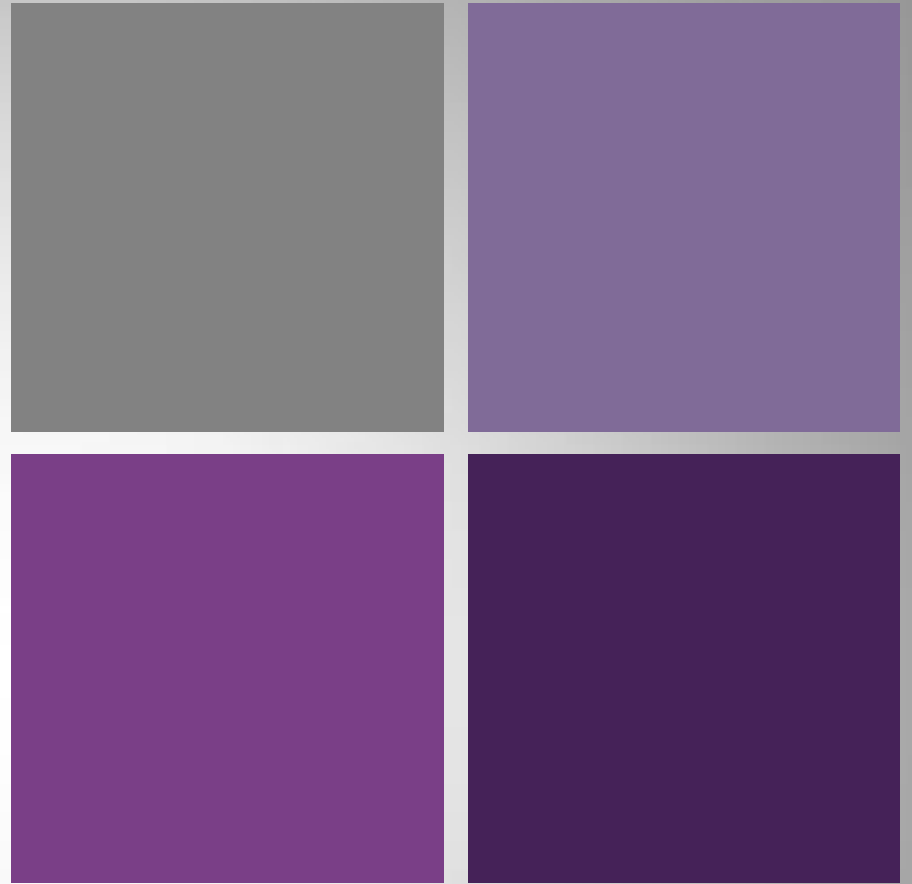




# Manhattan Bike Month 2016



## Public Health Field Experience Presentation

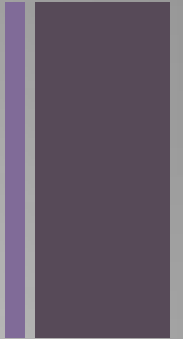
Riley County K-State Research & Extension: February 2016 – June 2016

Preceptor: Ginny Barnard, MPH

Cassandra Kay Knutson



# Riley County K-State Research and Extension

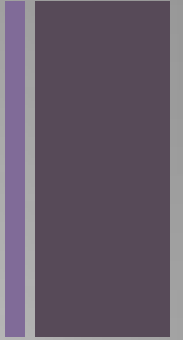


- Extending university findings to every county in Kansas, with the goal of improving quality of life and standard of living for all Kansas residents<sup>1</sup>
- Resources and educational training materials in the areas of:
  - Agriculture
  - Business & Economics
  - Family Life
  - Youth Development
  - Healthy Living





# Field Experience Preceptor



- Virginia (Ginny) Barnard, MPH
- Family & Consumer Sciences Agent
  - Focus:
    - Health
    - Nutrition
    - Food Safety
    - Indoor Environments



- Collaborates with numerous coalitions, organizations, community members in Manhattan

# Public Health Problem

- Physical inactivity is a major public health concern
  - Approximately 95% of adults, 92% of adolescents, do **NOT** meet current PH recommendations<sup>2</sup>
  - Negative health consequences<sup>3,4</sup>
- Transportation and public health research
  - Cycling as a means of increasing physically active lifestyles



# The Benefits of Cycling

## ■ Benefits of Cycling

### ■ Health Benefits<sup>5</sup>

- Reductions in mortality, diabetes occurrence for regular riders
- Lower likelihoods of overweight/obesity for commuters

