: JOURNEY TO PLATINUM

# INDIVIDUAL TIME TRIALS: FIVE PRIORITIES



FIVE E'S AND BLOOMINGTON'S FRAMEWORK

ENGINEERING

EDUCATION

ENCOURAGEMENT

ENFORCEMENT

EVALUATION AND PLANNING

# 2





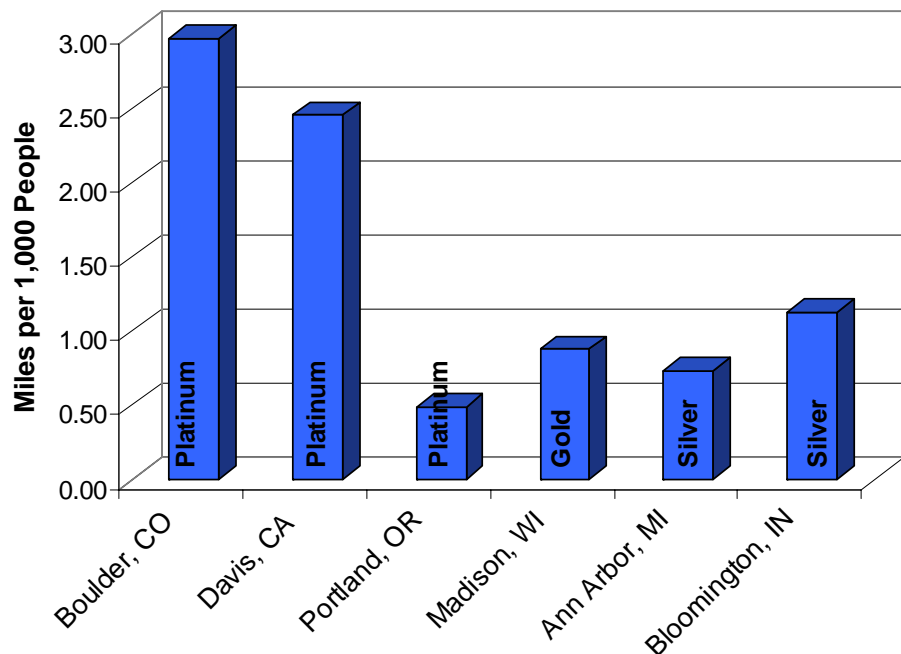
## THE FIVE E'S & BLOOMINGTON'S FRAMEWORK

As the title of this chapter implies, there are individual elements, or “Individual Trials,” in which a community is evaluated for its bicycle-friendliness. The League of American Bicyclists, or “League”, established an evaluation system known as the “Five E’s”: Engineering, Education, Encouragement, Enforcement, and Evaluation and Planning. Any community applying for recognition through the Bicycle Friendly Community Program must answer questions for each “E.” This is the basis the League uses to evaluate and ultimately designate communities for their bicycle-friendly efforts. A community must demonstrate achievements in each of the five categories in order to be considered for an award. Communities with more significant achievements in these areas receive superior recognition.

### ENGINEERING

*This chart illustrates the mileage differences between our Bicycle Friendly Community (BFC) peers and their bicycle infrastructure based on population. Portland, OR is at the pinnacle of bicycle friendliness, yet has the lowest per capita mileage. This suggests there is more than just building facilities. Portland obviously has a lot more to offer, as do other BFCs, than just mileage of facilities. Infrastructure is very important, but it is not everything... there are the other four E's.*

**Per Capita Bike Facility Miles of BFC Peers**



The Bicycle Friendly Community Program is a measurement of a community's overall bicycle-friendliness. While it provides clear metrics within each subject area, it also encourages flexibility and innovation where unique local efforts can be highlighted and celebrated. Through the development of strong programs in all five areas, a community can synergistically nurture the physical and social changes that are necessary to make bicycling and walking a significant component of its transportation system. Bloomington's general strengths and needs pertaining to the Five E's are respectively highlighted in this chapter from the



League's viewpoint. This gives context to our "Silver" status. More importantly, this evaluation from the League was used by the Task Force to identify action items for Bloomington's "Platinum" pursuit. A framework using the Five E's and their respective targets and actions is introduced. This framework sets the course for Bloomington's Journey to Platinum.

## ENGINEERING

Engineering covers bicycle infrastructure that has been built to promote cycling in the community. It also covers what is planned by a bicycle master plan or other official plans and policies. The engineering metric seeks to determine how well cyclists are accommodated on public roads and multi-use trails with well-designed and planned bicycle infrastructure. It also captures the availability of secure bike parking and the condition and connectivity of both the off-road and on-road bicycle network.

### ***Current Engineering Strengths:***

- 🚲 A robust and expanding bicycle-friendly network;
- 🚲 More bicycle parking, including bicycle corrals, around downtown Bloomington;
- 🚲 Bike racks on all Bloomington Transit buses; and
- 🚲 Local policies and codes acknowledge and encourage accommodation for cyclists.

### ***Current Engineering Needs (as identified by the League):***

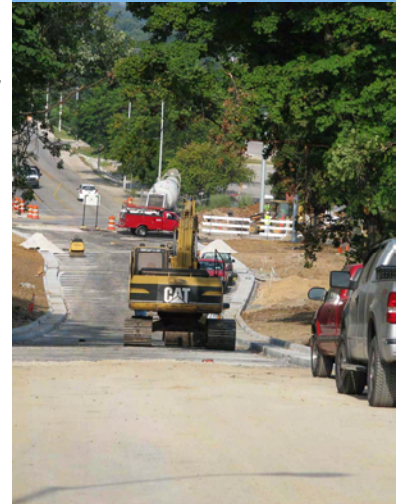
- 🚲 Increase the number of arterial streets that have shoulders and bike lanes;
- 🚲 Consider road diets to calm traffic and maximize use of roadway space;
- 🚲 Increase secure bicycle parking throughout the community;
- 🚲 Implement bicycle boulevards;
- 🚲 Develop bicycle wayfinding signage around the community; and
- 🚲 Conduct analysis of road compatibility for cycling through a "bicycle level of service" metric.

## EDUCATION

The criteria in this category are designed to determine the extent of education and outreach activities targeted at both cyclists and motorists. Education includes teaching cyclists of all ages how to ride safely in any area on different

1. Political Economy Research Institute, *Pedestrian and Bicycle Infrastructure: A National Study of Employment Impacts*, University of Massachusetts, Amherst, June 2011, Heidi Garrett-Peltier.

## JOBS



*A study of 58 nationwide projects in 11 different cities concludes that for each \$1M in spending: cycling only projects create 11.4 jobs. In comparison, pedestrian only projects create 10 jobs; multiuse trails projects create 9.6; roads with bike/ped projects create 9; and road only projects create 7.8 jobs. —Garrett-Peltier<sup>1</sup>.*

## THE LEAGUE

*The League of American Bicyclists (LAB) is one of the oldest active advocacy groups in America. Founded in 1880 as the League of American Wheelmen, often credited with getting paved roads, the League focuses its programs on education and advocacy for bicyclists. The League also administers the Bicycle Friendly Programs.*

<http://www.bikeleague.org/index.php>



types of facilities as well as teaching motorists how to share the road safely with cyclists. Important considerations include the availability of cycling education for adults and children, the number of local League Cycling Instructors, and other ways that safety information is distributed to both cyclists and motorists through bike maps, brochures, or as a part of driver's education manuals and courses.

### SAFETY IN NUMBERS

Research has shown that the more people who are out riding bicycles, the safer bicycling becomes — safety in numbers<sup>2</sup>:

- If cycling doubles (increases), then the risk per km falls by 34%
- If cycling halves (decreases), the risk per km increases by 52%

### LEARNING TO RIDE



Adult riders take a seminar to hone their road riding skills from a League Cycling Instructor at City Hall.

### SOCIAL MARKETING

King County, Washington

*In Motion* program highlights<sup>3</sup>:

- Costs around \$15 to \$20 per household to participate
- 51% of participants show openness to using active modes of transportation
- 27% decrease in drive-alone trips
- 27% drive-alone decrease causes a proportionate increase in the use of alternative modes

#### ***Current Education Strengths:***

- 🚲 The annual Bike Light Campaign;
- 🚲 Successful Safe Routes to School Program with many bicycle rodeos;
- 🚲 Bicycle safety classes are offered by League Cycling Instructors (LCIs);

#### ***Current Education Needs (as identified by the League):***

- 🚲 Expand public education campaigns and promote the share the road message;
- 🚲 Include education messages with public service announcements, program registrations and renewals, or with utility bills; and
- 🚲 Expand educational offerings through school-based curriculum, professional training for bus/taxi drivers, and LCI seminars.

### ENCOURAGEMENT

This category concentrates on how the community promotes and encourages bicycling. This can be done through Bike Month and Bike to Work Week events as well as producing community bike maps, route finding signage, community bike rides, commuter incentive programs, and having a Safe Routes to School program. In addition, some criteria focus on other facilities that have been built to promote cycling or a cycling culture such as off-road facilities, BMX parks, velodromes, and the existence of both road and mountain bicycling clubs.

#### ***Current Encouragement Strengths:***

- 🚲 Bloomington Bikes Month— every day in May;
- 🚲 Local support organizations: Bloomington Community Bicycle Project, the Bloomington Bicycle Club, numerous bicycle teams, and several locally owned bicycle shops;
- 🚲 Local events: the Little 500, the Bloomington Cycling Grand Prix, and bike polo tournaments; and
- 🚲 Free City of Bloomington Bicycle Map.

2. P. L. Jacobsen, "Safety in Numbers: More Walkers and Bicyclists, Safer Walking and Bicycling," *Injury Prevention* 9, 2003.

3. Tyler Benson, Carol Cooper, and Sunny Knott, "King County Embraces Social Marketing To Change Travel Behavior," *TDM Review*, Issue 4, p. 15, 2008.





**Current Encouragement Needs (as identified by the League):**

- 🚲 Engage the cycling community through a bicycle ambassadors program;
- 🚲 Augment local codes to encourage more bicycle parking or shower facilities;
- 🚲 Develop community bicycle programs like ciclovias, a series of short-loop rides around the City, or special celebrations when the community completes a new bicycle related project; and
- 🚲 Launch a public bike sharing system.

**ENFORCEMENT**

The enforcement category contains questions that measure the connections between the bicycling and law enforcement communities. Questions address whether or not the law enforcement community has a liaison with the bicycling community; if there are diversion programs; if the community uses targeted enforcement to encourage bicyclists and motorists to share the road safely; and if there are bicycling related laws.

**Current Enforcement Strengths:**

- 🚲 Law enforcement is represented on the Bicycle and Pedestrian Safety Commission;
- 🚲 Police officers use bikes for patrols; and
- 🚲 Laws prohibiting riding a bicycle on the sidewalk and requiring children to wear a helmet.

**Current Enforcement Needs (as identified by the League):**

- 🚲 Provide specialized bicycle focused training to police officers; and
- 🚲 Use targeted “share the road” enforcement activities so motorists and cyclists can share the road safely and effectively.

**EVALUATION AND PLANNING**

In this section the community is judged on the systems in place to evaluate current programs and plan for the future. Criteria are focused on measuring the amount of cycling taking place in the community, the crash and fatality rates, and ways that the community works to improve these numbers. Communities are asked about whether or not they have a bike plan, how much of it has been implemented, and the next steps for improvement.

4. Laura Baum, “Smart Trips Summit-U: An Individualized Marketing Approach to Changing Travel Behavior,” *TDM Review*, Issue 4, p. 7, 2008, <http://data.memberclicks.com/site/asct/TDMR-2008Q4.pdf> (accessed August 9, 2011).

**SMART TRIPS**

*An individualized marketing program in Saint Paul, MN changed travel behavior by working with transit, public agencies, and 22 local businesses partnerships for a cost around \$10 per resident<sup>4</sup>. The results include:*

- 33 % increase in biking and walking trips
- 2,289,000 reduction in vehicle miles traveled per year
- 990 metric ton reduction in greenhouse gas emissions per year.

**WAYFINDING**

*Wayfinding—helps travelers find their way to points of interest around town. Wayfinding is also an effective tool in the bicycle-friendly tool box to help bicyclists find their way around town.*



**STOP!****IN THE NAME OF...*****Effects of Traffic on Obeying Stop Signs<sup>5</sup>***

*The presence of oncoming traffic significantly affect stopping patterns and turn signal use for motorists at stop signs. Generally speaking, the more traffic present the better people were at obeying the law. For stop signs this study found:*

- 26% overall compliance
- 100% compliance with traffic
- 5% compliance with no traffic

***League of American Bicyclists<sup>6,7</sup>***

*For context in regards to bicyclists, the League has these facts:*

- *Bicyclists have the same rights and responsibilities to the road in all 50 states*
- *Wrong-way riding and riding on the sidewalk are the two of the biggest contributions to car/bike collisions*
- *Both cyclists and motorists often fail to follow the rules of the road*
- *Speeding and driving under the influence result in 43,000 deaths and 2.6 million injuries from traffic crashes annually*
- *Surveys regularly indicate that 60-70% of drivers routinely speed (often >10 mph)*
- *Many don't understand the law and assume that a cyclist is doing something wrong*

***Current Evaluation and Planning Strengths***

- 🚲 The Bicycle and Pedestrian Transportation and Greenways System Plan;
- 🚲 Historically, the City established a bicycle and pedestrian implementation fund;
- 🚲 A full time City Bike and Pedestrian Coordinator;
- 🚲 The creation of the Platinum Bicycling Task Force;
- 🚲 Bicycle usage and parking counts on trails, at key intersections, and around the Downtown; and
- 🚲 The City has policies, reports, and ordinances (the Growth Policies Plan, the Redefining Prosperity Report, and Unified Development Ordinance) which encourage bicycling as a form of transportation.

***Current Evaluation and Planning Needs (as identified by the League):***

- 🚲 Fully implement the Bicycle and Pedestrian Transportation and Greenways System Plan;
- 🚲 Improve data collection on bicycle usage and set an ambitious, attainable target to increase the percentage of trips made by bike;
- 🚲 Effectively analyze crash data and develop plans to reduce crashes in the community;
- 🚲 Work with the mountain biking community to develop a plan for off-road access and single-track riding; and
- 🚲 Consider an economic impact study on bicycling in the community.

5. Angela R. Lebbon, John Austin, Ron Van Houten, and Louis E. Malenfant, "Evaluating the Effects of Traffic on Driver Stopping and Turn Signal Use at a Stop Sign", *Journal of Organizational Behavior Management*, Vol. 27 (2), 2007.

6. League of American Bicyclists, *Bicyclists Should Get on the Sidewalk*, <http://www.bikeleague.org/action/trashtalk/getofftheroad.php> (accessed August 10, 2011).

7. League of American Bicyclists, *Bicyclists Don't Follow the Rules*, <http://www.bikeleague.org/action/trashtalk/behave.php> (accessed August 10, 2011).



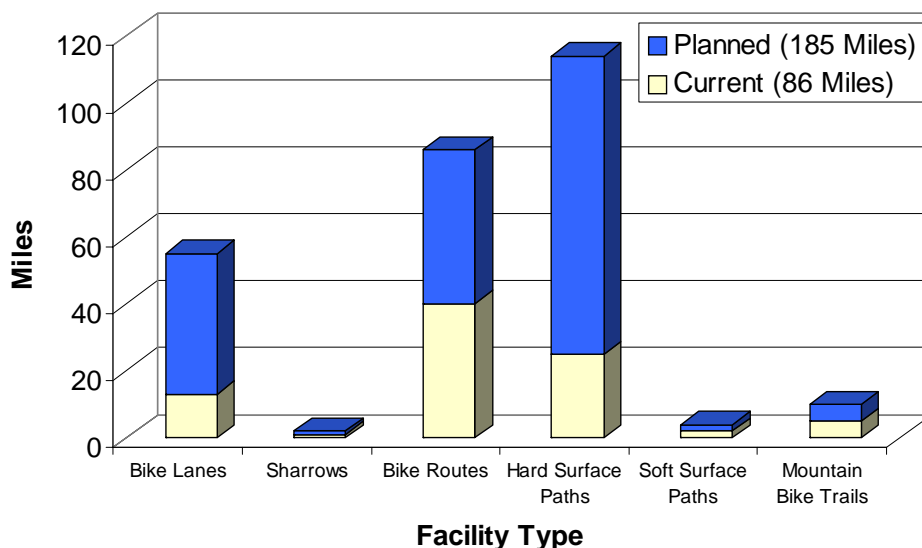
## BLOOMINGTON'S FRAMEWORK

The previous chapter, *Qualifications: Why Platinum?*, identified core community values and our overall vision. This vision contains important community traits and many are influenced by our transportation system. Embracing active transportation will result in many positive outcomes given the time, resources, and efforts. Overall targets and benchmarks were identified: most through local reports, advocacy groups, or other national resources. They are big-picture aspects that bicycling and becoming Platinum cannot achieve alone. Likewise, fulfilling many of these will require a robust active transportation system where the bicycle and cyclists are part of the mix.

