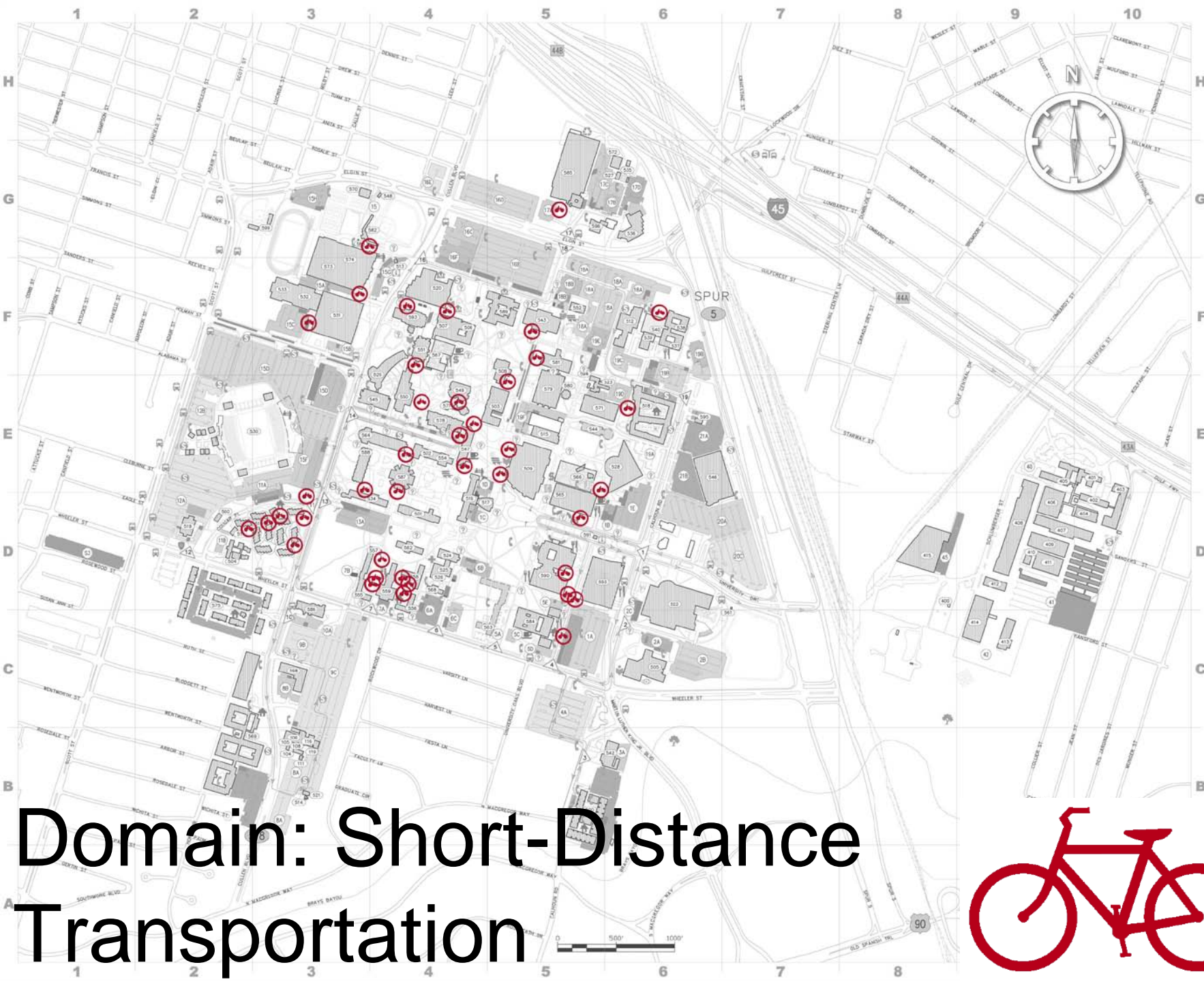