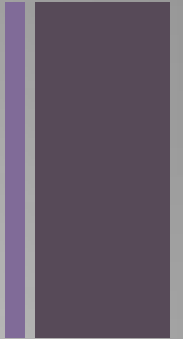
### ■ Other Benefits<sup>6</sup>

- Environmental, social, community benefits

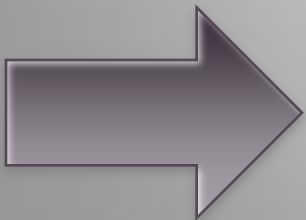




# Cycling Promotion in Communities



- Understanding and encouraging cycling in communities<sup>7-10</sup>
  - Infrastructure
  - Cost-effectiveness of trail development
  - Policies
  - Training and education
  - Perceptions, awareness, and attitudes
    - Convenience and time
    - Safety and vandalism
    - Facilities
    - Psychological factors



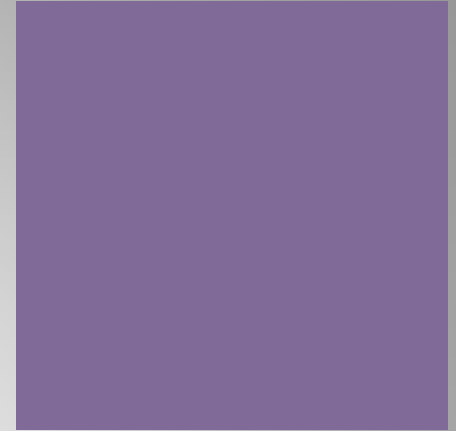
Focusing our efforts on ***several*** of these factors, and using ***multiple sources*** to do so, is necessary to promote cycling as a safe, healthy, and family-friendly method of transportation and recreation!



# Focus and Scope of Field Experience

*Bike Month 2016*

“Cycling for health, active transportation,  
and as a family-friendly activity”







# Learning Objectives

1. Understand how to organize and implement a community-wide program to promote bicycling.
2. Identify evidence-based methods to promote Bike Month and cycling safety in order to reach a diverse population.
3. Learn to formulate an effective marketing effort for cycling promotion.
4. Evaluate the public's perception and awareness of bicycling, Bike Month, and bike safety topics following the program in order to develop and support lasting change.
5. Describe how field experience activities improve public health using a community-change framework.





# Activities Performed



## *Prior to Bike Month*

- Meet with project team to discuss ideas & expectations
- Attend Bike Month planning committee meetings
- Background research and brief literature review
- Promotional videos for City's website
  - 3 Target Audiences:
    - Novel bike rider
    - Family
    - Avid cyclist (specifically for health benefits)
- Radio public service announcements (PSAs)
- Development of marketing materials



# Activities Performed

*During Bike Month*

- Digital info-graphics
- Bike Month event posts via Twitter
- Social Media campaign via Twitter
- Research, develop, and create MHK Bicycle Perception & Awareness Survey



# Activities Performed



## *Following Bike Month*

- Distribution of survey
  - Asking for community organization's support and sharing link via social media sites and emails
- Collect and analyze results from survey
- Share results with City of Manhattan, Flint Hills Metropolitan Planning Organization (FHMPO), and Riley County Research & Extension
- Educational flyers using survey results
  - 'Manhattan Bicycle Safety Series'
- Social Media analytics

# Products Developed

- Bicycle Promotion Videos
- Radio PSA scripts
- Marketing, promotional, and educational materials
- MHK Bicycle Perception & Awareness Survey





## Health Benefits of Cycling

Increased cardiovascular fitness



Decreased stress levels



Improved flexibility

Prevention and management of chronic disease

Increased muscle strength



Reduced anxiety and depression



Improved bone strength

Potential weight loss and reduced body fat

Improved posture and coordination



... And much more!