The Framework uses these overall targets and benchmarks to develop more bicycle-friendly specific measures—all fit within the context of the Five E's and a platinum level bicycle-friendly game-plan. Bicycle-friendly targets and action items are the result of this effort. These provide the framework with which to measure our efforts upon. They are designed to be measurable in order to give direction and allow us to respond accordingly in our pursuit through monitoring and evaluation. The framework provides direction and allows for innovation. It is a results oriented mandate and not a step by step instruction book—if it were only that easy.

These targets and actions were developed by the Platinum Biking Task Force through their investigation of national best practices, review of other top Bicycle Friendly Communities' efforts, a heightened understanding of Bloomington's strengths and weaknesses, and public involvement. All are necessary steps needed to become platinum. They are organized by the Five E's and their respective targets and actions are generally listed in order of importance. Each action item is encapsulated with a short a.k.a. (also known as) phrase that will be used in Chapter 3, *Miss-n-Out: Implementation Strategies*.

**Bloomington Active Transportation Network**



### HOW MUCH FARTHER?

*The community has a strong preference towards bicycle, pedestrian, and transit transportation. The City has implemented many projects to support these modes over time. The chart on the left illustrates different facilities that bicyclists can utilize and respective existing and planned miles of these facilities. Many of them are within the 235 miles of roadway in Bloomington.*





THE FOLLOWING TARGETS AND ACTIONS ARE RECOMMENDATIONS OF THE PLATINUM BIKING TASK FORCE:

## ENGINEERING



*The Bicycle Pedestrian Transportation and Greenways System Plan (BPTGSP) identifies these benefits to increased bicycling and pedestrian usage:*

*Reduce Traffic Congestion  
Non-Driver Accessibility  
Quality of Life  
Health and Wellness  
Economic*

*Breaking Away: Journey to Platinum builds upon this document and has refocused our core values and put them into a bicycle-friendly framework.*

**P**latinum Intent: Embrace the concept of a community of villages, maximize the potential of the existing roadway network, accommodate the safety and comfort needs of bicyclists, and recognize each facility serves a range of users.

☉ *Target: Build neighborhood connections to provide direct access from neighborhoods to parks, schools, and commercial activity centers.*

**Action: Work with Burges and Niple/Alta Planning and Design to design and implement new, and improve existing, on-street and off-street bicycle facilities for lower-volume roadways using innovative treatments within the NACTO Urban Bikeway Design Guide. Priority and attention to detail must focus on reducing the stress level and improve convenience at high-stress locations for facility users along entire routes (a.k.a. "Low-Volume Roadway NACTO Bicycle Facilities").**

🚲 Lead Agency: Public Works Department

🚲 Support: Alta Planning and Design, Burgess and Niple, and citizen input

**Action: Work with Burges and Niple/Alta Planning and Design to design and iteratively implement improvements for the Allen Street, and for a north-south, Bicycle Boulevard. Improvements must first focus on reducing the stress level and improve convenience at high-stress locations for facility users along entire routes (Walnut Street, College Mall Road, Atwater, and 3<sup>rd</sup> Street). Other iterative improvements should focus on lower-stress locations throughout entire routes (a.k.a. "Bicycle Boulevards").**

🚲 Lead Agency: Public Works Department

🚲 Support: Alta Planning and Design, Burgess and Niple, and citizen input

**Action: Expand the Bicycle Boulevard network for additional routes that create a low-stress and traffic-calmed roadway with low-cost improvements. Priorities should focus on smaller portions of the network. Together these re-purposed roadways will function as Neighborhood Greenways" (a.k.a. "Neighborhood Greenways").**

🚲 Lead Agency: Public Works Department

🚲 Support: Planning Department, other TBD partners, neighborhoods



**Action: Expand the length of the multiuse B-Line trail system South of Country Club Drive, West of Adams Street, and East of the Switchyard (a.k.a. "B-Line Connections/Extensions").**

🚲 Lead Agency: Parks and Recreation Department

🚲 Support: Monroe County, CSX Rail Road, other TBD partners

**Action: Construct the "shovel ready" Cascades Trail/Path network from Miller-Showers Park to Lake Griffy and to Bloomington High School North (a.k.a. "Cascades Trail").**

🚲 Lead Agency: Parks and Recreation Department

🚲 Support: Planning and Public Works Departments

🎯 *Target: Enhance the existing bicycle network through on-going maintenance and network upgrades to better serve all types of bicyclists including the "interested but concerned" who do not ride regularly, but would ride more if safety and accessibility are improved.*

**Action: Maintain the existing bicycle network at the same frequency and urgency as the roadway network: annual pavement marking improvements; seasonal sweeping and debris removal; on-demand pothole or other repair requests; and winter weather (snow, ice, sleet) mitigation (a.k.a. "Bicycle Asset Management").**

🚲 Lead Agency: Public Works and Parks and Recreation Departments

🚲 Support: other TBD partners

🎯 *Target: Make a North-South Bike Arterial along the College Avenue/Walnut Street Corridors (from North Old S.R. 37 to Gordon Pike) AND an East-West Bike Arterial along the 3<sup>d</sup> Street/SR48 Corridor (from S.R. 446 to Curry Pike).*

**Action: Redesign higher volume intersections to reduce the stress level for bicyclists and improve overall safety through innovative treatments within the NACTO Urban Bikeway Design Guide (a.k.a. "High-Volume Roadway NACTO Intersections").**

🚲 Lead Agency: Public Works Department

🚲 Support: Alta Planning and Design, Burgess and Niple, and citizen input

## URBAN BIKEWAY DESIGN GUIDE

National Association of City Transportation Officials (NACTO) "encourages the exchange of transportation ideas, insights, and practices among large central cities while fostering a cooperative approach to key national transportation issues". NACTO developed the Urban Bikeway Design Guide in order to "provide cities with state-of-the-practice solutions that can help create complete streets that are safe and enjoyable for bicyclists". The Guide has information on<sup>8</sup>:

Bike Lanes  
Cycle Tracks  
Intersections  
Signals  
Signing and Marking

## HOWDY PARTNER

"TBD partners" - becoming platinum is a process and it will require a sustained effort by the lead agencies identified. More importantly it will require the skills and assistance by the support partners listed too. Even ones yet to be determined (TBD). Interested? Sign-up by contacting the Planning Department! Platinum partners are always welcome.

8. National Association of City Transportation Officials, *Urban Bikeway Design Guide*, NACTO, <http://nacto.org/cities-for-cycling/design-guide/>



## OLD MAN WINTER



Don't let winter weather hold you back. With proper clothing and use of well maintained City biking facilities (promptly plowed) riding your bike is not so bad and much safer too than with no preparations at all.

**Action: Work with Burges and Niple/Alta Planning and Design to design and implement new, and improve existing, on-street bicycle facilities for high-volume roadways using innovative treatments within the NACTO Urban Bikeway Design Guide. Priority and attention to detail must focus on reducing the stress level and improve safety at high-stress locations for facility users along entire routes (a.k.a. "Bike Arterials").**

🚲 Lead Agency: Public Works Department

🚲 Support: Alta Planning and Design, Burgess and Niple, and citizen input

**Action: Identify, design, and build at least one roadway separated bike-ped facility over/under the SR 37/I-69 Corridor (a.k.a. "SR 37/I-69 Crossing").**

🚲 Lead Agency: Public Works Department

🚲 Support: Monroe County, Indiana Department of Transportation, other TBD partners

🎯 *Target: Provide secure, convenient, and attractive bike parking to compliment end of bicycle trip planning for Downtown Bloomington, City Hall, Indiana University, College Mall, Westside shopping, and Southside shopping to significantly increase the total number of available bike parking spaces.*

**Action: Install ten downtown bike corrals and covered bike parking at key public and commercial destinations (parks, shopping areas, etc.—a.k.a. "Improved Bike Parking").**

🚲 Lead Agency: Parks and Recreation and Public Works Departments

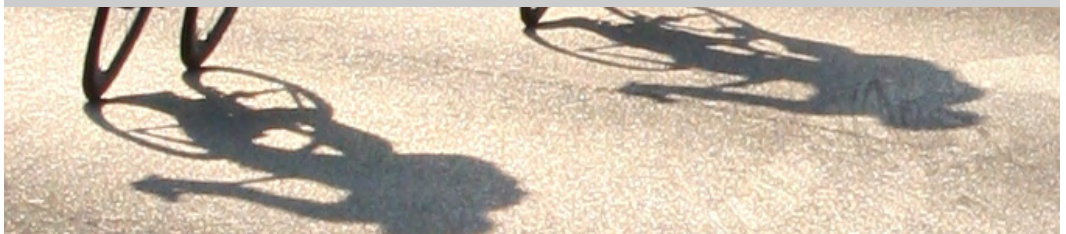
🚲 Support Agency: other TBD Downtown and area business partners

**Action: Provide a minimum ratio of 1:5 for Downtown public bicycle parking spaces to public vehicle parking spaces AND a minimum ratio of 1:20 for other commercial areas and community activity centers (a.k.a. "Bike Parking Supply").**

🚲 Lead Agency: Public Works and Planning Departments

🚲 Support: TBD business sponsors

## BIKE ARTERIALS



Roadways can be classified into categories ranging from highways to local streets. Arterials carry higher volumes of traffic and connect destinations and places of commerce. A Bike Arterial is making an Arterial Street bicycle-friendly.





## EDUCATION

**P**latinum Intent: Discover common ground amongst roadway users, tap into bicycling's exuberant potential to benefit health, environment, economy, and our quality of life, and set out to teach everyone but not convert them.

☉ *Target: Use effective public relations, marketing, and outreach through varied media techniques (safety, share the road, promotion).*

**Action: Regularly advertise and air active transportation and bicycle education messages on local radio, newspaper, television, and other media forums (billboards, scoreboards, buses—a.k.a. "Platinum Public Relations").**

🚲 Lead Agency: Office of the Mayor and Indiana University

🚲 Support: Community Access Television Service, other TBD partners

**Action: Produce short, fun, and even quirky educational bicycle-friendly media that can be easily accessed and shared via the Internet as "webisodes" (important topics include wayfinding, nighttime and inclement weather riding, riders etiquette, platinum ambassadors— a.k.a. "Webisodes").**

🚲 Lead Agency: Indiana University and Planning Department

🚲 Support: TBD partner

**Action: Include brochures and educational information with City of Bloomington Utilities bills and other agency mailings/orientation packets (a.k.a. "Mailing Inserts").**

🚲 Lead Agency: City of Bloomington and Indiana University

🚲 Support: Planning Department, TBD partners

☉ *Target: Teach all school aged children positive lifelong wellness behaviors.*

**Action: Ensure that Monroe County Community School Corporation elementary school students take a basic (30 minute—off-bike) bike safety lesson/class (a.k.a. "Children's Bike Safety Classes").**

🚲 Lead Agency: Monroe County Community School Corporation

🚲 Support: Planning Department, other TBD partners

9. D. Meisel, *Bike Corrals Local Business Impacts, Benefits, and Attitudes*, Portland State University School of Urban Studies and Planning, 2010, [http://bikeportland.org/wp-content/uploads/2010/05/PDX\\_Bike\\_Corral\\_Study.pdf](http://bikeportland.org/wp-content/uploads/2010/05/PDX_Bike_Corral_Study.pdf) (accessed, August 19, 2011).

10. M. Wesley and N. Garrick, "Evidence Why Bike Friendly Cities Are Safer for All Users", *Environmental Practice* 13 (1), March 2011.

### BIKE CORRAL



This is one of two bike corrals in Downtown Bloomington. A study of Portland's 67 Bike Corrals indicate many perceived benefits including<sup>9</sup>:

- Sustainability
- Sidewalk activity
- Business visibility
- Street identity

### SAFEST OF ALL

Data shows cities with a high bicycling rate among the population generally show much lower risk of fatal crashes for all road users. It also shows improving the streets and street networks to better accommodate bicycles (e.g. Bicycle Friendly Communities) may lead to a self-reinforcing cycle that can help enhance overall safety for all road users. Essentially, better accommodations lead to more bicyclists, which increases safety for everyone<sup>10</sup>.



## SYNERGISTIC EFFECTS

*This literature review reveals some interesting synergies that accompany more active transportation<sup>11</sup>:*

*Education and encouragement programs tend to have synergistic effects with facility improvements so that **total impacts are greater than the sum of their individual impacts.***

*More comprehensive surveys indicate that **non-motorized travel is three to six times more common** than conventional surveys indicate.*

*Bicycle parking generates **five times as much spending** per square meter than auto parking.*

*Improved walking and cycling conditions tend to **increase local property values** and support local development.*

**Action: Include bicycle education programs for all 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, and 6<sup>th</sup> grades (a.k.a. “Bicycle Rodeos”).**

🚲 Lead Agency: Monroe County Community School Corporation, Private Schools

🚲 Support: Planning and Police Departments, IU-Health Bloomington Hospital, League Certified Instructors, other TBD partners

**Action: Have comprehensive Safe Routes to School Plans for each elementary school (a.k.a. “Safe Routes to School Plans”).**

🚲 Lead Agency: Monroe County Community School Corporation and Bloomington/Monroe County Metropolitan Planning Organization

🚲 Support: Indiana Department of Transportation, other TBD sponsors

🎯 **Target:** *Hone skill sets of professionals by providing bicycle friendly perspectives for high-level officials and professional drivers (bus, truck, taxi, police, fire); offer adults a variety of ways to relearn the joys of bicycling.*

**Action: Hold specialized educational classes targeting the interested but concerned (a.k.a. “Adult Bicycle Safety Classes”).**

🚲 Lead Agency: Planning Department

🚲 Support: League Certified Instructors, other TBD partners

**Action: Offer certified professional, low cost, training/classes through the League of American Bicyclists League Certified Instructor program (a.k.a. “Business Bicycle Classes”).**

🚲 Lead Agency: Planning Department and League Certified Instructors

🚲 Support: Chamber of Commerce, other TBD partners

**Action: Conduct sensitivity training for City staff and require specialized training for staff that frequently must drive a City vehicle for their day to day duties (a.k.a. “Bicycle Awareness Training”).**

🚲 Lead Agency: Human Resources Department

🚲 Support: League Certified Instructors, Planning, Police, Fire, Public Works, and Utilities Departments, Bloomington Transit, other TBD partners

11. Todd Litman, “Evaluating Non-Motorized Transportation Benefits and Costs”, *Victoria Transport Policy Institute*, June 8, 2011.



## ENCOURAGEMENT

**P**latinum Intent: Understand that simple actions can bring prolific results. Likewise, partnerships unlock potentials not attainable when simply doing it alone.

◎ *Target: Program a wide variety of bike events to attract visitors and generate interests ranging from passerby to participant.*

**Action: Hold several Sunday Open Streets (Ciclovias), from May through October, that celebrate active transportation for all ages and abilities. The route of a Sunday Open Streets should be a loop, no more than several miles long, and contain a variety of programs, events, and promotions in order to provide numerous destinations within close proximity to one another along the route (a.k.a. "Sunday Open Streets").**

- 🚲 Lead Agency: Parks and Recreation, Planning, Police, and Public Works Departments
- 🚲 Support: Bloomington Entertainment and Arts District, other TBD partners (event, program, and promotion providers along route such as yoga, aerobics, and other fitness classes, demonstration bicycle rentals and gear promotions, etc.)

**Action: Feature twelve monthly organized "Fun Rides" that are organized around themed concepts (Midnight Madness, Ride with the Mayor, Bicycling Musicians, Women's Ride, Flat Tire Ride (get it fixed), Spanish Speakers Ride, Ron's Bridge Ride, Family Fun Ride, Bike Trailer Ride, Beyond the City Limits Ride, Oliver Winery Ride, many more...) and build upon existing successful community events (Lotus, Taste of Bloomington, etc.) for event related fun rides (a.k.a. "Fun Rides").**

- 🚲 Lead Agency: Bicycle Friendly Businesses, other TBD partners
- 🚲 Support: Parks and Recreation, Planning, and Information and Technology Services Departments

**Action: Attain a daily participation rate of 25% (currently ~ 5%) for children walking and biking to school (a.k.a "Bike to School").**

- 🚲 Lead Agency: Monroe County Community School Corporation
- 🚲 Support: Planning Department, Bloomington/Monroe County Metropolitan Planning Organization, IU-Health Bloomington Hospital

### FLAPJACKS



*Okay, B-town's hilly reputation is not "flat as a pancake", but we're not the Himalayas either! The average slope for our multi-use trails are around 1% and for the entire bike network is just under 3%. Slopes 5% or more, are often considered a steep hill. Even then most steep hills are short and good for the thighs. Pass the maple syrup please and enjoy the easy ride!*

### LOW HANGING FRUIT?



*Signs help to inform everyone, improve trip planning, and offer high returns for a lower cost action.*





## GATEWAY TRAIL SYSTEM



Wapehani Mountain Bike Park—a bicycle-friendly asset that introduces mountain biking to beginners and strengthens skills for the experienced rider. Photo courtesy of A.D. Kent-Isaac (2011).