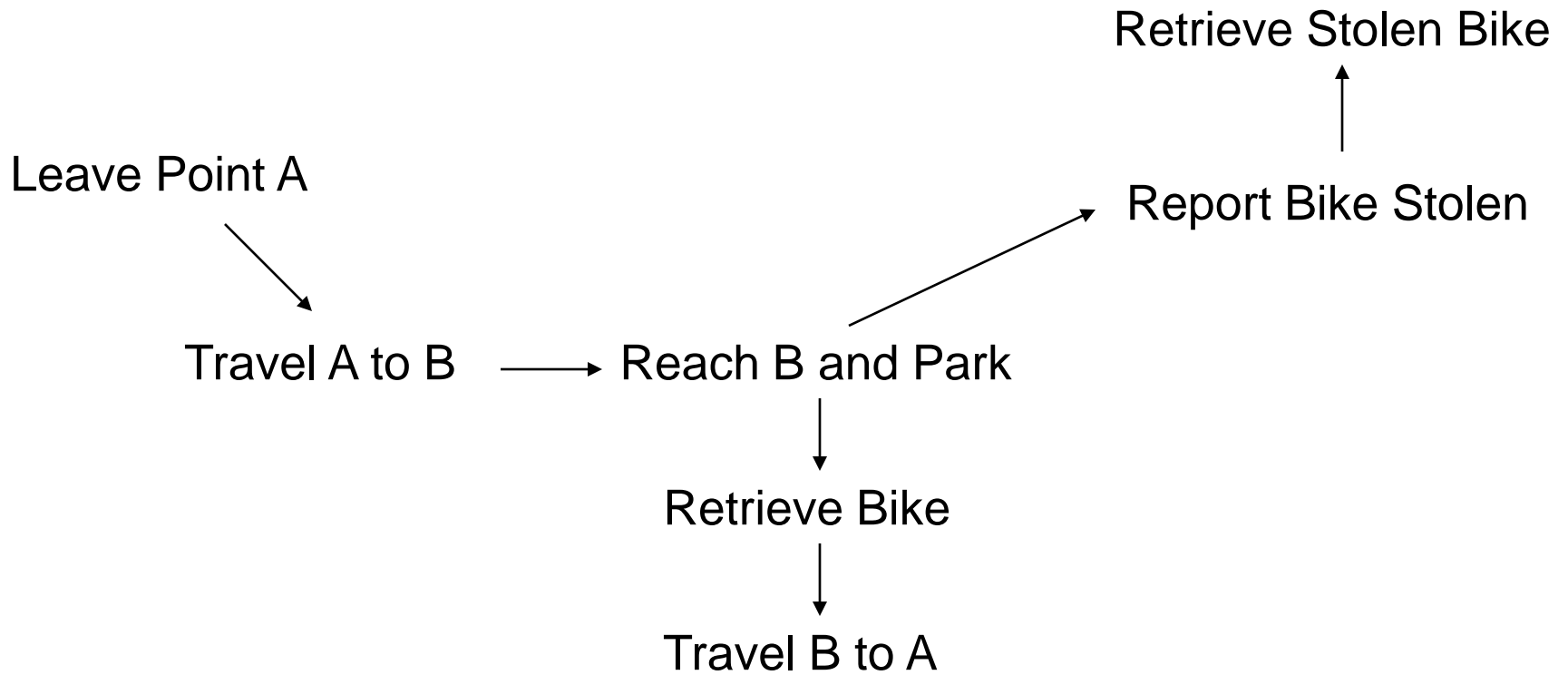