Get out and ride during Bike Month! For more information, visit  
[cityofmhk.com/bikemonth](http://cityofmhk.com/bikemonth)

## Product Examples

# May 20th



## BIKE<sup>to</sup>work DAY

## May 20th

*Bike Month Events Happening Today*

Bike & Pedestrian  
Committee Meeting

Progressive Dinner  
& Mayor's Ride

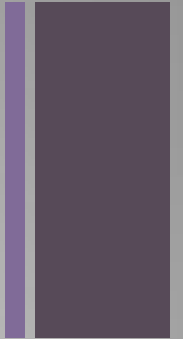


# The Manhattan Bicycle Perception & Awareness Survey





# MHK Bicycle Perception & Awareness Survey Development

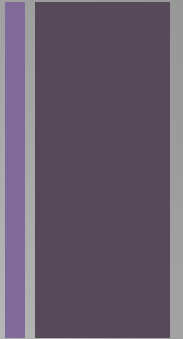


- Developed using evidence from peer-reviewed literature and examples from previous community, state, and national cycling surveys
- Main Outcomes:
  1. Assess the public's perception and awareness of several cycling topics, barriers, and safety issues in MHK
  2. Report on previous Bike Month programs and events
- Designed to evaluate what promotional methods and educational programs worked well, as well as to identify what improvements are needed in the community





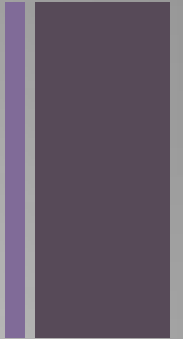
# MHK Bicycle Perception & Awareness Survey Development



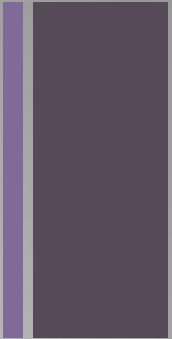
- 27 questions
- 6 sections:
  - Demographics
  - Transportation habits
  - Bike-riding habits
  - Barriers to bicycling in the community
  - Bicycle safety perception and awareness
  - Bike Month awareness
- Distributed for 2.5 weeks
- 203 total responses



# MHK Bicycle Perception & Awareness Survey: Summary of Findings



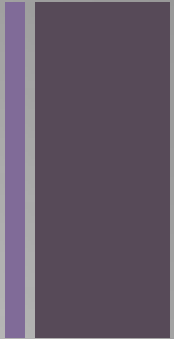
- ~13% identify bicycle as primary method of transportation
- Most residents' daily commute is less than 15 miles, 52% within 0-5 miles
- 51% of respondents had ridden bike in the past week
- Most cyclists ride for recreation and/or health and exercise
- Majority wear helmet and use lights at night
- Many responses were incorrect, or unsure of, several cycling and motor vehicle laws
- Majority unsure of what a bike sharrow is and, where bike sharrows are located in MHK
- Respondents identified more events on weekends, more family-friendly activities, more competitions, and training/education, as activities to increase desire to participate in Bike Month



# Survey: Summary of Findings

**Q15 - What options would increase your likelihood of riding, or commuting, in the Manhattan community? Please select all that apply.**