**Action: Do membership drives, event sponsorships, and strategic marketing to promote the area's mountain biking resources and City of Bloomington's Wapehani Mountain Bike Park as a regional draw for mountain bike enthusiasts (a.k.a. "Mountain Biking Promotion").**

- 🚲 Lead Agency: Bloomington Convention and Visitors Bureau and Parks and Recreation Department
- 🚲 Support: Planning Department, Do Indiana Off-road, Hoosier Mountain Bike Association, other TBD partners

**Action: Make the Scholars Inn Bakehouse Cycling Festival (aka Downtown Criterium), the Hilly Hundred, or new event a signature bicycle race that will attract all riders (men, women, and children; professional to recreational) and spectators from around the region (a.k.a. "Signature Event").**

- 🚲 Lead Agency: Bloomington Bicycle Club, other TBD partners
- 🚲 Support: Public Works, Planning, and Parks and Recreation Departments

🎯 *Target: Celebrate successes and tout bike related assets that captivate the "interested but concerned" group and acknowledge, reward, and reassure the bicyclist within most of us – especially the everyday bicyclist.*

**Action: Annually do an "individualized marketing" program for a different City neighborhood to legitimize active transportation options and to reduce everyday dependency on the automobile for the everyday citizen (a.k.a. "Individualize Marketing").**

- 🚲 Lead Agency: Housing and Neighborhood Development Department
- 🚲 Support: Planning Department, Neighborhood Associations, other TBD partners

**Action: Install wayfinding signage along all bike routes that give time and distance for an average bicyclist to arrive at various destinations throughout the community (a.k.a. "Wayfinding").**

- 🚲 Lead Agency: Public Works and Parks and Recreation Departments
- 🚲 Support: Planning Department, other TBD partners

**Action: Provide free, readily available, up-to-date and easy to use Bloomington Bicycle Maps (a.k.a. "Bike Maps").**

- 🚲 Lead Agency: Planning Department
- 🚲 Support: Bloomington Convention and Visitors Bureau, Bicycle Pedestrian Safety Commission, other TBD partners

## CARBO-LOADING



Free food and other incentives helps even the very young enjoy their Bike to Work Day trip!



**Action: Use the Internet to serve as a one stop shop for a wide variety of bicycle related resources (a.k.a. "Bike Bloomington.com").**

🚲 Lead Agency: Bloomington Bicycle Pedestrian and Safety Commission

🚲 Support: Information and Technology Services and Planning Departments, other TBD partners

**Action: At community events, showcase programs demonstrating that bicycle use for shopping, commuting, or recreation is a convenient, affordable, and practical form of transportation (trailers, proper gear, etc.—a.k.a. "Bike Demonstrations").**

🚲 Lead Agency: TBD partners

🚲 Support: Parks and Recreation Department

🎯 **Target:** Maximize community wide efforts around Bikes Week that culminate on Bike to Work Day.

**Action: Provide pit-stops on Bike to Work Day that offer a variety of food and snacks, drinks, entertainment, dynamic speakers, and chances to win prizes (a.k.a. "Pit-Stops").**

🚲 Lead Agency: TBD partners and Parks and Recreation Department

🚲 Support: Chamber of Commerce, Downtown Bloomington Inc., other TBD partners

**Action: Have mobile clinics and commuter convoys leading up to Bike to Work Day (a.k.a. "Clinics and Convoys").**

🚲 Lead Agency: TBD partners

🚲 Support: YMCA, Planning and Parks and Recreation Departments

**Action: Register all cyclists, request their feedback, and respond to needs for Bike to Work Day participants to ensure growth and success of the program (a.k.a. "Bike to Work Registration").**

🚲 Lead Agency: Parks and Recreation Department

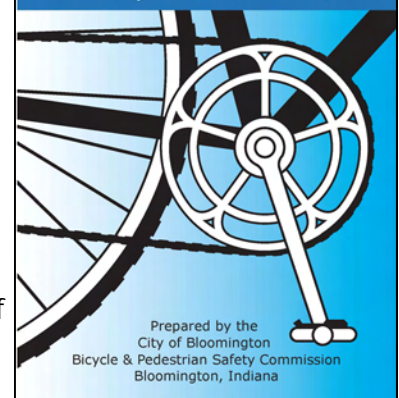
🚲 Support: Information and Technology Services Department, Chamber of Commerce, other TBD partners

## CHA-CHING

*A local economic impact study found that an event, such as a signature bike race, generates \$60.75, per day, per person. For the Hilly Hundred, approximately \$911,250 is infused into the local coffers<sup>12</sup>.*

## TRIP PLANNING

### Bloomington Bicycle Map



Mayor Mark Kruzan

*Be sure to bring a few simple items on your ride: bicycle map, bike light, identification, water bottle, bike tool, and unscented baby wipes<sup>13</sup>*

12. Indiana University, *Economic Impact of Tourism to Monroe County, Indiana*, Department of Recreation, Park and Tourism Studies, June 2010.

13. Idea: Riders Tricks of the Trade, "unscented baby wipes" offer a quick and easy way to freshen-up after a short ride, BikeBloomington.com (Internet site under development October, 2011).



◎ *Target: Build community partnerships and seek advocacy and leadership from non-city agencies and organizations.*

**Action: Increase participation in the Bicycle Friendly Business (BFB) program (a.k.a. “BFB Program”).**

- 🚲 Lead Agency: Economic and Sustainable Development Department
- 🚲 Support: Planning Department, League of American Bicyclists, other TBD partners

**Action: Hold regular lunchtime meetings with area employers to discuss bicycling and ways to increase bike commuter trips through employee wellness programs (a.k.a. “Brown Bag Lunch Sessions”).**

- 🚲 Lead Agency: Economic and Sustainable Development and Planning Departments
- 🚲 Support: local Bicycle Friendly Businesses, and League Certified Instructors, other TBD partners

## BICYCLE FREINDLY BUSINESS

*City Parking Enforcement Employee Gary Rutherford has patrolled many of his enforcement routes by bike—mostly around the Downtown and year round when weather permits. Since 1997, Gary alone has logged approximately 48,066 miles or about 3,000 miles a year. Last year he rode 4,100 miles! Gary says he likes it because “he gets paid to exercise”. The Platinum Biking Task Force sees many more benefits to this business model.*

## WRAP IT UP!



*This Champaign-Urbana Mass Transit District (CUMTD) bus illustrates one way a Safe Routes to School program can team-up with a transit agency and a local bicycling advocacy group. The result: A bus advertising campaign that includes a bus wrap with a nice mix of Education, a pinch of Encouragement, and a tad of Enforcement. Photo: Courtesy of Cynthia Hoyle, FAICP, Transportation Planning Consultant, CUMTD.*





## ENFORCEMENT

**P**latinum Intent: Focus enforcement efforts strategically, seek uniform enforcement of laws, and ensure that the rights of bicyclists are protected.

☉ *Target: Change the laws to adequately address law enforcement and bicyclists needs.*

**Action: Pass a local ordinance to provide additional legal protections for bicyclists, appropriate fines for violations, and effective flexible enforcement tools for police officers (a.k.a. "Vulnerable Road User Law").**

🚲 Lead Agency: Legal Department, and Common Council

🚲 Support: Bloomington Bicycle Club (Resolution), Police Department

☉ *Target: Use special detail assignments, bike patrols, and roll-call trainings for frequent and targeted law enforcement and activities.*

**Action: Always use bicycle police patrols at community events (Farmers' Market, IU football games, etc.) and regularly around the downtown area on weekends and popular weekday nights (a.k.a. "Bicycle Patrols").**

🚲 Lead Agency: Police Department

🚲 Support: Indiana University Police Department, other TBD partners

**Action: Issue special police enforcement details during International Walk to School Day, Bike to Work Day, and at high crash intersections, school walk zones, and other targeted areas of need (a.k.a. "Special Enforcement Details").**

🚲 Lead Agency: Office of the Mayor and Police Department

🚲 Support: Monroe County Community School Corporation, Planning Department, other TBD partners

**Action: Hold regular roll-call trainings focused on bicycle and pedestrian safety (a.k.a. "Roll-Call Trainings").**

🚲 Lead Agency: Police and Planning Departments

🚲 Support: Bloomington Bicycle Club, other TBD partners

**Action: Continue the annual bike light campaign and distribute free bike lights to turn an enforcement action into a teachable moment (a.k.a. "Bike Light Campaign").**

🚲 Lead agency: Planning and Police Departments

🚲 Support: Bloomington Bicycle Club

### VULNERABLE USERS?



The Bloomington Bicycle Club passed a resolution on April 20, 2011 encouraging an ordinance that would protect Vulnerable Road Users. See the resolution in Team Pursuit: Platinum BFC Resources chapter.

### NEAR-MISS



Incident reporting, even for near-misses, is key to identifying locations that need focused attention for enforcement and education. Emergency responders, shown here, understand bicycles provide an efficient means for medical services at large community events. BikeBloomington.com could be used to report near-misses, post conditions of the active transportation network, and other information that public service agencies could utilize.



◎ *Target: Expand the enforcement “tool box” to move beyond citations and ordinance violations.*

**Action: Require defensive driving training and drivers licenses test requirements (driving and written test) that include bicyclist and pedestrian safety precautions (a.k.a. “Drivers Training”).**

🚲 Lead Agency: Indiana Bureau of Motor Vehicles

🚲 Support: Legal and Planning Departments, Bicycle Indiana

## HELP WANTED

### Bicycling in Bloomington:

#### Establishing a Baseline of Use and Determining Trends in Ridership

Report to the City of Bloomington  
Planning Department  
February 2011

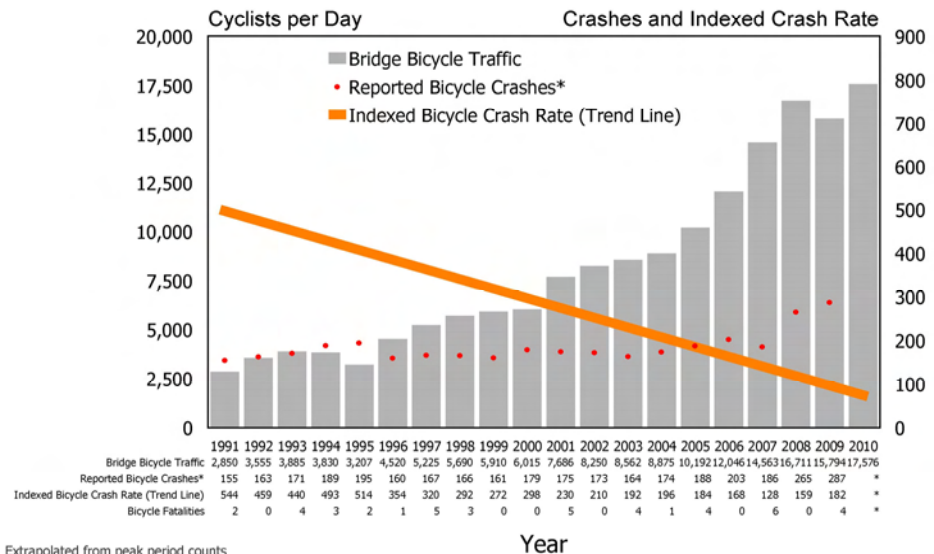
Jacob Knight  
SPEA Service Corps Fellow



The Planning Department seeks help from volunteers in counting bicyclists riding around Bloomington. This helps to collect data and understand trends, such as the safety in numbers concept. It also builds working relationships with citizens and the City on our collective “Breaking Away: Journey to Platinum”.

## SAFETY IN NUMBERS: A PORTLAND CONTEXT

### Combined Bicycle Traffic over Four Main Portland Bicycle Bridges Juxtaposed with Bicycle Crashes



Extrapolated from peak period counts

\*Crash Rate\* represents an indexing of annual reported crashes to daily bicycle trips across the four main bicycle bridges.

\*2008, 2009 Reported Bicycle Crashes data reflects increased crash reporting requirements.

This chart illustrates that the concept of safety in numbers holds true. In Portland, OR, as ridership of bicyclists increased (Bridge Bicycle Traffic) over time, the reported bicycle crashes did not increase at the same rate as some may expect. In fact, when the bicycle crashes are indexed to ridership, the trend line shows the crash rate is decreases as ridership increases. Safety in numbers!

Table Courtesy: Mia Birk, Alta Planning and Design.



## EVALUATION AND PLANNING

**P**latinum Intent: Balance the transportation network, establish essential data to track/monitor progress, proactively respond to needs and emergent trends, and validate results.

☉ *Target: Monitor, respond, report, and modify to keep the Platinum vision bold and help ensure effective use of community resources are towards platinum goal.*

**Action: Hold annual Platinum Bike Summits, during May, that bring Bicycle Friendly Partners together to reflect, innovate, and respond to the Targets and Actions identified herein. Have agencies and partners report on progress and challenges in order to help establish and budget specific guidance needed for implementation (a.k.a. "Bike Summit").**

🚲 Lead Agency: Planning Department

🚲 Support Agency: Bicycle Friendly Businesses, other TBD partners

☉ *Target: Study the economic impact bicycling has on local tourism, health, environment, transportation, and other key indices.*

**Action: Commission an independent economic impact study to comprehensively evaluate past, present, and future economic impacts of bicycling (a.k.a. "Economic Impact Study").**

🚲 Lead Agency: Planning Department and Indiana University

🚲 Support Agency: Economic and Sustainable Development Department, Bloomington Convention and Visitors Bureau, Bloomington Economic Development Corporation, other TBD partners

**Action: Collect and analyze data on cycling rates, trip distances, trip purposes, and mode preferences at the neighborhood level (a.k.a. "Data Analysis").**

🚲 Lead agency: Planning Department

🚲 Support Agency: Bloomington Monroe County Metropolitan Planning Organization, other TBD partners

HI HO SILVER

**Platinum  
Bike ★ Summit**



*The annual Platinum Bike Summit will be a key part of Evaluation and Planning. It will provide a venue to openly evaluate the strategy outlined in Chapter 3 and subsequently make recommendations on ways to fine tune the strategy. This will help ensure our overall success, but it also is a venue to celebrate our accomplishments!*





## RIDE LOCAL BUY LOCAL



National statistics for professional dealers and specialty bicycle retailers (non-Big Box) include<sup>14</sup>:

Average cost of a New Bicycle:  
\$535

Average gross annual sales:  
\$886,817 (per store)

Average annual bicycle sales:  
650 bikes (per store)

Bloomington has **three** specialty bicycle stores ...and counting.

## NATIONAL INTEREST

Biking and walking account for 12% of all trips in the US.

Funding for biking and walking projects only accounts for 1.5% of the Federal Transportation Budget.

Bicyclists and pedestrians account for 14% of all traffic related deaths<sup>15</sup>.

◎ *Target: Monitor bike activity trends and improve mode balance in comparison to automobile trips within the transportation network.*

**Action: Index the City's annual budget to the City's efforts identified within this report so at least 1% of total annual spending is allocated to BFC/Platinum efforts per year and optimally achieve upwards of 5% per year. For example, the 2011 budget, contains total revenue of approximately \$32.4 million, which would index to \$324,000 at 1% or \$1.6 million at 5% to bicycle friendly funding efforts (a.k.a. "Indexed City Budget").**

🚲 Lead Agency: Office of the Mayor and Common Council

🚲 Support Agency: All City Departments

**Action: Conduct a detailed survey on the barriers (e.g. terrain, natural elements, equipment, infrastructure, safety, etc.) to cycling for all bicyclists in order to fine tune applicable action items under the education, encouragement, enforcement, and engineering sections of this report (a.k.a. "Comprehensive Survey").**

🚲 Lead agency: Planning Department

🚲 Support Agency: TBD partner

**Action: Monitor, evaluate, and report bike commuter activities with the goal of attaining a 10% bicycle commuter mode in comparison with automobiles. This is a strong indicator of Bloomington's overall bicycle friendliness (a.k.a. "Commuter Mode Split").**

🚲 Lead Agency: Planning Department

🚲 Support Agency: Volunteers (Bike Count), TBD partners

**Action: Use the concept of Heinrich's Safety Triangle to achieve zero annual bike/ped related deaths from crashes through near miss reporting, crash data analysis (Crash Report), and targeted safety improvements (a.k.a. "Safety Triangle").**

🚲 Lead Agency: Public Works, Police, and Planning Departments

🚲 Support Agency: Bloomington Monroe County Metropolitan Planning Organization, TBD partner

14. National Bicycle Dealers Association, *Industry Overview*, <http://nbda.com/articles/industry-overview-2010-pg34.htm>, 2010 (accessed, August 23, 2011).