The University of Houston
& Biking

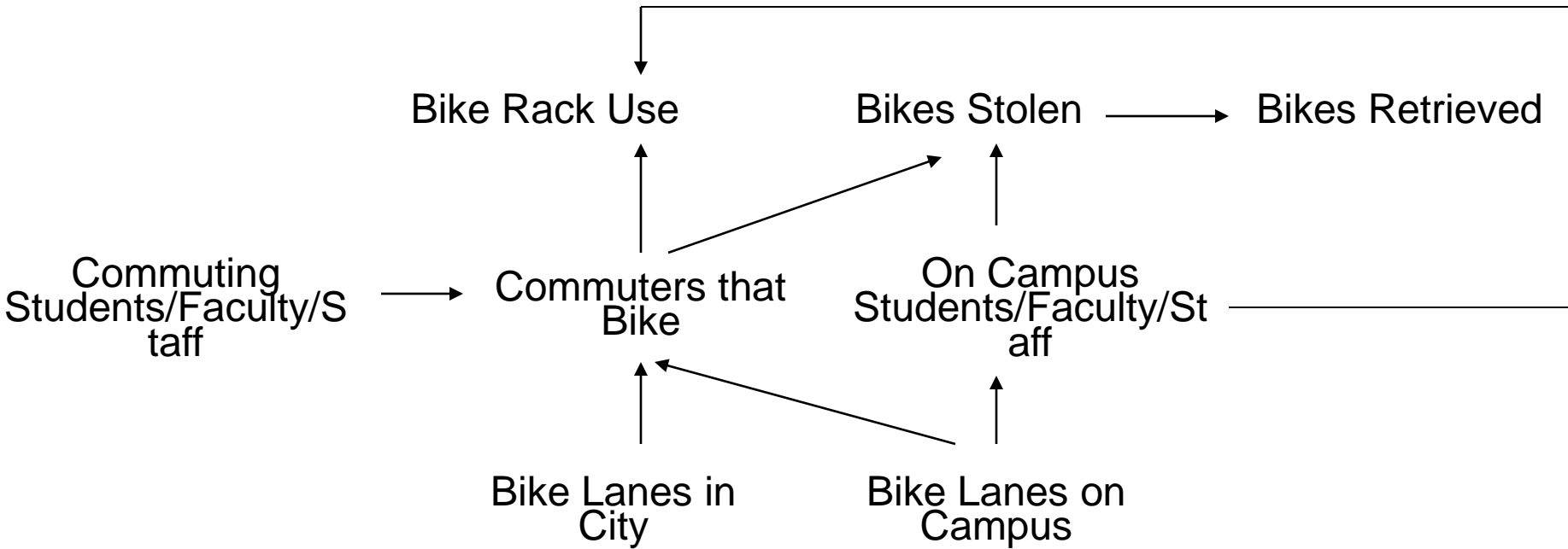


Domain: Short-Distance Transportation





Research Results: Process Map



Research Results: Variable Map

Research Results: Survey

1. More accommodations for bikes

Covered bike racks, bike lockers, better paths around campus, a bike shop

2. Safer accommodations for bikes

Better protection from theft and weather elements

3. Positive feedback on a potential Bike Sharing program

(44.2% yes, 37.2% no, 18.6% maybe)

4. Little knowledge about biking organizations available to students

5. Little knowledge about bike registration with Police Department

Research Results: Survey

Research Results: Robert Browand

1. Houston is not bike friendly, which makes biking transportation to or from campus difficult.
2. Additional bike racks and bike lanes would help make the campus more bike friendly.
3. No current incentives for riding your bike to school (other than improved health, environment and saving money on gas)
4. Previous investigation into a bike sharing program found it to be too expensive.