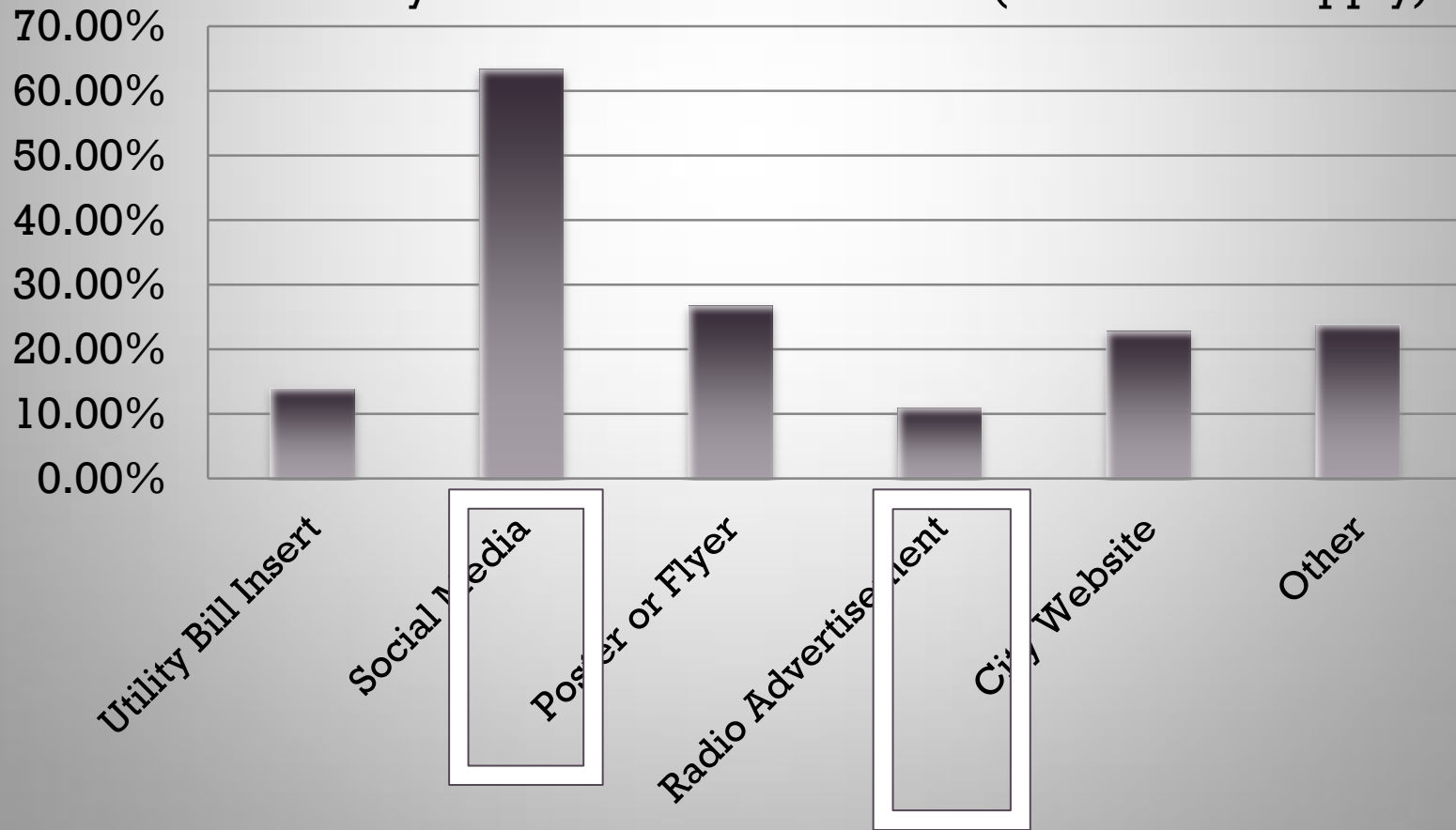
Answer	%	Count
More bike friendly trails	82.04%	137
More shared road lanes	53.89%	90
More bike-only lanes	77.25%	129
More bike friendly signage	43.71%	73
Access to bike safety and rules education, or training	22.16%	37
Allow bicycles on sidewalks	31.74%	53
Increased traffic enforcement for both vehicle operators and cyclists who do not follow the law	47.31%	79
Other:	11.38%	19

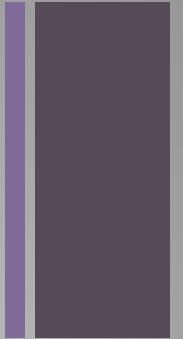


# Survey: Summary of Findings

- 60% of respondents previously aware that May is Bike Month

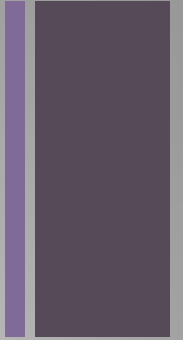
How did you hear about Bike Month? (Select all that apply).





# What will the survey be used for?

- I shared the results of the survey with:
  - The City of Manhattan & Emma Rearick, Manhattan Bicycle and Pedestrian Coordinator
    - Specifically for Bike Month planning, educating the public about safety and awareness, future projects and programs
  - Stephanie Watts, Transportation Planning Manager for Flint Hills MPO
    - Specifically for development projects in the community
  - Riley County Research & Extension
    - Specifically for future programs in MHK



# What will the survey be used for?

- Results were also used to create three educational flyers titled, “Manhattan Bicycle Safety Series”
  
- Questions from survey that were used to develop safety series posters:
  1. Do you wear a bicycle helmet when riding?
  2. Do you use lights when riding at night?
  3. Are you aware of what a bike sharrow is?
  4. True/False: Vehicles must pass cyclists with at least a 3-foot distance between them.

# Bicycle Safety Series Examples

## Bike MHK



### *What's a Bike Sharrow?*

#### **Description:**

Bicycle "sharrows", or Shared Lane Markings (SLMs), are road markings used to indicate a shared lane for bicycles and vehicles on the road.

#### **How do I use it?**

Always ride with traffic. Ride over the markings to position yourself within the lane.

#### **Remember:**

Obey all traffic signs and signals. Ride your bicycle like the vehicle it is.