15. Association of Pedestrians and Bicycle Professionals, *Key Lawmakers Acting to end Dedicated Bicycling and Walking Funding*, APBP, July 8, 2011.



**Action: Utilize “active transportation” as an effective means to help combat the obesity/physical inactivity epidemic and reduce Monroe County's Risk Index to below 19.8 % (currently 24.8%) the average for all Bicycle Friendly Communities (a.k.a. “Combat Obesity”).**

🚲 Lead Agency: Planning Department and IU Health Bloomington Hospital

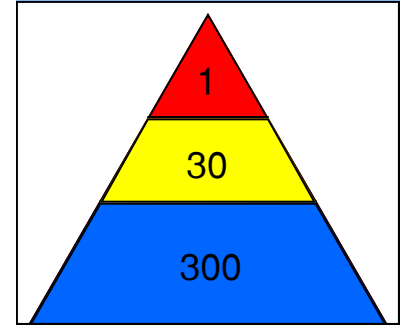
🚲 Support Agency: Community and Family Resources Department

**Action: Track Vehicle Miles Traveled (VMT) and Greenhouse Gas (GHG) emissions to measure local success in achieving the United States Conference of Mayors Climate Protection Agreement of 7% gas reductions below 1990 levels (a.k.a. “Track VMT and GHG”).**

🚲 Lead Agency: Planning Department and Environmental Commission

🚲 Support Agency: Bloomington Monroe County Metropolitan Planning organization, other TBD partners

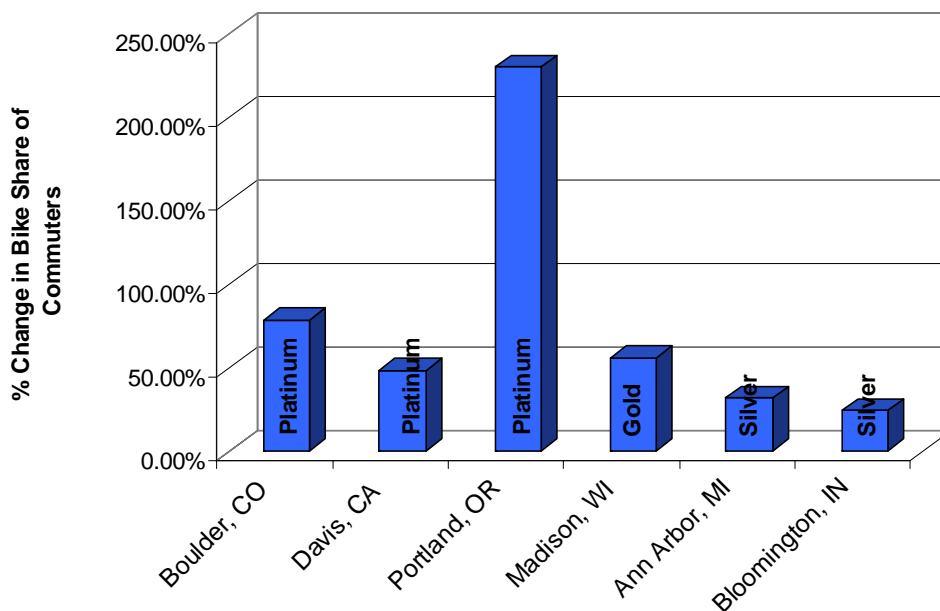
### SAFETY DANCE



Heinrich Safety Triangle illustrates how statistically a fatality is going to happen. For every 300 near-miss or first aid incidents, 30 injuries and one fatality or serious injury will result. Many near-miss or first aid incidents go un-reported. Addressing more frequent accidents can prevent more serious accidents that cause injuries. Therefore understanding where the near-misses are happening **and** addressing the safety issue is a proactive approach in preventing fatalities by fixing the safety issue before a near-miss actually results in a tragedy<sup>16</sup>.

### BIKE COMMUTERS

**Change in Bike Share of Commuters, 2000-2009**



This chart illustrates how ridership has changed over time for some of our peers. The chart on page 2-2, on Per Capita Bike Facility Miles, has Boulder, CO toping the charts and Portland, OR bringing up the rear. What has changed? Now Portland, OR is tops the chart in ridership change over the last decade. High population density, bicycle-friendly infrastructure, and successful education and encouragement programs are likely suspects in changing the game for Portland's bicyclists.

16. Center for Occupational Safety and Health, Purdue University North Central, [www.pnc.edu/ce](http://www.pnc.edu/ce) (accessed August 22, 2011).



## CHAPTER TWO BIBLIOGRAPHY

Association of Pedestrians and Bicycle Professionals, *Key Lawmakers Acting to end Dedicated Bicycling and Walking Funding*, APBP, (July 8, 2011).

Baum, Laura, "Smart Trips Summit-U: An Individualized Marketing Approach to Changing Travel Behavior", *TDM Review*, Issue 4 (2008), <http://data.memberclicks.com/site/asct/TDMR-2008Q4.pdf> (accessed August 9, 2011).

Benson, Tyler, Carol Cooper, and Sunny Knott, "King County Embraces Social Marketing To Change Travel Behavior", *TDM Review*, Issue 4 (2008).

BikeBloomington.com, *Idea: Riders Tricks of the Trade*, (Internet site is currently under development October, 2011).

Center for Occupational Safety and Health, Purdue University North Central, [www.pnc.edu/ce](http://www.pnc.edu/ce) (accessed August 22, 2011).

Garrett-Peltier, Heidi, Political Economy Research Institute, *Pedestrian and Bicycle Infrastructure: A National Study of Employment Impacts*, University of Massachusetts, Amherst June 2011.

Indiana University, *Economic Impact of Tourism to Monroe County, Indiana*, Department of Recreation, Park and Tourism Studies, (June 2010).

Jacobsen, P. L., "Safety in Numbers: More Walkers and Bicyclists, Safer Walking and Bicycling", *Injury Prevention* 9, (2003).

League of American Bicyclists, *Bicyclists Don't Follow the Rules*, <http://www.bikeleague.org/action/trashtalk/behave.php> (accessed August 10, 2011).

League of American Bicyclists, *Bicyclists Should Get on the Sidewalk*, <http://www.bikeleague.org/action/trashtalk/getofftheroad.php> (accessed August 10, 2011).

Lebbon, Angela R., John Austin, Ron Van Houten, and Louis E. Malenfant, "Evaluating the Effects of Traffic on Driver Stopping and Turn Signal Use at a Stop Sign", *Journal of Organizational Behavior Management*, Vol. 27 (2), 2007.

Litman, Todd, "Evaluating Non-Motorized Transportation Benefits and Costs", *Victoria Transport Policy Institute*, June 8, 2011.

Meisel, D., "Bike Corrals Local Business Impacts, Benefits, and Attitudes", Portland State University School of Urban Studies and Planning, 2010, [http://bikeportland.org/wp-content/uploads/2010/05/PDX\\_Bike\\_Corral\\_Study.pdf](http://bikeportland.org/wp-content/uploads/2010/05/PDX_Bike_Corral_Study.pdf) (accessed, August 19, 2011).

### BRIDGE THE DIVIDE



Crossing State Road 37 is very difficult for bicyclists and pedestrians. One location, near Whitehall Crossing Boulevard, offers an underpass for a CSX Rail Road as one possible solution. This location could serve as a westward extension of the B-line Trail. Early planning efforts find this location feasible— even with an active CSX Rail Road. Monroe County Planning Department also identifies other locations along the State Road 37 corridor needing bicycle-friendly improvements. To learn more try these virtual bridges:

"SR 37 Grade-Separated Crossing" <http://bloomington.in.gov/media/media/application/pdf/7027.pdf>

"I69/State Road 37 Alternative Transportation Corridor Study (2007)" <http://www.co.monroe.in.us/tsd/Government/Infrastructure/PlanningDepartment/DocumentManagerPlanning.aspx?EntryId=24803>





National Association of City Transportation Officials, *Urban Bikeway Design Guide*, NACTO, <http://nacto.org/cities-for-cycling/design-guide/>

National Bicycle Dealers Association, Industry Overview, <http://nbda.com/articles/industry-overview-2010-pg34.htm>, 2010 (accessed, August 23, 2011).

Wesley, M., and N. Garrick, "Evidence Why Bike Friendly Cities Are Safer for All Users", *Environmental Practice* 13 (1), March 2011.

## COMMUNITY FESTIVAL + BIKES + FILMS + SUSTAINABILITY = GOOD TIMES



"Clips of Faith" made a tour stop in Bloomington on June 3, 2011. The national tour is a great example of an event that folds bicycling, education, fund raising, and FUN into the whole program. It's not just about bikes, but bicyclists are part of the equation. This event was a first in many ways for Bloomington. The Task Force thinks it was a success! Surely more events like this are soon to come...





*Page Intentionally Blank*



BREAKING AWAY: JOURNEY TO PLATINUM

# **MISS-N-OUT: IMPLEMENTATION STRATEGIES**



TACTICS

ACTION CHARTS

SUMMARY

# 3



## TACTICS

Chapter 2 provides strategies to improve Bloomington's bicycle-friendliness in respect to the Five E's. Chapter 3 takes these strategies and further dials them in towards platinum by setting measurable outcomes for the actions over time. Action charts included within this chapter give the details on the progress needed to either maintain Bloomington's silver status or achieve a gold or platinum level designation. Maintaining our silver status will require continued commitments for many established efforts, such as Bike to Work Day and Bicycle Rodeos. Nothing is static for any of the E's or their platinum actions. Therefore, it is expected that progress will be needed even to maintain our silver status for some actions identified.

The ambition of this report is bold and attaining a gold or platinum designation will require bold actions. The forthcoming action charts offer a menu-like approach towards implementation pegged to a success rating ("status level"): silver, gold, platinum. However, there really is no set formula or checklist for what exactly it will take to become platinum. Some actions may exceed the anticipated success rating while others may fall short. The important factor is not the individual success rating of an action item, but collectively how all actions together will further propel Bloomington along towards bicycle-friendliness.

An example of an action chart is provided below to explain the relationship with Chapter 2 and each action's tactics outlined within a chart. The following section contains the action charts for each action organized by the Five E's: Engineering, Education, Encouragement, Enforcement, and Evaluation and Planning. A quick reference to the action's respective "E" and its overall target is also provided in these charts. The number in the upper left corner is simply for reference purposes. The actions are listed in general order of importance for each target

Finally, the last section of this chapter provides a review to the implementation strategy, a glimpse beyond 2016, and an overall summary table of the action items.

### ANATOMY OF AN ACTION CHART

2

TARGET: Reference to a target and its action items.

THE FIVE E'S

Action	Indicators	2012	2013	2014	2015	2016
CH2 "A.K.A. Statement"	Gives the values to measure the action upon.	Provides a general time-line and expectation level to measure progress.				
Action Summary	Status Level Silver Gold Platinum	Estimates the efforts needed to maintain or elevate Bloomington's bicycle-friendly status.				
general cost estimate	rough estimate on general costs to implement					
project implementer	identifies a City Department, non-profit agency, other lead agency					
project support	identifies City Departments, non-profit agency, other support agencies					



1

**TARGET:** Build neighborhood connections to provide direct access from neighborhoods to parks, schools, and commercial activity centers.

Action	Indicators		2012	2013	2014	2015	2016
Low-Volume Roadway Facilities  Design and implement new, and improve existing, on-street and off-street bicycle facilities for lower-volume roadways using NACTO	Projects	Number	10	5	5	3	2
		Type	on-street	on-street	on-street	on/off-street	on/off-street
	Status Level	Silver	0 existing projects/ 5 total new projects				
		Gold	15 total projects				
		Platinum	25 total projects				
Estimated Capital Costs		\$10,000 to \$100,000 (each)					
Lead Agency		Public Works Department					
Support		Burgess and Niple/Alta Planning and Design and citizen input					

Action	Indicators		2012	2013	2014	2015	2016
<b>Bicycle Boulevards</b>  Design and construct the Allen Street, and a north-south, Bicycle Boulevard - improvements must first focus on reducing the stress level at high-stress locations	Boulevard	Miles	2	0.5	0.5	2	2
		Type	on-street	on-street	on-street	on-street	on-street
	Status Level	Silver	0 existing/ complete designs for boulevards				
		Gold	1 Bicycle Boulevard				
		Platinum	2 or more Bicycle Boulevards				
<i>Estimated Capital Costs</i>		<i>\$10,000 to \$300,000 (per mile)</i>					
<i>Lead Agency</i>		<i>Public Works Department</i>					
<i>Support</i>		<i>Burgess and Niple/Alta Planning and Design and citizen input</i>					

Action	Indicators		2012	2013	2014	2015	2016
Neighborhood Greenways  Expand the Bicycle Boulevard network and create low-stress and traffic-calmed neighborhood streets with low-cost small-scale improvements	Projects	Number	none	none	none	2	2
		Type	n/a	n/a	n/a	on-street	on-street
	Status Level	Silver	0 existing projects				
		Gold	1-2 total projects				
		Platinum	2-4 total projects				
Estimated Capital Costs	\$10,000 to \$50,000 (per project)						
Lead Agency	Public Works Department						
Support	Planning Department, other TBD partners, neighborhoods						





## ENGINEERING

Action	Indicators		2012	2013	2014	2015	2016
<div>B-Line Connections/ Extensions</div> <div>Expand the B-Line trail system south of Country Club Dr, west of Adams St, and east of the Switchyard</div>	Trails	Miles	none	none	0.5	none	2
		Type	n/a	n/a	connection	n/a	extension
	Status Level	Silver	B-Line Trail Completed				
		Gold	~0.5 mile Black Lumber Trail				
		Platinum	~2 mile B-Line Trail north and south extensions				
	Estimated Capital Costs		\$1,000,000 to \$2,000,000 (per mile)				
	Lead Agency		Parks and Recreation Department				
Support		Monroe County, CSX Rail Road, other TBD partners					

Action	Indicators		2012	2013	2014	2015	2016
Cascades Trail  Construct Cascades Trail network from Miller-Showers to Lake Griffy and to North High School	Trail	Miles	none	1	none	none	none
		Type	n/a	trail	n/a	n/a	n/a
	Status Level	Silver	Design & land acq. complete/ ~ 1 mile of phase one				
		Gold	none (future phases after 2016)				
		Platinum	none (future phases after 2016)				
	Estimated Capital Costs		\$750,000 to \$1,500,000 (per mile)				
Lead Agency		Parks and Recreation Department					
Support		Planning and Public Works Departments					

2

**TARGET:** Enhance the existing bicycle network through on-going maintenance and network upgrades to better serve all types of bicyclists including the “interested but concerned” who do not ride regularly, but would ride more if safety and accessibility are improved.

## ENGINEERING

Action	Indicators		2012	2013	2014	2015	2016
<b>Bicycle Asset Management</b>  Maintain bicycle network at the same frequency/urgency as the roadway network	Response	Rate	Low to high (variable)				
		Priority	Low to high (policy)				
	Status Level	Silver	Low frequency and priority levels				
		Gold	Moderate frequency and priority levels				
Platinum		Moderate frequency and high priority					
<i>Estimated Capital Costs</i>	<i>Minimal to moderate (highly variable based on rate and priority)</i>						
<i>Lead Agency</i>	<i>Public Works and Parks and Recreation Departments</i>						
<i>Support</i>	<i>TBD partners</i>						



3

**TARGET:** Make a North-South Bike Arterial along the College Avenue / Walnut Street Corridors (from North Old S.R. 37 to Gordon Pike) AND an East-West Bike Arterial along the 3<sup>rd</sup> Street / SR48 Corridor (from S.R. 446 to Curry Pike).