Research Results: Robert Browand

Research Results: Bike Officer

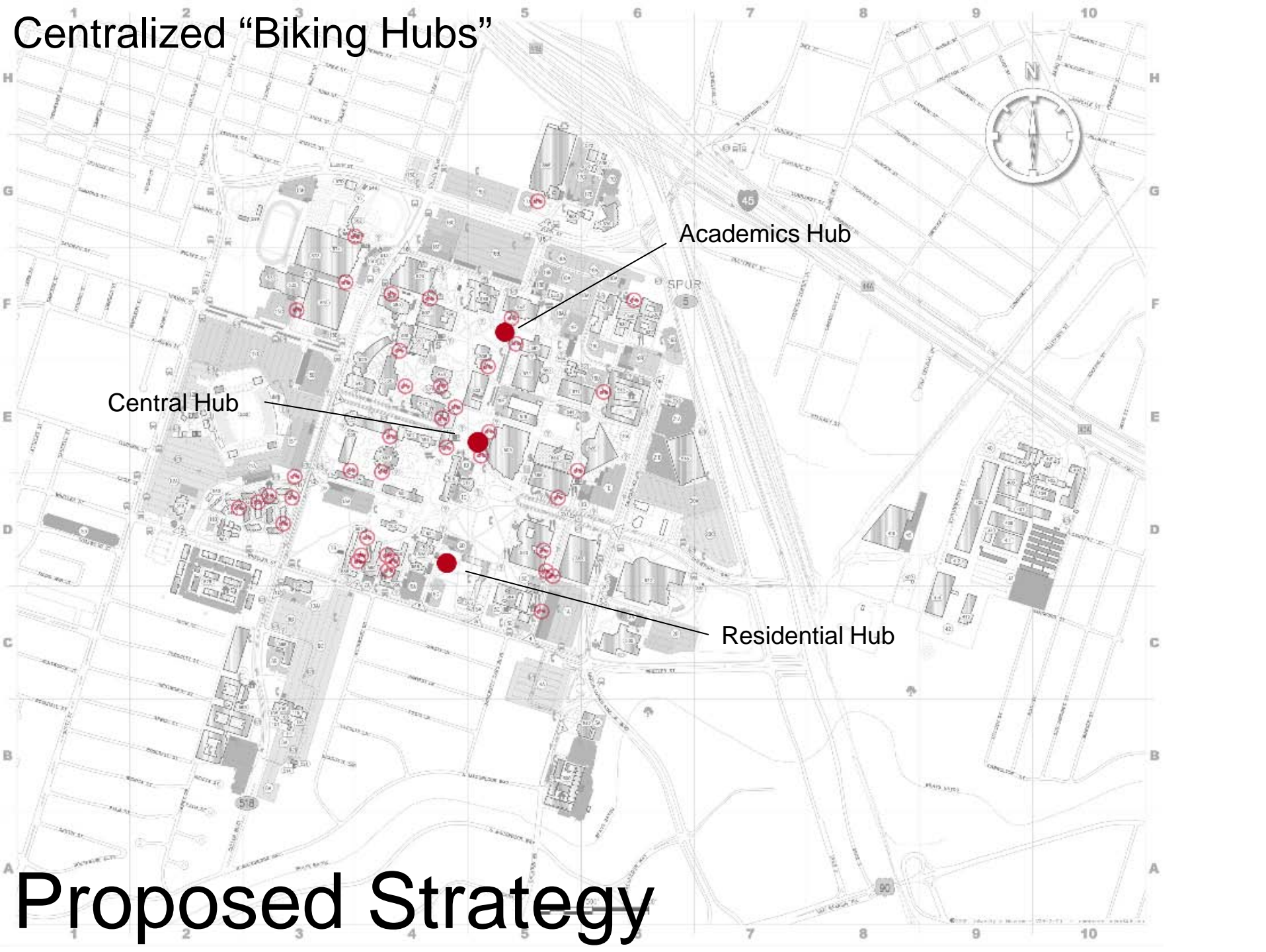
1. Most bikes get stolen from low traffic areas that are out of sight (i.e. the bike racks underneath Moody Towers)
2. Students should register their bike with the Police Department on campus
3. Good locks are important to keep your bike protected

Research Results: Bike Officer

Safety, Convenience,
and Cost

Research Results

Centralized "Biking Hubs"



Proposed Strategy

Centralized “Biking Hubs”

The hubs are places to gather bikes and information where there is also a large number of people present during the day. High circulation places will be convenient and easy to find as well as more secure. Each hub will include both **Bike lockers** and **Covered bike racks** as well as a **Community bulletin board** for students to post information about security, biking clubs, meeting times for rides, etc.



Proposed Strategy

Academic Hub

8 Bike Lockers

8 Bike Racks

Central Hub

10 Bike Lockers

12 Bike Racks

Residential Hub

10 Bike Lockers

4 Bike Racks

Proposed Strategy

Encouragement

By offering more convenience and safety as well as a low cost, students will be encouraged to utilize their bikes to, from and around campus.

Habit

The new biking hubs will encourage students to ride their bikes and consequently develop a habit of biking to get to nearby places rather than driving.