**Ride Safe, Ride Happy Manhattan!**

## Bike MHK



### *What's the 3-foot passing law?*

#### **Description:**

When motor vehicles pass a bicyclist on the road, they must allow a 'safe distance' between their vehicle and the bicyclist. In Kansas, the minimum required distance between a passing vehicle and a bicycle is 3 feet.



#### **Remember:**

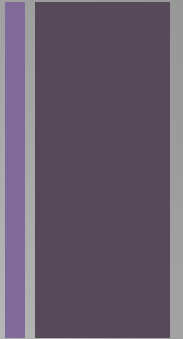
Always ride with traffic. Obey all traffic signs and signals. Ride your bicycle like the vehicle it is.

**Ride Safe, Ride Happy Manhattan!**





# Alignment with Public Health Competencies



## ■ *Biostatistics*

- Statistics Courses, Research Assistant Position, Field Experience
  - Proper methods of collecting and analyzing data
  - Critically analyze statistical evidence

## ■ *Environmental Health*

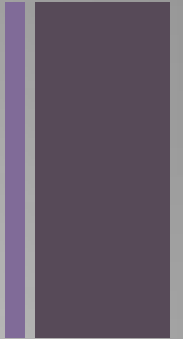
- Environmental Toxicology & Public Health Nutrition Courses
  - Proper food safety practices to prevent foodborne illnesses

## ■ *Epidemiology*

- Epidemiology Courses, Topics Course, Research Assistant Position
  - Learning about research ethics and practices
  - Literature review of epidemiological studies



# Alignment with Public Health Competencies



## ■ *Health Care Administration*

### ■ Courses, Field Experience Project

- Understanding the importance of how public health professionals, healthcare industry, and community partners alike work together in order to impact the overall health and well-being of communities and populations as a whole

## ■ *Social & Behavioral Science*

### ■ Courses, Research Assistant, Field Experience Project

- Understanding theories of behavior and lifestyle change in order to plan, develop, implement, and assess several interventions and programs



# Conclusions

- Gained a firm foundation in public health knowledge, research, and application
- Extremely gratifying and beneficial experience
  - And FUN!
- Eager to translate my knowledge and passions into practice in my professional public health career starting in... Lincoln, NE!





# Acknowledgements

## ■ MPH Committee Members

- Dr. Richard Rosenkranz
- Dr. Sara Rosenkranz
- Dr. David Dzewaltowski

## ■ Riley County Research & Extension

- Ginny Barnard

## ■ Project Supporters

- Emma Rearick, Jared Tremblay, Gayle Donaldson, Jace Mills, Women's Group Ride Club, MHK Cycling Community Members, The Pathfinder, Green Apple Bikes, K-State Rec Services, City of MHK, etc.!

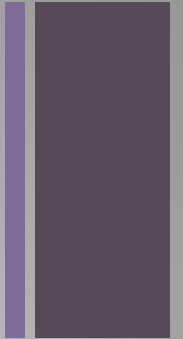
## ■ Brooke Cull

## ■ Family & Friends

## ■ PAN-CRC & YPANML Lab Groups and Fellow Research Assistants



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# Questions?

Thank you for attending!





# Supplemental Slide: Twitter Analytics

<u>Date</u>	<u>Event/Topic</u>	<u>Impressions</u>
May 1, 2016	Start of Bike Month	327
May 3, 2016	Health Benefits of Cycling	2,573
May 3, 2016	Ric Tweet, Bike to Work	165
May 4, 2016	Bike to School Day	984
May 5, 2016	Bike to Cico Park	202
May 5, 2016	Wendy, Commuting in MHK	198
May 6, 2016	Bike in Florida	206
May 7, 2016	Bike Sharrow Placement	151
May 8, 2016	Bike to Bill Snyder Stadium	384
May 10, 2016	Bike to the Rec Center	333
May 12, 2016	Bike to MHK Public Library	135
May 13, 2016	Bike to Anneburg Park	228
May 15, 2016	Gravel Ride Event	224
May 17, 2016	Halfway through Bike Month	1,127
May 19, 2016	Bike to Work Day	1,542
May 19, 2016	RAGBRAI	260
May 20, 2016	Bike Month Events	122
May 22, 2016	Women's Ride Event	154
May 24, 2016	Bike to FHDC	148
May 29, 2016	Biking in Iowa	140
June 3, 2016	End of Bike Month	140