Action	Indicators		2012	2013	2014	2015	2016
<div>High-Volume Roadway NACTO Intersections</div> <div>Redesign high volume intersections to reduce stress for cyclists and improve overall safety using NACTO</div>	Projects	Number	2	2	2	1	1
		Type	on-street	on-street	on-street	on-street	on-street
	Status Level	Silver	existing network/ 2-4 total new projects				
		Gold	5-8 total new projects				
		Platinum	8 or more total new projects				
	<i>Estimated Capital Costs</i>		<i>\$25,000 to \$250,000 (each)</i>				
	<i>Lead Agency</i>		<i>Public Works Department</i>				
<i>Support</i>		<i>Burgess and Niple/Alta Planning and Design and citizen input</i>					

Action	Indicators		2012	2013	2014	2015	2016
Bike Arterials  Design and implement new, and improve existing, on-street and off-street bicycle facilities for high-volume roadways using NACTO	Projects	Number	5	5	2	2	2
		Type	on-street	on-street	on-street	on-street	on-street
	Status Level	Silver	existing network/ 6 total new projects				
		Gold	12 total new projects				
		Platinum	16 total new projects				
	Estimated Capital Costs		\$25,000 to \$500,000 (each)				
Lead Agency		Public Works and Parks and Recreation Departments					
Support		Burgess and Niple/Alta Planning and Design and citizen input					

Action	Indicators		2012	2013	2014	2015	2016
SR37/I-69 Crossing  Identify, design, and build at least one separated bike/ped facility over/under the SR37/I-69 corridor	Projects	Number	none	none	none	none	1
		Type	n/a	n/a	n/a	n/a	bridge/ tunnel
	Status Level	Silver	Feasibility study				
		Gold	None				
		Platinum	One or more projects				
Estimated Capital Costs	\$1,000,000 to \$3,500,000 (each)						
Lead Agency	Public Works Department						
Support	Monroe County, INDOT, other TBD partners						



4

**TARGET:** Provide secure, convenient, and attractive bike parking to compliment end of bi-cycle trip planning for Downtown Bloomington, City Hall, Indiana University, College Mall, Westside shopping, and Southside shopping to significantly increase the total number of available bike parking spaces.

ENGINEERING

Action	Indicators		2012	2013	2014	2015	2016
Improved Bike Parking  Install bike corrals and covered bike parking at key public and commercial destinations	Projects	Number	2	2	2	2	2
		Type	corral	corral	corral	covered	covered
	Status Level	Silver	2 total projects (corrals)				
		Gold	6 total projects (corrals)				
		Platinum	10 total projects				
	Estimated Capital Costs		\$800 to \$10,000 (each)				
	Lead Agency		Parks and Recreation and Public Works Departments				
Support		TBD Downtown and area business partners					

Action	Indicators		2012	2013	2014	2015	2016	
<div>Bike Parking Supply</div> <div>Provide a minimum ratio of 1:5 for downtown and 1:20 for other areas of public bicycle parking in relation to public vehicle parking</div>	Parking	Racks	20	20	20	25	25	
		Location	downtown	downtown	downtown	city-wide	city-wide	
	Status Level	Silver	existing facilities (~155 downtown racks)/20 new racks					
		Gold	20-60 total new racks					
		Platinum	60 or more total new racks					
	Estimated Capital Costs		\$100 per rack/two bike parking spaces					
Lead Agency		Public Works and Planning Departments						
Support		TBD business partners						



1

**TARGET:** Use effective public relations, marketing, and outreach through varied media techniques (safety, share the road, promotion).

Action	Indicators		2012	2013	2014	2015	2016
<div>Platinum Public Relations</div> <div>Regularly advertise and air active transportation education messages on radio, newspaper, television, and other media</div>	Messages	Number	12	12	12	12	12
		Type	online	& print	& radio	& TV	all media types
	Status Level	Silver	no existing messages/ 6 total new messages				
		Gold	12-36 total new messages				
		Platinum	36-60 total new messages				
	<i>Estimated Costs</i>		<i>\$0 to \$1,000 (each)</i>				
	<i>Lead Agency</i>		<i>Office of the Mayor and Indiana University</i>				
<i>Support</i>		<i>Community Access Television Service, TBD Partners</i>					

Action	Indicators		2012	2013	2014	2015	2016
<div>Webisodes</div> <div>Produce short fun educational bicycle friendly media that can be shared via the internet</div>	Webisodes	Number	2	2	2	2	2
		Type	safety	fun	skills	etiquette	safety
	Status Level	Silver	no webisodes existing/ 2 total new webisodes				
		Gold	6 total new webisodes				
		Platinum	6 or more total new webisodes				
	Estimated Costs	\$0 to \$1,000 each					
Lead Agency	Indiana University and Planning Department						
Support	TBD Partners						

Action	Indicators		2012	2013	2014	2015	2016
<div>Mailing Inserts</div> <div>Include brochures and educational information with City Utilities bills and other agency mailings/orientation packets</div>	Mailings	Number	2	3	4	5	6
		Type	safety	& benefits	& motorist education	& events promo	all subjects
	Status Level	Silver	no mailings				
		Gold	4 mailings per year				
		Platinum	6 mailings per year				
	Estimated Costs		\$0 to \$2,000 (per mailing)				
Lead Agency		City of Bloomington and Indiana University					
Support		Planning Department, TBD Partners					





2

**TARGET:** Teach all school aged children positive lifelong wellness behaviors.

## EDUCATION

Action	Indicators		2012	2013	2014	2015	2016
Children's Bike Safety Classes  Ensure that MCCSC elementary school students take a basic bike safety lesson/class ("off-bike")	Schools	Number	2	4	8	12	14
		Type	safety	safety	safety	safety	safety
	Status Level	Silver	no schools				
		Gold	8 total schools				
		Platinum	14 total schools				
Estimated Costs	None to minimal costs						
Lead Agency	MCCSC						
Support	Planning Department, TBD Partners						

Action	Indicators		2012	2013	2014	2015	2016
<b>Bicycle Rodeos</b>  Include "on-bike" education programs for all 3rd, 4th, 5th, and 6th grades	Schools	Number	2	4	8	12	14
		Type	safety	safety	safety	safety	safety
	Status Level	Silver	No formalized rodeo schedule				
		Gold	8 total schools				
		Platinum	14 total schools				
<i>Estimated Costs</i>	<i>None to minimal costs</i>						
<i>Lead Agency</i>	<i>MCCSC, Private Schools</i>						
<i>Support</i>	<i>Planning Dept, LCIs, Police Dept, IU Health Bloomington Hospital</i>						

Action	Indicators		2012	2013	2014	2015	2016
<div>Safe Routes to School Plans</div> <div>Have comprehensive Safe Routes to School Plans for each elementary school</div>	Schools	Number	2	4	8	12	14
		Type	SRTS Plan	SRTS Plan	SRTS Plan	SRTS Plan	SRTS Plan
	Status Level	Silver	no schools				
		Gold	8 total schools				
		Platinum	14 total schools				
	<i>Estimated Costs</i>		<i>\$0 to \$10,000 (per school)</i>				
<i>Lead Agency</i>		<i>MCCSC, BMCMPD</i>					
<i>Support</i>		<i>INDOT, TBD Partners</i>					



3

**TARGET:** Hone skill sets of professionals by providing bicycle friendly perspectives for high-level officials and professional drivers (bus, truck, taxi, police, fire); offer adults a variety of ways to relearn the joys of bicycling.

Action	Indicators		2012	2013	2014	2015	2016
<div>Adult Bicycle Safety Classes</div> <div>Hold educational classes targeting the interested but concerned adult cyclist using LAB curriculum</div>	Classes	Number	2	3	4	5	6
		Type	TS101, Commuter	TS101, Commuter	TS101, Commuter	TS101, TS201, Commuter	TS101, TS201, Commuter
	Status Level	Silver	2 per year				
		Gold	4 per year				
		Platinum	6 per year				
	<i>Estimated Costs</i>		\$0 to \$250 (per class)				
<i>Lead Agency</i>		Planning Department					
<i>Support</i>		LCIs, TBD Partners					

Action	Indicators		2012	2013	2014	2015	2016
<div>Business Bicycle Classes</div> <div>Offer shortened educational classes and brown bag lunch sessions to businesses on bicycling and safety</div>	Classes	Number	2	4	6	8	10
		Type	Business	Business	Business	Business	Business
	Status Level	Silver	currently no classes/ 2 outreach classes per year				
		Gold	6 outreach classes per year				
		Platinum	10 outreach classes per year				
Estimated Costs	None to minimal costs						
Lead Agency	Planning Department, LCIs						
Support	Chamber of Commerce, TBD Partners						

Action	Indicators		2012	2013	2014	2015	2016
<div>Bicycle Awareness Training</div> <div>Conduct awareness training for City staff and require specialized training for staff which drive daily for work purposes</div>	Trainings	Number	1	3	4	5	6
		Dept.	All (general)	& Fire, Police	& Transit	& Utilities	& Sanitation
	Status Level	Silver	no awareness trainings per year				
		Gold	4 awareness trainings per year				
		Platinum	6 awareness trainings per year				
	Estimated Costs	None to minimal costs					
Lead Agency	Human Resources Department						
Support	LCIs, Planning, Fire, Police, Transit, Utilities, Sanitation						



1

**TARGET:** Program a wide variety of bike events to attract visitors and generate interests ranging from passerby to participant.

Action	Indicators		2012	2013	2014	2015	2016
<div>Sunday Open Streets</div> <div>Hold several Cyclovias from May to October to celebrate active transportation for all ages and abilities</div>	Events	Number	1	2	3	4	5
		Event Sponsors	1-2	2-3	3-4	4-5	5-6
	Status Level	Silver	no existing cyclovias/ 1 event per year				
		Gold	3 events per year				
		Platinum	5 or more events per year				
	<i>Estimated Costs</i>		<i>\$1,000 to \$50,000 per event</i>				
	<i>Lead Agency</i>		<i>Parks and Recreation, Planning, Public Works, and Police Departments</i>				
<i>Support</i>		<i>BEAD, TBD Partners</i>					

Action	Indicators		2012	2013	2014	2015	2016
<div>Fun Rides</div> <div>Feature twelve monthly rides organized around themed concepts and build upon existing successful community events</div>	Rides	Number	2	4	6	10	12
		Type	e.g. Midnight Madness, Ride with the Mayor, Bicycling Musicians, Women's Ride, Flat Tire Ride, Spanish Speakers Ride, Family Fun Ride, etc.				
	Status Level	Silver	no existing fun rides/ 2 fun rides per year				
		Gold	6 fun rides per year				
		Platinum	12 fun rides per year				
Estimated Costs	None to minimal costs						
Lead Agency	Bicycle Friendly Businesses, TBD partners						
Support	Parks and Recreation, Planning, Information and Tech. Services Depts.						

Action	Indicators		2012	2013	2014	2015	2016
Bike to School  Attain a daily participation rate of 25% of children walking and biking to school	Trips to School	Percent	7%	10%	15%	20%	25%
		Type	Bike/walk	Bike/walk	Bike/walk	Bike/walk	Bike/walk
	Status Level	Silver	5% of children biking/walking to school				
		Gold	15% of children biking/walking to school				
		Platinum	25% of children biking/walking to school				
Estimated Costs	None to minimal costs						
Lead Agency	MCCSC						
Support	Planning Dept, BMCMPPO, IU Health Bloomington Hospital						



## ENCOURAGEMENT

Action	Indicators		2012	2013	2014	2015	2016
<div>Mountain Biking Promotion</div> <div>Promote the area's mountain biking resources and Wapehani Mountain Bike Park</div>	Promos	Number	1	2	2	3	3
		Type	Member Drive	& Promo of Wapehani	"	Wapehani Event	"
	Status Level	Silver	no existing events/ 1 event/promo per year				
		Gold	2 events/promos per year				
		Platinum	3 events/promos per year				
	<i>Estimated Costs</i>		<i>\$500 to \$5,000 per event or promo</i>				
	<i>Lead Agency</i>		<i>Convention and Visitors Bureau and Parks and Rec. Department</i>				
<i>Support</i>		<i>Planning Department, DINO, HMBA, TBD Partners</i>					

Action	Indicators		2012	2013	2014	2015	2016
Signature Event  Create a new event or signature bicycle race that will attract all kinds of riders and spectators from around the region	Event	Number	none	none	none	1	1
		Type	plan event	plan event	seek sponsors	hold event	grow event
	Status Level	Silver	no event identified				
		Gold	planning for event underway				
		Platinum	successful implementation of event				
	Estimated Costs		minimal to \$25,000 (depending on sponsorships)				
	Lead Agency		Bloomington Bicycle Club, TBD Partners				
Support		Public Works, Planning, Parks and Recreation Depts.					

2

**TARGET:** Celebrate successes and tout bike related assets that captivate the “interested but concerned” group and acknowledge, reward, and reassure the bicyclist within most of us – especially the everyday bicyclist.

## ENCOURAGEMENT

Action	Indicators		2012	2013	2014	2015	2016
<div>Individualized Marketing</div> <div>Market a different City neighborhood to legitimize active transportation and reduce dependency on the automobile</div>	Neighborhoods	Number	0	1	2	2	4
		Type	none	Core	Core	Core & Non-Core	Core & Non-Core
	Status Level	Silver	no neighborhoods per year				
		Gold	1 neighborhoods per year (total)				
		Platinum	4 neighborhoods per year (total)				
Estimated Costs	\$5 to \$15 per marketing item for each neighborhood resident						
Lead Agency	Housing and Neighborhood Development Department						
Support	Planning Department, Neighborhood Associations, TBD Partners						





## ENCOURAGEMENT

Action	Indicators		2012	2013	2014	2015	2016
<div>Wayfinding</div> <div>Install wayfinding signage along all bike routes that give time and distance to arrive at various destinations</div>	Facility	Miles	~27	~13	~6	~40	~86
		Type	trails/ paths	bike lanes	bike blvds	bike routes	all facilities
	Status Level	Silver	no wayfinding				
		Gold	wayfinding for existing trails, bike lanes, and bike blvds				
		Platinum	wayfinding for all existing bike facilities				
Estimated Costs	\$250 to \$750 per mile						
Lead Agency	Public Works and Parks and Recreation Departments						
Support	Planning Department, TBD Partners						

Action	Indicators		2012	2013	2014	2015	2016
<div>Bike Maps</div> <div>Provide free, readily available, up-to-date and easy-to-use Bloomington Bike Maps</div>	Maps	Number	2,000	2,000	2,000	2,000	2,000
		Type	Existing	Existing	Re-designed	New	New
	Status Level	Silver	Distributed all 2007 bike maps/ new 2011 bike maps				
		Gold	Redesign and distribute new bike map				
		Platinum	Distribution of new bike map				
Estimated Costs	~\$0.50 per map						
Lead Agency	Planning Department						
Support	Convention and Visitors Bureau, Bike Ped Safety Commission, TBD						

Action	Indicators		2012	2013	2014	2015	2016
<b>BikeBloomington.com</b>  Create a webpage to serve as a one-stop-shop for a wide variety of bicycle related resources	Webpage	Visits	n/a	100/Day	500/Day	750/Day	1000/Day
		Steps	development	launch	sponsors/ads	expand	maintain
	Status Level	Silver	no webpage				
		Gold	webpage				
		Platinum	expand and maintain webpage				
<i>Estimated Costs</i>	<i>Development = \$2,000 to \$10,000; Hosting/Maintenance = minimal</i>						
<i>Lead Agency</i>	<i>Bike Ped Safety Commission</i>						
<i>Support</i>	<i>Information and Tech Svcs and Planning Depts., TBD Partners</i>						



ENCOURAGEMENT	Action		Indicators	2012	2013	2014	2015	2016	
	Bike Demonstrations  Showcase programs at community events which demonstrate the bicycle as convenient, affordable, and practical	Demos	Number	2	3	4	5	6	
			Type	campus events	& Farmers' Market	& religious events	& festivals	& other	
		Status Level	Silver	no formalized demonstrations					
			Gold	4 demonstrations per year					
			Platinum	6 demonstrations per year					
		Estimated Costs		none to minimal costs					
	Lead Agency		TBD Partners						
	Support		Local Bike Shops, Parks and Recreation Dept.						

3

**TARGET:** Maximize community wide efforts around Bikes Week that culminate on Bike to Work Day.

ENCOURAGEMENT	Action		Indicators	2012	2013	2014	2015	2016
	Pit-Stops	Pit-Stops	Number	1	2	3	4	6
		Type	downtown	& campus	& 1 activity center	& 2 activity centers	& 4 activity centers	
	Status Level	Silver	some participation from local restaurants					
		Gold	3 formal Bike-to-Work Day Pit-Stops					
		Platinum	6 formal Bike-to-Work Day Pit-Stops					
	Provide pit-stops on Bike to Work Day which offer a variety of snacks, drinks, entertainment, dynamic speakers, and prizes							
	Estimated Costs		minimal to \$500 per pit-stop/prizes					
	Lead Agency		TBD Partners and Parks and Recreation Department					
Support		TBD Partners, Chamber of Commerce, Downtown Bloomington Inc.						