Sustainability

The more students choose to bike rather than drive, the more sustainable the University of Houston will become. Although this benefit will not reflect directly into savings for the University, the positive effect on student health, energy use and parking concerns will be rightfully accredited to the University.

Leader

The University will be a leader in biking in Houston and can be an example to other schools as well as for the city of Houston itself.

Benefits

Costs for bike lockers, bike racks, and bulletin board.

14 bike lockers [\$10,000/locker]

2 high density bike racks [\$2800/rack]

2 wall mount bike racks [\$44/rack]

3 bulletin boards [\$50/board]

Total: \$145,838

Costs

Each bike locker can use the Cougar ID flex account

Daily Rate [\$8.00]

Hourly Rate [\$1.50]

Semester/Year Round Cougar Bike Passes [\$100]

Pricing

100% Use

\$1.50 an hour will provide \$367,920 a year

\$8 a day will provide \$81,760 a year

Initial cash flow: -\$151,526

Cash Flow 1 (average of hourly and daily incomes): \$220,000

One year return (IRR of 45.19%)

Internal Rate of Return [IRR]

50% Use

Initial cash flow: -\$151,526

Cash Flow 1 (average of hourly and daily incomes): \$110,000

Cash Flow 2 (average of hourly and daily incomes): \$110,000

Two year return (IRR of 28.91%)

Internal Rate of Return [IRR]

25% Use

Initial cash flow: -\$151,526

Cash Flow 1 (average of hourly and daily incomes): \$55,000

Cash Flow 2 (average of hourly and daily incomes): \$55,000

Cash Flow 2 (average of hourly and daily incomes): \$55,000

Three year return (IRR of 4.383%)

Internal Rate of Return [IRR]

Step 1: Purchase products from CycleSafe

Step 2: Prepare sites (pave if necessary)

Step 3: Begin advertising for Biking Hubs

Step 4: Have products assembled

Step 5: Set up Cougar Card with swipe system

Step 6: Sell Cougar Biking Passes

Implementation

Low use; ineffective interjection.

High use; have to purchase more lockers
; crowded pathways and more accidents with
pedestrians require the University to pave new
biking lanes or improve current pathways.

Abuse of bike lockers; storing things other than bikes

Risks



End

too much information, come up with themes, not actual peoples
commentssmall text needs to get bigger.14 bike lockers
[\$10,000/locker]2 high density bike racks [\$2800/rack] 11,2002
wall mount bike racks [\$44/rack] 1763 bulletin boards
[\$50/board]\$151,526at \$1 an hour, the most cash flow in for all the
bike lockers is \$245,280at \$1.50 an hour, the most cash flow in for
all the bike lockers is \$367,920at \$5 a day, the most cash flow in
for all the bike lockers is \$51,100at \$8 a day, the most cash flow in
for all the bike lockers is \$81,760sell bike passes

Do you own a bike or have access to one?

YES NO

Do you own a bike or have access to one?

YES

NO

65.1%

34.1%

Do you own a bike or have access to one?

Do you ride a bike in your commute to school?

YES NO

Do you ride a bike in your commute to school?

YES

NO

9.3%

90.7%

Do you ride a bike in your commute to school?

If you don't ride a bike to school, explain why.

I don't want to get hit by a car.

I live 40 miles away. The third ward isn't safe. I don't have a bike.

Too far. Far away.

Afraid of getting jacked.

I live near 59 & Edloe (behind the Edwards cinema) and getting to

I live too far away.

school via Richmond or Alabama is a nightmare. cars get angry. passing through rice villages

It's not safe.

get to the bayou takes considerably longer, and doesn't feel much safer either. 30-45 minutes to school is a considerable

ride when it starts getting hotter, or when it starts dumping rain like crazy. i have head-to-toe water proof equipment, but it makes arriving at school awkward.

Danger and distance. I'd rather walk. I keep late hours. What if I don't want to ride back?

I live at school.

Riding on a freeway sucks.

If you don't ride a bike to school, explain why.

Do you live on or near campus (within 10 miles)?

YES NO

Do you live on or near campus (within 10 miles)?