ENCOURAGEMENT	Action		Indicators	2012	2013	2014	2015	2016
	Clinics and Convoys  Have mobile clinics and commuter convoys leading up to Bike-to-Work Day	Events	Number	1	2	3	4	4
			Type	convoy	convoy and clinic	convoys and clinic	convoys and clinics	convoys and clinics
		Status Level	Silver	no convoys or clinics				
			Gold	2 convoys and 1 clinic per year				
			Platinum	2 convoys and 2 clinic per year				
		Estimated Costs		none to minimal cost				
	Lead Agency		TBD partners					
	Support		YMCA, Planning and Parks & Recreation Departments					



ENCOURAGEMENT	Action		Indicators	2012	2013	2014	2015	2016
	Bike to Work Registration	Participant s	Number	200	300	500	750	1000
			Type	registered riders	registered riders	registered riders	registered riders	registered riders
		Increase registration of cyclists, request feedback, and respond to needs for Bike-to-Work Day participants to ensure growth & success	Status Level	Silver	about 100 registered riders			
	Gold			500 registered riders				
	Platinum			1000 registered riders				
	Estimated Costs		none to minimal cost					
	Lead Agency		Parks and Recreation Department					
	Support		Information & Tech. Svcs. Dept., Chamber of Commerce, TBD					

4

**TARGET:** Build community partnerships and seek advocacy and leadership from non-city agencies and organizations.

ENCOURAGEMENT	Action		Indicators	2012	2013	2014	2015	2016
	BFB Program	Local Business	Number	2	2	2	2	2
			Type	new BFBs	new BFBs	new BFBs	new BFBs	new BFBs
		Status Level	Silver	Prior to 2010 no BFBs/ currently 3 BFB's				
			Gold	6 or more BFBs				
			Platinum	10 or more BFBs				
	Estimated Costs		none to minimal cost					
	Lead Agency		Economic and Sustainable Development Department					
	Support		Planning Dept., League of Am. Bicyclists, TBD Partners					

ENCOURAGE	Action		Indicators	2012	2013	2014	2015	2016	
	Brown Bag Lunch Sessions	Sessions	Number	2	4	6	8	12	
			Type	Lunch Sessions	Lunch Sessions	Lunch Sessions	Lunch Session	Lunch Sessions	
		Status Level	Silver	no lunch hour sessions					
			Gold	6 lunch hour sessions per year					
			Platinum	12 lunch hour sessions per year					
	Hold regular lunchtime meetings with area employers to discuss bicycling and ways to increase bike commuter trips								
	Estimated Costs		none to minimal cost						
	Lead Agency		Economic and Sustainable Development and Planning Depts.						
Support		Local BFBs, LCIs, TBD Partners							



1	TARGET: Change the laws to adequately address law enforcement and bicyclists needs.								
ENFORCEMENT	Action	Indicators		2012	2013	2014	2015	2016	
	Vulnerable Road User Law  Pass a local law to provide additional legal protection for bicyclists, appropriate fines for violations, and flexible enforcement tools	Law	Steps	Draft Law	Pass Law	Monitor effective-ness	Monitor effective-ness	Monitor effective-ness	
		Status Level	Silver	no vulnerable road user law					
			Gold	passed vulnerable road user law					
			Platinum	monitor effectiveness of road user law					
	Estimated Costs	none to minimal costs							
	Lead Agency	Legal Department and Common Council							
	Support	BBC, Bloomington Police Department							

2		TARGET: Use special detail assignments, bike patrols, and roll-call trainings for frequent and targeted law enforcement and activities.							
ENFORCEMENT	Action		Indicators		2012	2013	2014	2015	2016
	Bicycle Patrols	Patrols	Number	2	4	12+	36+	72+	
			Type	special events	special events	major events	major events & weekends	& popular week-nights	
		Status Level	Silver	irregular bike patrols					
			Gold	special events bike patrols					
			Platinum	major events, weekends, & popular weeknight patrols					
	Estimated Costs		none to minimal costs (overtime)						
	Lead Agency		Police Department						
	Support		Indiana University Police Department, TBD Partners						





## ENFORCEMENT

Action	Indicators		2012	2013	2014	2015	2016
<div>Special Enforcement Detail</div> <div>Issue special enforcement details during I Walk to School Day, Bike to Work Day, high crash intersections, school zones, &amp; other areas</div>	Detail	Number	1	2	3	4	5
		Type	I Walk to School	& Bike to Work	& School Zones	& Problem inter-sections	Continue Enforcement
	Status Level	Silver	I Walk to School enforcement				
		Gold	I Walk, Bike to Work, school zone enforcement				
		Platinum	All above, and problem intersections				
	<i>Estimated Costs</i>		<i>minimal to some additional costs (overtime)</i>				
<i>Lead Agency</i>		<i>Office of the Mayor and Police Department</i>					
<i>Support</i>		<i>MCCSC, Planning Department, TBD Partners</i>					

Action	Indicators		2012	2013	2014	2015	2016
Roll-Call Trainings  Hold regular roll call trainings focused on bicycle and pedestrian safety	Trainings	Number	2	4	6	10	12
		Freq.	per year	per year	per year	per year	per year
	Status Level	Silver	no trainings				
		Gold	trainings every other month				
		Platinum	trainings every month				
	Estimated Costs		none to minimal				
	Lead Agency		Police and Planning Departments				
Support		Bloomington Bicycle Club, TBD Partners					

Action	Indicators		2012	2013	2014	2015	2016
Bike Light Campaign  Continue the annual bike light campaign and distribute free lights to cyclists	Light Sets	Number	75	75	75	100	100
		Freq.	per year	per year	per year	per year	per year
	Status Level	Silver	60 light sets per year				
		Gold	75 light sets per year				
		Platinum	100 light sets per year				
	Estimated Costs		\$20 per light set				
Lead Agency		Planning and Police Departments					
Support		Bloomington Bicycle Club					



3

**TARGET:** Expand the enforcement “tool box” to move beyond citations and ordinance violations.

ENFORCEMENT	Action		Indicators		2012	2013	2014	2015	2016
	Drivers Training	Trainings	Type	Get questions on drivers license test			Defensive driving training		
			Status Level	Silver	no driver training				
		Gold		Questions on drivers license test					
		Platinum		Defensive driving training					
	Estimated Costs		none to minimal						
	Lead Agency		Indiana Bureau of Motor Vehicles						
	Support		Legal and Planning Departments, Bicycle Indiana						



1

**TARGET:** Monitor, respond, report, and modify to keep the Platinum vision bold and help ensure effective use of community resources are towards platinum goal.

EVALUATION &amp; PLANNING

Action	Indicators		2012	2013	2014	2015	2016
<div>Bike Summit</div> <div>Hold Annual Bike Summits during May to reflect, innovate, and respond to Targets and Actions of this report</div>	Events	Number	1	1	1	1	1
		Freq.	per year	per year	per year	per year	per year
	Status Level	Silver	no bike summit per year				
		Gold	1 bike summit per year				
		Platinum	1 bike summit per year				
	<i>Estimated Costs</i>		<i>minimal to \$1,500 per summit</i>				
	<i>Lead Agency</i>		<i>Planning Department</i>				
<i>Support</i>		<i>Bicycle Friendly Businesses, TBD Partners</i>					

2

**TARGET:** Study the economic impact bicycling has on local tourism, health, environment, transportation, and other key indices.

EVALUATION &amp; PLANNING

Action	Indicators		2012	2013	2014	2015	2016
<b>Economic Impact Study</b>  Commission an independent economic impact study to evaluate past, present, and future economic impacts on bicycling	Study	Step	gather data	gather data	write report	complete report	n/a
	Status Level	Silver	no report				
		Gold	gather data and start to write report				
		Platinum	finish report				
<i>Estimated Costs</i>	<i>minimal to \$50,000 (if consultant is hired)</i>						
<i>Lead Agency</i>	<i>Planning Department and Indiana University</i>						
<i>Support</i>	<i>Economic and Sustainable Development, BEDC, CVB, TBD Partners</i>						



EVALUATION & PLANNING	Action		Indicators	2012	2013	2014	2015	2016	
	Data Analysis  Collect and analyze data on cycling rates, trip distances, trip purposes, and mode preferences at the neighborhood level	Data	Number	20	30	100	100	100	
			Type	Inter-section Counts	Inter-section Counts	User Surveys	User Surveys	User Surveys	
		Status Level	Silver	sporadic cycling rate data collection					
			Gold	systematic cycling rate data					
			Platinum	reliable data on cycling habits and preferences					
		Estimated Costs		none to minimal costs					
	Lead Agency		Planning Department						
	Support		BMCMP, other TBD Partners						

3

**TARGET:** Monitor bike activity trends and improve mode balance in comparison to automobile trips within the transportation network.

PLANNING	Action		Indicators		2012	2013	2014	2015	2016
	Indexed City Budget  Index the City's annual budget to the City's Platinum Biking Community efforts	Index	Percent	1 to 5%	1 to 5%	1 to 5%	1 to 5%	1 to 5%	
		Status Level	Silver	\$500,000/yr (flat)					
			Gold	3% of City's budget (indexed)					
			Platinum	5% of City's budget (indexed)					
	Estimated Costs		\$324,000 to \$1.6 million per year						
	Lead Agency		Office of the Mayor and Common Council						
	Support		All City Departments						

EVALUATION	Action		Indicators	2012	2013	2014	2015	2016	
	Comprehensive Survey	Event	Step	data collection	survey analysis	evaluate Platinum strategy	change approach as needed	repeat survey steps	
		Status Level	Silver	no comprehensive survey					
			Gold	updated strategy to get to Platinum					
			Platinum	implementation of new approach as needed					
	Estimated Costs		minimal to \$30,000 (if consultant is hired)						
	Lead Agency		Planning Department						
	Support		TBD partner						





## EVALUATION &amp; PLANNING

Action	Indicators		2012	2013	2014	2015	2016
<div>Commuter Mode Split</div> <div>Monitor, evaluate, and report bike commuter activities with the goal of attaining a 10% bicycle commuter mode compared to automobiles</div>	Mode Split	Percent	3%	4%	6%	8%	10%
		Type	trips to work by bike	trips to work by bike	trips to work by bike	trips to work by bike	trips to work by bike
	Status Level	Silver	3% trips to work by bike				
		Gold	6% trips to work by bike				
		Platinum	10% trips to work by bike				
	Estimated Costs		None to minimal costs				
Lead Agency		Planning Department					
Support		Volunteers, TBD partners					

Action	Indicators		2012	2013	2014	2015	2016
<div>Safety Triangle</div> <div>Achieve zero annual bike/ped related deaths through near miss reporting, crash data analysis, and targeted safety improvements</div>	Fatalities	Number	3	2	1	1	none
		Freq.	per year	per year	per year	per year	per year
	Status Level	Silver	3 bike ped fatalities per year				
		Gold	1 bike ped fatalities per year				
		Platinum	no bike ped fatalities per year				
	Estimated Costs		No direct costs				
	Lead Agency		Public Works, Police, Planning Departments				
Support		BMCMPPO, TBD Partners					

Action	Indicators		2012	2013	2014	2015	2016
<b>Combat Obesity</b>  Utilize active transportation as an effective means to help combat the obesity epidemic and reduce Monroe County's Risk Index	Obesity	Percent	24%	23%	22%	21%	19%
		Type	Monroe Co. risk index	Monroe Co. risk index	Monroe Co. risk index	Monroe Co. risk index	Monroe Co. risk index
	Status Level	Silver	25% Monroe County risk index				
		Gold	22% Monroe County risk index				
		Platinum	19% Monroe County risk index				
	<i>Estimated Costs</i>		<i>No direct cost</i>				
	<i>Lead Agency</i>		<i>Planning Dept. and IU Health Bloomington Hospital</i>				
<i>Support</i>		<i>Community and Family Resources Department</i>					



EVALUATION & PLANNING	Action		Indicators		2012	2013	2014	2015	2016
	Track VMT and GHG		Webpage	Step	gather/analyze data	gather/analyze data	gather/analyze data	gather/analyze data	achieve target level
	Track Vehicle Miles Traveled and Greenhouse Gas emissions to measure plan's progress towards increasing active transportation		Status Level	Silver	2.5% carbon offset (3,685 ton reduction)				
				Gold	5% carbon offset (7,370 ton reduction)				
				Platinum	10% carbon offset (14,740 ton reduction)				
	Estimated Costs		None to minimal direct costs						
	Lead Agency		Planning Department and Environmental Commission						
Support		BMCMPPO, TBD Partners							

## SUMMARY

The Bloomington Platinum Biking Task Force make these action recommendations based on their review of information outlined within Resolution 10-10. Many of these actions items are similar to steps other prominent bicycle-friendly communities are doing. Most will require fine-tuning in order to maximize the beneficial effects that action items will have on Bloomington. Almost all should be viewed as an iterative process, especially for the on-going items, where progress is made by constantly building support through innovation and adaption. There are many existing programs, events, and activities that with some fine-tuning, innovation, and adaptation can easily transition into an action item identified herein. Opportunities for Education, Encouragement, Enforcement, and Evaluation and Planning have the best potential for this kind of transition. Engineering will also need to take a transitional approach in designing the best bicycle-friendly infrastructure. Near-term infrastructure improvements must focus on reducing the stress level for bicyclists at high stress locations. This should start with simple lower-cost countermeasures that set the foundation for more substantive infrastructure improvements later. Long-term improvements will need to fill the larger gaps and create a functioning bicycle-friendly network for even the interested but concerned.

Achieving all actions is not realistic by 2016; and however, continuing current efforts is not a realistic option to reaching the goals of Resolution 10-10. This leaves the expectation level somewhere in-between. It is expected that progress will be made on most actions items. How much progress requires fine-tuning and evaluation of the strategy. It is up to Bloomingtonians to dial-in the expectation level for these action items at the annual Bike Summit and ensure progress is indeed made. Regardless of Bloomington's Bicycle Friendly Community rating in 2016, one thing is clear: being a Bicycle Friendly Community is an on-going commitment that will take everyone well beyond 2016.

The following table summarizes all the action items and identifies general costs that are associated with each action item. Costs can vary significantly depending on many variables including staff salaries and partners' costs. On-going actions indicate strategies that occur frequently and are generally indefinite. These are only intended to set initial expectation levels and can be updated as necessary.