YES

NO

51.2%

48.8%

Do you live on or near campus (within 10 miles)?

0-5 miles:	41.9%
6-10 miles:	11.6%
11-15 miles:	9.3%
16-20 miles:	16.3%
21-25 miles:	9.4%
26-30 miles:	2.3%
>30 miles:	9.3%

If you live off campus, how far?

What sort of accommodations do you think the University of Houston **already** supplies to bike riders?

Bike racks? Nothing. Just Bike Racks. **Minimal Parking**

Bikes get stolen all of the time and you're not even allowed to take them inside.

Bike Racks, that's it!

Those rails to lock them.

Not much

Bike racks I guess. Not sure. Some bike routes.

What sort of accommodations do you think the University of Houston **already** supplies to bike riders?

What sort of accommodations do you think the University of Houston **should** supply to bike riders?

Bike roads where applicable.

Maybe a bike share program
Since most we're a commuter

More bike racks!

School and most people don't want to haul their bikes to campus.

Better security.

I think they should make the campus more bike friendly

Secure storage for bikes, bike lanes on major roads and a bike shop on camp

What sort of accommodations do you think the
University of Houston **should** supply to bike
riders?

A bike-sharing program is an organization, such as the University, that provides bikes that are available for short-term use or rental to specific users, such as students or professors. Would you utilize a bike-sharing program at the University of Houston?

YES NO MAYBE

A bike-sharing program is an organization, such as the University, that provides bikes that are available for short-term use or rental to specific users, such as students or professors. Would you utilize a bike-sharing program at the University of Houston?

YES NO MAYBE

44.2%

37.2%

18.6%

A bike-sharing program is an organization, such as the University, that provides bikes that are available for short-term use or rental to specific users, such as students or professors. Would you utilize a bike-sharing program at the University of Houston?

1. How important or useful do you think bike transportation will be for the University of Houston in the future? How useful is it now? For example, do you think biking to/from UH is a viable option for students based on safety, availability of accommodations (bike racks, etc.) and space for biking traffic on campus. **The University of Houston is not centered in a collage town, it's centered in the fourth (maybe third now) largest city in the US. We therefore have inherited obstacles to deal with when it comes to promoting biking to and from campus. Houston is not a bike friendly city, most city roads do not have bike lanes and motorist don't feel they need to share the road. Therefore, you will usually only see your avid cyclist out there riding.**
2. Do you think a bike-sharing program would work on the University of Houston campus? **I know there is some interest in it but I am skeptical as to how reliable the interest is. Most students will not use it. However, I am in favor of having one if it's affordable, manageable, and used.**
3. Do you think the campus could be better accommodated for biking? How? **Yes, there could be more dedicated bike lanes on UH streets and additional bike racks around campus.**
4. Are there incentives that the University of Houston could offer to students who use biking as a part of their commute to school? **Currently are none beside it's good for your health and environment, and will save you money versus driving a vehicle.**
5. Has the Department of Parking and Transportation ever considered biking before? Would they be willing to invest in either a bike-sharing program or providing more accommodations for bikers? **Yes, in 2009 we put out an RFP for a bike sharing program. We got one response and they wanted \$4,750 per bike with a minimum of 20 bikes. Students would have had to subscribe to the service at \$78 per year or \$28 per month and pay a graduating usage rate of 1st 30 minutes free (most would fall under this period), 2nd 30 minutes +\$1.50, 3rd 30 minutes +3.00, any additional 30 minute period +\$6.00. Therefore two hours would cost \$10.50. We felt that the cost to the university (\$5,000/bike) and the students (subscription fee and usage fee) was too great to proceed at that time.**
Providing more accommodations for cyclist would be doable however we would need to do a study on the number of bikes in use and where they are being used at so we get them to the right number needed and put them in the right areas.

Research Results: Robert Browand

Where are bikes most often stolen from? Areas with little traffic that are also blocked from view are the places where bikes most often get stolen.

How can students better protect themselves from theft? First off, they can buy better locks that can't be easily cut off. In addition, they should register their bike with the Police Department so that we can look for it and identify it.

Research Results: Police Biker