Action Summary					Cost Estimate (per unit)				
Action A.K.A. Statement	Action Indicator	Indicator Units	Silver Benchmark	Platinum Target	On-going	<\$10K	\$10K to \$100K	\$101K to \$1M	>\$1M
<b>ENGINEERING</b>									
Low-Volume Roadway Facilities	projects	number	5	25			X		
Bicycle Boulevards	facility	miles	0	6			X	X	
Neighborhood Greenways	projects	number	0	4			X		
B-Line Connections/Extensions	trails	miles	0	2.5					X
Cascades Trail	trails	miles	1	1				X	
Bicycle Asset Management	response	rate	low	high	X		X		
High-Volume Roadway NACTO Intersections	projects	number	4	8			X		
Bike Arterials	projects	number	6	16			X	X	
SR37/ I-69 Crossing	projects	number	0	1					X
Improved Bike Parking	projects	number	2	10	X	X			
Bike Parking Supply	parking	racks	20	110	X	X			
<b>EDUCATION</b>									
Platinum Public Relations	messages	number	6	60	X	X			
Webisodes	webisodes	number	2	6	X	X			
Mailing Inserts	mailings	number	0	6	X	X			
Children's Bike Safety Class	schools	number	0	14	X	X			
Bicycle Rodeos	schools	number	0	14	X	X			
Safe Routes to School Plans	schools	number	0	14	X	X			
Adult Bicycle Safety Classes	classes	number	2	6	X	X			
Business Bicycle Classes	classes	number	2	10	X	X			
Bicycle Awareness Training	trainings	number	1	7	X	X			
<b>ENCOURAGEMENT</b>									
Sunday Open Streets	events	number	1	5	X		X		
Fun Rides	rides	number	2	12	X	X			
Bike to School	trips	percent	5%	25%	X	X			
Mountain Biking Promotion	promos	number	1	3	X	X			
Signature Event	event	number	0	1	X		X		
Individualized Marketing	neighborhoods	number	0	4	X	X			
Wayfinding	facility	miles	0	86		X			
Bike Maps	maps	number	2000	2000	X	X			
BikeBloomington.com	webpage	visits	0	1000	X	X			
Bike Demonstrations	demos	number	0	6	X	X			
Pit-Stops	pit-stops	number	1	6	X	X			
Clinics and Convoys	events	number	0	4	X	X			
Bike to Work Registration	participants	number	100	1000	X	X			
BFB Program	participants	number	3	10	X	X			
Brown Bag Lunch Sessions	sessions	number	0	12	X	X			
<b>ENFORCEMENT</b>									
Vulnerable Road User Law	law	logic	no	yes			N/A		
Bicycle Patrols	patrols	number	0	72+	X	X			
Special Enforcement Detail	details	number	1	5	X	X			
Roll-Call Trainings	trainings	number	0	12	X	X			
Bike Light Campaign	light sets	number	60	100	X	X			
Drivers Training	trainings	logic	no	yes			N/A		
<b>EVALUATION AND PLANNING</b>									
Bike Summit	events	number	0	1	X	X			
Economic Impact Study	study	logic	no	yes				X	
Data Analysis	data	survey	0	100	X	X			
Indexed City Budget	index	percent	0	5%	X	N/A			
Comprehensive Survey	event	survey	0	varies				X	
Commuter Mode Split	mode-split	percent	3%	10%	X	N/A			
Safety Triangle	fatality	number	3	0	X	X			
Combat Obesity	obesity	percent	24%	19%	X	N/A			
Track VMT and GHG	carbon offset	percent	2.5%	7%	X	N/A			







BREAKING AWAY: JOURNEY TO PLATINUM

# TEAM PURSUIT: PLATINUM BFC RESOURCES



TERMINOLOGY

FURTHER READING

THE PLATINUM BIKE SUMMIT

REDEFINING PROSPERITY REPORT

VULNERABLE ROAD USER RESOLUTION

RESOLUTION 11-15

# 4





Being an effective bicycle advocate requires knowing a few things about transportation and local government. This chapter is intended to provide additional information, bring everyone up-to-speed on recent bicycle advocacy in Bloomington, and provide a gateway to current research and best practices from around the world. It is a resource that even the interested but concerned can use to further our efforts in becoming the very best at being a bicycle-friendly community and fulfill Bloomington's Platinum vision.

## TERMINOLOGY

This section provides an alphabetical quick-reference to many common terms that may not be familiar to most readers, but are used throughout this report.

**'10 Minute Neighborhood':** a planning and land-use concept that aims to locate basic community functions (homes, schools, grocery stores, etc.) within a 10-minute walking distance to each other. Similar to the concept of 'Activity Nodes', 'Natural Neighborhoods', or 'Villages'.

**Arterial Street:** a street that carries high traffic volumes, often serving longer trips by virtue of connecting major destinations across the city.

**Bicycle Ambassador:** an individual, often part of a paid team, who conducts community outreach encouraging people to bicycle and educating on safety. Philadelphia and Chicago have model programs.

**Bicycle Level of Service (BLOS):** a quantitative measurement of the comfort level of a bicycle facility. Analogous to measurements used for automobile travel, bicycle level of service analysis can help identify areas in need of improvement or demonstrate the benefits of potential improvements.

**Bicycle Rodeo:** a bicycle skills event, *almost* always for children, where basic safety skills are taught and practiced in a fun environment.

**Bike Arterial:** a high-volume arterial street that also includes bicycle facilities.

**Bike Boulevard:** generally interchangeable with the term 'neighborhood greenway', with an emphasis on bicycling aspects of the facility.

**Bike Corral:** a section of roadway, most often what was previously a car parking space, that's cordoned off exclusively for bicycle parking.

**Bike Share of Commuters:** for a given community, the percentage of workers who identify bicycling as their primary means of transportation to work—most of the time. While this leaves out many people who bicycle regularly, it is the standard measurement of bicycling use throughout America because the U.S. Census Bureau collects this data annually throughout the country.

**Bikeway:** a general term for a transportation corridor that includes a variety of accommodations for bicycles.



**‘Interested But Concerned’:** people who are interested in bicycling, but have safety concerns. Estimated to include nearly 60% of the population in a given community, this group has the greatest potential to increase overall bicycling activity for a community.

**League Cycling Instructor:** a person certified by the League of American Bicyclists to teach bicycle education courses.

**Metropolitan Planning Organization (MPO):** a regional transportation planning body that’s required for all U.S. urbanized areas greater than 50,000 people. Usually comprised of members appointed by local governments, MPO’s must approve the spending of all federal transportation dollars in their area. Visit <http://www.bloomington.in.gov/mpo>.

**Mode Split:** for a given community, the distribution of all travel between the available types of transportation (driving, walking, transit, bicycling, taxi, etc.). This data is collected regularly by the U.S. Census Bureau and is focused around journey to work.

**NACTO Urban Bikeway Design Guide:** a comprehensive manual that provides design and implementation details on a wide range of recommended bicycle facilities. Created by the National Association of Transportation Officials to help spread American best-practices in bicycle engineering.

**Neighborhood Greenway:** a low-volume, low-speed street that is very comfortable for bicycling and may include additional wayfinding, pedestrian, storm water, or park-like features. Also known as a ‘bicycle boulevard’.

**Sunday Open Streets (Ciclovía):** an event that creates a linear park-like condition by temporarily closing a network of streets to cars and opening them to people. Started in Bogota, Columbia, the event has spread to cities throughout the U.S.

**‘Share the Road’:** a common term that generally refers to the legal responsibility of all drivers and bicyclists to share the same roadway space. In all 50 states, bicycles are classified as vehicles.

**Safe Routes to School:** an international movement to increase the number of children who walk or bike to school. In America, the federal government has provided annual funding for infrastructure and non-infrastructure programs since 2005.

**The Five Es:** an organizing framework that delineates the major focus areas of programs to increase bicycling and bicycling safety - Engineering, Education, Encouragement, Enforcement, and Evaluation. Used widely in America as part of the Bicycle Friendly Community and Safe Routes to School programs.

**Vehicle Miles Traveled (VMT):** the total number of miles driven by vehicles in a particular area, usually given as a yearly value. This is an important metric in transportation planning, and is often used to estimate greenhouse gas emissions.

**Vulnerable Road User:** a person who is particularly susceptible to the risks of moving automobiles. This includes bicyclists, pedestrians, road workers, and others.



## FURTHER READING

**T**his section provides a quick-reference to some of the latest research and news on bicycling from around the world. It links to a wide array of academic papers, government research, non-profit reports, and news articles. It is organized around two questions that are central to this report - 1) why is it important to increase bicycling? and 2) what can we do to increase bicycling? For those of you who were intrigued or inspired by parts of this report, this section will serve as a wonderful starting point for further learning.

### WHY IS IT IMPORTANT TO INCREASE BICYCLING?

#### *Economic Benefits & Equity*

- 🚲 [Pedestrian and Bicycle Infrastructure: A National Study of Employment Impacts](#). Heidi Garrett-Peltier, Political Economy Research Institute (PERI), University of Massachusetts-Amherst, 2011.
- 🚲 [Penny Wise Pound Foolish: New Measures of Housing and Transportation Affordability](#). Center for Neighborhood Technology (CNT), 2010.
- 🚲 [Transportation and Poverty Alleviation](#). Surface Transportation Policy Project (STPP).
- 🚲 [Complete Streets Spark Economic Revitalization](#). National Complete Streets Coalition.
- 🚲 [The Economic Benefits of Bicycle Infrastructure Investments](#). Darren Flusche, League of American Bicyclists, 2009.
- 🚲 [Evaluating Non-Motorized Transportation Benefits and Costs](#). Todd Litman, Victoria Transport Policy Institute, 2011.
- 🚲 [Costs and Benefits of Bicycling Investments in Portland, Oregon](#). Thomas Gotschi, Journal of Physical Activity and Health, 2011.
- 🚲 [The Bicycle Dividend](#). Nancy Folbre, *The New York Times*, 2011.
- 🚲 [Property Value/Desirability Effects of Bike Paths Adjacent to Residential Areas](#). David P. Racca and Amardeep Dhanju, Delaware Center for Transportation and Delaware DOT, University of Delaware, 2006.
- 🚲 [Impact of the Little Miami Scenic Trail on Single Family Residential Property Values](#). Duygu Karadeniz, Masters Thesis, University of Cincinnati, 2008.

#### *Health & Safety*

- 🚲 [Evidence Why Bike Friendly Cities Are Safer for All Users](#). Wesley E. Marshall & Norman W. Garrick, *Environmental Practice*, 2011.
- 🚲 [Prevalence of Obesity Among Children and Adolescents: United States, Trends 1963-1965 through 2007-2008](#). Cynthia Ogden and Margaret Carroll, Center for Disease Control (CDC), 2010.
- 🚲 [Walking, Cycling, and Obesity Rates in Europe, North America, and Australia](#). David R. Bassett, et al, *Journal of Physical Activity and Health*, 2008.
- 🚲 [Do The Health Benefits Of Cycling Outweigh The Risks?](#) Jeroen Johan de Hartog et al., *Environmental Health Perspectives*, 2010.
- 🚲 [America's Top Cities for Bike Commuting: Happier, Too](#). Richard Florida, *The Atlantic*, 2011.



## Environmental Sustainability

- 🚲 [The 2009 Greenhouse Gas Inventory for the City of Bloomington, Indiana: Footprint, Projections, and Recommendations.](#) Mark Lemon, Patrick Foley, and Frances Gary, City of Bloomington, 2009.
- 🚲 [Moving Cooler: An Analysis of Transportation Strategies for Reducing Greenhouse Gas Emissions.](#) Cambridge Systematics, Inc., 2009.
- 🚲 [Transportation's Role in Climate Change.](#) US Department of Transportation.
- 🚲 [Top 10 Least-Polluting U.S. Metros.](#) Jeffery Spivak, Urban Land Institute (ULI), 2011.

## WHAT CAN WE DO TO INCREASE BICYCLING?

## Measuring Use

- 🚲 [2009 National Household Travel Survey - Highlights.](#) League of American Bicyclists & America Bikes, 2010.
- 🚲 [Short and Sweet Analysis of Shorter Trips Using National Personal Travel Survey Data.](#) Todd Litman, Victoria Transport Policy Institute, 2010.
- 🚲 [Bicycling and Walking in the U.S.: 2010 Benchmarking Report.](#) Alliance for Biking & Walking, 2010.
- 🚲 [The National Bicycling and Walking Study – 15 Year Status Update.](#) Federal Highway Administration, 2010.
- 🚲 [American Community Survey Bicycle Commuting Trends, 2000 – 2008.](#) League of American Bicyclists & Alliance for Biking and Walking, 2009.
- 🚲 [Four Types of Cyclists.](#) Roger Geller, Portland Bureau of Transportation.

## Policies and Programs

- 🚲 [Policy Statement on Bicycle and Pedestrian Accommodation Regulations and Recommendations.](#) US Department of Transportation, 2010.
- 🚲 [Infrastructure, Programs, and Policies to Increase Bicycling: An International Review.](#) John Pucher, Jennifer Dill, and Susan Handy, Preventative Medicine, 2010.
- 🚲 [Analysis of Bicycling Trends and Policies in Large North American Cities: Lessons from New York.](#) John Pucher and Ralph Buehler, University Transportation Research Center - Rutgers, 2011.
- 🚲 [Transportation and Health: Policy Interventions for Safer, Healthier People and Communities.](#) Partnership for Prevention, 2011.

## Facility Design &amp; Improving Safety

- 🚲 [The Effect of Street Network Design on Walking and Biking.](#) Wesley E. Marshall & Norman W. Garrick, presented at the Transportation Research Board's 89<sup>th</sup> Annual Meeting, 2009.
- 🚲 [Understanding and Measuring Bicycling Behavior: A Focus on Travel Time and Route Choice.](#) Jennifer Dill & John Gliebe, Oregon Transportation Research and Education Consortium (OTREC), 2008.
- 🚲 [How We Roll There's Safety in Numbers for Cyclists.](#) Elly Blue, Grist, 2011.
- 🚲 [Safety in Numbers: More Walkers and Bicyclists, Safer Walking and Bicycling.](#) Peter L Jacobsen, Injury Prevention, 2003.
- 🚲 [The Impact of Transportation Infrastructure on Bicycling Injuries and Crashes: A Review of the Literature.](#) Conor CO Reynolds, et al, Environmental Health, 2009.





### Encouragement

- 🚲 [Promoting Safe Walking and Cycling to Improve Public Health: Lessons From the Netherlands and Germany.](#) John Pucher, and Lewis Dijkstra, American Journal of Public Health, 2003.
- 🚲 [Evaluation of Australian TravelSmart Projects in the ACT, South Australia, Queensland, Victoria and Western Australia 2001-2005.](#) Report to the Department of the Environment and Heritage and State TravelSmart Programme Managers, 2005.
- 🚲 [Smart Trips Summit-U: An Individualized Marketing Approach to Changing Travel Behavior in St Paul MN.](#) Laura Baum, *TDM Review*, 2008 Issue 4.
- 🚲 [Applying Individualized Marketing to the Workplace.](#) Steve Hoyt-McBeth, Courtney Kulyk, UrbanTrans, and Scott Cohen. *TDM Review*, 2008 Issue 4.
- 🚲 [King County Embraces Social Marketing To Change Travel Behavior.](#) Tyler Benson, Carol Cooper, and Sunny Knott. *TDM Review*, 2008 Issue 4.
- 🚲 [Portland SmartTrips.](#) Pedestrian and Bicycle Information Center, 2011.
- 🚲 [Women Cycling Project.](#) Andrea Garland, et al, Association of Pedestrian and Bicycle Professionals, 2011.
- 🚲 [How To Get More Bicyclists On The Road.](#) Linda Baker, *Scientific American*, 2009.

## THE PLATINUM BIKE SUMMIT

The Platinum Bike Summit was held on Thursday, April 28, 2011 at the Bloomington Monroe County Convention Center. The event had dual purposes: to celebrate bicycling and to prioritize actions to make Bloomington more bicycle-friendly.

The summit began with a reception where attendees socialized with other cyclists and received information about local bike-friendly organizations while enjoying snacks and beverages. The reception was sponsored by Bicycle Garage Inc., Bikesmiths, Bloomington Bicycle Club, Bloomingtonfoods, Bloomington Pedal Power, Bloomington Transportation Options for People (B-TOP), the City of Bloomington Commission on Sustainability (BCOS), and Downtown Bloomington, Inc.

The workshop following the reception focused on strategies for making Bloomington a Platinum level Bicycle Friendly Community by 2016. The 66 attendees were split into groups, each addressing one of the “Five Es” focus areas.

Each group developed a list of top ideas to make Bloomington more bicycle friendly. Then, attendees received five dots, which they could use to vote on all of the ideas suggested that evening. The dots were allocated however each person wanted, whether five dots on one idea or one dot on five different ideas. Top vote-getters included installing bike boxes at intersections, subsidizing bike trailers, creating bike boulevards (especially east-west), and providing targeted bike education for both motorists and cyclists. Information on community priorities was incorporated into the recommendations of this report.



## WHO ATTENDED

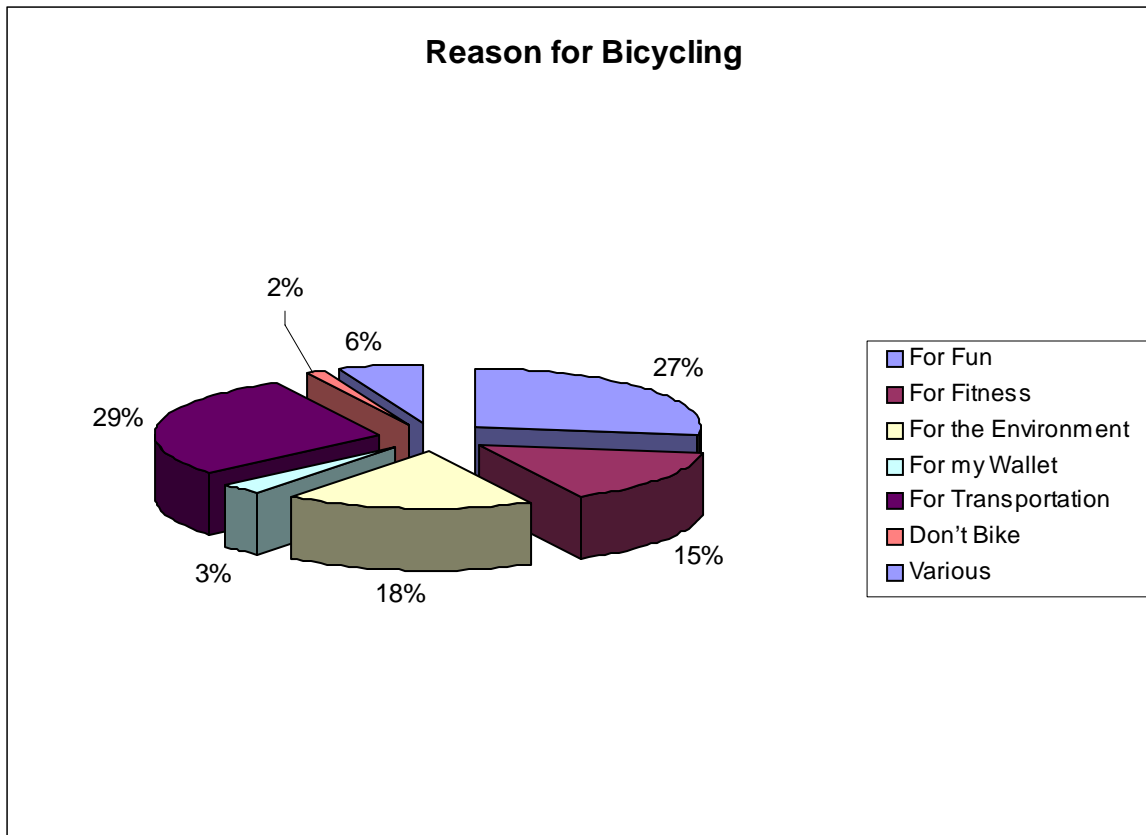
The attendees included many of Bloomington's most dedicated bicyclists. The majority (56%) ride daily, and more than 45% of attendees own 4 or more bicycles!

## WHAT WERE THEIR PRIORITIES?

Each attendee was asked to rank each of the 'Five E's' in order of importance. One signified most important while 5 signified least important. The results of this survey, identified that - 'Engineering' is the area that needs the most attention, followed closely by 'Education', 'Evaluation and Planning', 'Enforcement', and then 'Encouragement'.

The pie chart below provides some information on who attended the Platinum Bike Summit and their various reasons for bicycling. From the results, one could conclude the Summit had a good variety of bicyclists who attended and provided their ideas and priorities.

For more detailed results, contact the Bloomington Planning Department or visit <http://bloomington.in.gov/bike>.



**Platinum Bike Summit Results** - Participants were simply asked "what is your main reason for bicycling"? From these results there is a great cross-section of bicyclists and even a few who currently don't ride. This would suggest that there was broad representation at the Summit and it was effective towards providing meaningful community feedback to the Platinum Biking Task Force.



## REDEFINING PROSPERITY REPORT

On December 2, 2009, the Bloomington City Council approved the report of the Bloomington Peak Oil Task Force, titled *Redefining Prosperity: Energy Descent and Community Resilience*. One of the few reports of its kind, *Redefining Prosperity* details bold strategies for Bloomington to adapt to the consequences of declining oil production.

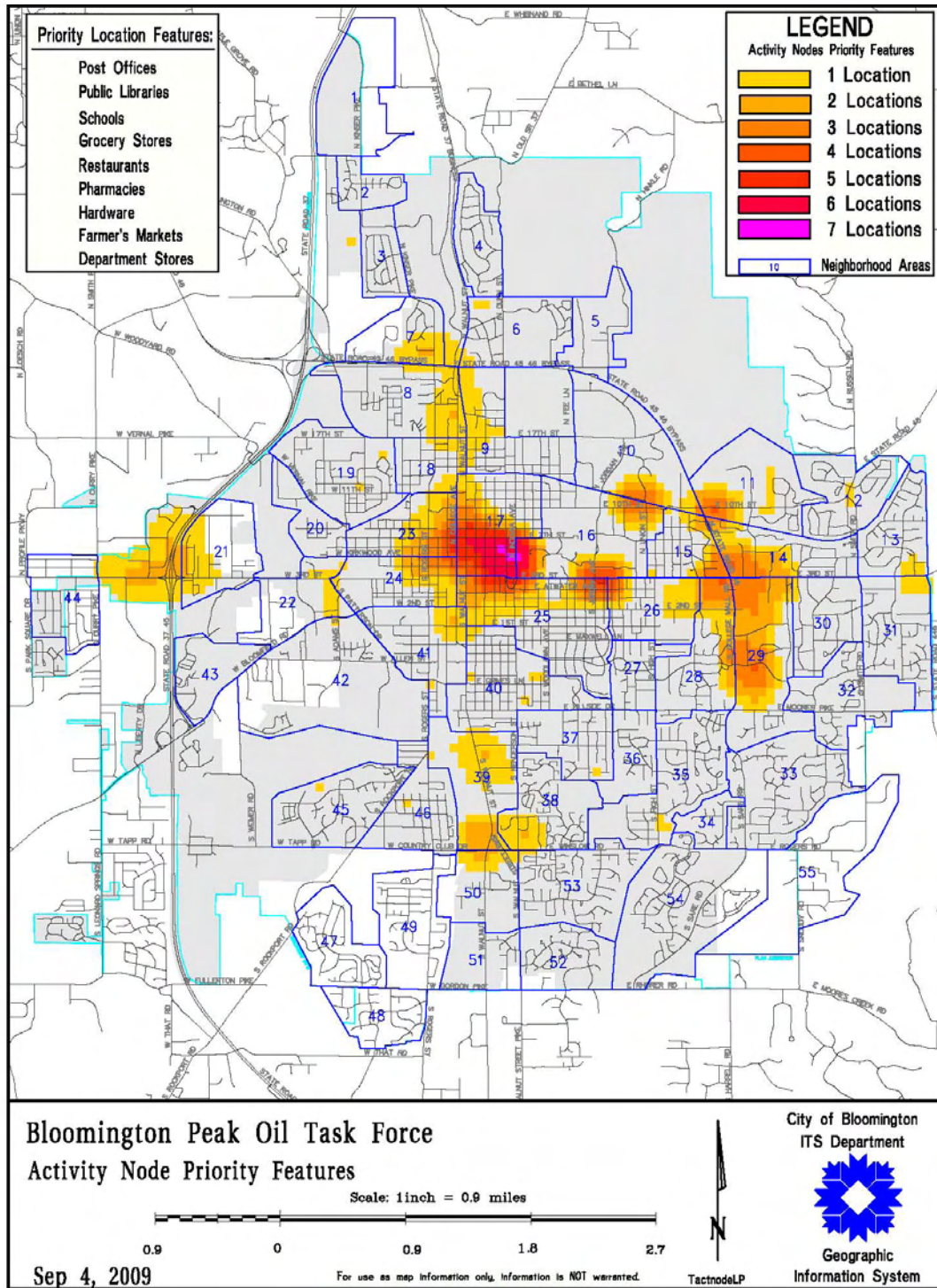
This report has some similarities to the recommendations within *Redefining Prosperity*. The *Redefining Prosperity Report* identified transportation as the economic sector most vulnerable to disruptions caused by declining oil production. This report also addresses vulnerabilities in the transportation sector by examining how we can maximize opportunities for travel by bicycle, which is a very economical choice, used by a wide range of people of all ages and abilities, and is virtually an oil-free mode of transportation.

Many of the recommendations within this report deal with building safe and attractive infrastructure for bicycling, and creating the social conditions that encourage its use. However, it also reflects the important reality, emphasized in *Redefining Prosperity*, that the large distances between where we live and where we carry out our daily lives is a critical barrier to the widespread use of bicycles for transportation or other low-energy modes.

To address these barriers to bicycle transportation, this report is consistent with the land-use recommendations in the *Redefining Prosperity* report. In Chapter 1 and Chapter 2, reference is made to encouraging '10-Minutes Neighborhoods', or 'Activity Centers'. In essence, this recommendation is intended to foster a built environment where travel distances are minimized for everyone, thereby making bicycling a more viable mode of transportation for a broader demographic.

For your reference, a 'heat map' of the current 'Activity Centers' in Bloomington is reproduced here from *Redefining Prosperity*. For more information on the *Redefining Prosperity* report or the Bloomington Peak Oil Task Force, please visit <http://bloomington.in.gov/peakoil>.



**MAP A: Activity Nodes**

Report of the Bloomington Peak Oil Task Force

97

**Activity Nodes** - an ideal configuration to maximize bicycle transportation and other alternative modes would locate people closer to these nodes, or nodes closer to where people live (Redefining Prosperity, pg 96-97).





## VULNERABLE ROAD USER RESOLUTION

On April 28, 2011, the Board of Directors of the Bloomington Bicycle Club submitted a proposal to the Bloomington City Council to adopt a 'Vulnerable Road User' resolution. Among other things, this resolution aims to increase legal protections for bicyclists and other exposed users of roads. Currently, three U.S. states - Oregon, Delaware, and New York - have a broad 'Vulnerable Road User' law; seventeen states have laws that include similar elements (<http://www.3feetplease.com/advocacy>).

At this time, the City of Bloomington is investigating whether the proposed BBC resolution is possible given the constraints on local government in Indiana. For more information, visit <http://bloomingtonbicycleclub.org/>.

**Resolution of The Bloomington Bicycle Club Proposing Adoption of Vulnerable Road User Protection in The City of Bloomington, Monroe County, Indiana**

WHEREAS, by Common Council Resolution 10-10 adopted May 12, 2010 as signed and approved by Mayor Mark Kruzan on May 13, 2010, the Common Council and Mayor confirmed interest in the City of Bloomington attaining platinum rating from the League of American Bicyclist by 2016, pursuant to the League's Bicycle Friendly City program,

WHEREAS, the Bloomington Bicycle Club endorses the efforts of The City of Bloomington in further enhancing Bloomington's posture and practices as a bicycle and pedestrian friendly city,

WHEREAS, with this goal in mind, the Bloomington Bicycle Club:

- recognizes that some roadway users are more vulnerable than others in their legal use of the public roadways,
- believes that:
  - o Vulnerable Road Users include pedestrians, runners, physically disabled persons, persons on horseback, persons operating equipment other than a motor vehicle, including a bicycle, hand cycle, horse-driven conveyance, or unprotected farm equipment, and workers with legitimate business in or near the road or right-of-way including highway construction/maintenance workers, tow truck operators, utility workers, stranded motorists or passengers, and that
  - o Vulnerable Road Users deserve defined legal protection to assure their equity in the legal use of the public roadways and defined expectations of motor vehicle operators in affording them such protection.

BE IT RESOLVED THAT, the Bloomington Bicycle Club implores and encourages the Common Council for The City of Bloomington, Monroe County, Indiana to adopt ordinance and protection for Vulnerable Road Users wherein the operator of a motor vehicle shall be required, by law, to:

- Vacate the lane used by a Vulnerable Road User if two or more lanes exist
- Allow for at least three feet of clearance when a car or light truck passes a Vulnerable Road User and six feet of clearance for a vehicle larger than a light truck
- Yield the right of way to a Vulnerable Road User when turning left or right
- Not overtake a Vulnerable Road User traveling in the same direction to subsequently make a turn into the path of the Vulnerable Road User unless such turn can be made with ample safe distance and without disruption to the speed or path of the Vulnerable Road User
- Not operate a vehicle in a manner that intimidates, harasses, or otherwise threatens a Vulnerable Road User in any way whether by verbal or non-verbal action.

Resolved and Approved in a scheduled meeting of the Board of Directors of the Bloomington Bicycle Club this 20<sup>th</sup> day of April, 2011.

President

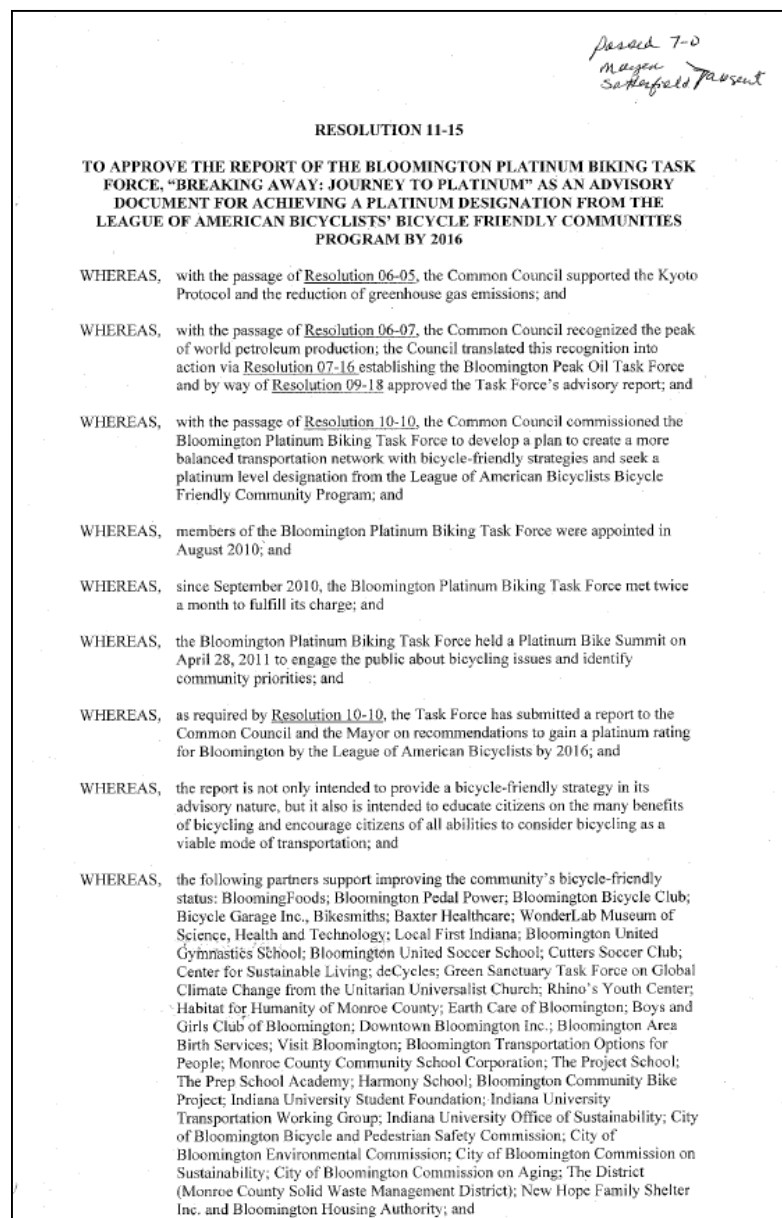
Secretary

*Vulnerable Road User resolution - submitted to Bloomington City Council members on April 28, 2011.*



## RESOLUTION 11-15: APPROVING "BREAKING AWAY: JOURNEY TO PLATINUM" REPORT

This resolution approves the report of the Bloomington Platinum Biking Task Force as an advisory document and strategy for achieving a platinum designation from the League of American Bicyclists by 2016. The Bloomington Common Council first considered the resolution at their November 9, 2011 meeting and adopted the resolution 7-0 at their November 30, 2011 meeting. A copy of the signed resolution is included in the following pages and is available at the Council Office.



WHEREAS, bicycling is an enjoyable, safe, healthy, inexpensive, environmentally-friendly, and readily-available mode of transportation; and

WHEREAS, as outlined in Resolution 10-10, the Task Force shall cease to exist once its final Bloomington Platinum Biking Task Force report is submitted to both the Mayor and the Common Council; and

WHEREAS, the report, entitled "Breaking Away: Journey to Platinum," is attached hereto and incorporated herein as exhibit A;

NOW, THEREFORE, BE IT HEREBY RESOLVED BY THE COMMON COUNCIL OF THE CITY OF BLOOMINGTON, MONROE COUNTY, INDIANA, THAT:

SECTION I. The Report of the Bloomington Platinum Biking Task Force, "Breaking Away: Journey to Platinum," shall be approved as an advisory document and strategy for achieving a platinum designation from the American League of Bicyclists by 2016.

PASSED AND ADOPTED by the Common Council of the City of Bloomington, Monroe County, Indiana, upon this 30<sup>th</sup> day of NOVEMBER, 2011.

  
SUSAN SANDBERG, President  
Bloomington Common Council

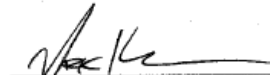
ATTEST:

  
REGINA MOORE, Clerk  
City of Bloomington

PRESENTED by me to the Mayor of the City of Bloomington, Monroe County, Indiana, upon this 1<sup>st</sup> day of DECEMBER, 2011.

  
REGINA MOORE, Clerk  
City of Bloomington

SIGNED and APPROVED by me upon this 1<sup>st</sup> day of DECEMBER, 2011.

  
MARK KRUZAN, Mayor  
City of Bloomington

