Ideas:
Bruce:

1. Course Map: a campus map showing courses in selected class time.
    - show classroom usage arrangement all day long
    - show shortest route between classes with given course schedule
    - show popular course area by number of registered students during past years
    - give student better experience choosing course with visualized number of registered students
    - Purdue campus population density (real-time)
        - Find data on course enrollment
        - total internet traffic volume? We might be able to get something from ITAP

    Worry:
    1. Not enough information to make it really useful (you can't tell which courses are popular, etc.)
    2. What would it be useful for? Why would people come look at it?
    3. Since the data is spread out, how long will it take to gather?
    4. We might not be able to get the non-academic buildings to be portrayed accurately
    5. Permission to have access record from each facilities?

    Task:
    1. course collection time cost
    2. Can we get old building traffic statistics (e.g. from the dining courts or co-rec) - Call them and ask.

    Source: https://selfservice.mypurdue.purdue.edu/prod/bwckctlg.p_disp_dyn_ctlg?

2. Coupon gathering: gathering grocery coupons from each market and find the best discount.
    - Maybe not coupons? If we do the normal price with sale price as a (mouseover?) option, then the data gathering is more straightforward
    - We can put them on a map, so students can plan shopping routes
    - Maybe have bus routes?
    - Some way for the viewers to contact us for changes/new products

    Worries:
    1. How many items to include?
    2. How many markets? (count them, base our decisions on the "shopping list")
    3. How often will we need to update? (sales)

    Task:
    1. Independently make a "shopping list"

    Source:
    1. http://www.walmart.com/
    2. http://www.payless.com/

3. http://www.meijer.com/

1. House : Price, Utility, Map
    a. Map of West Lafayette with rents, house quality, utilities
        i. This is the strongest of the ideas as far as visualizations go
    b. Overlay bus routes
    c. Parking availability

    Worries?
    1. Variation in the subjective ratings (how run-down the building is, etc.)
    2. Intangibles, like insulation affecting cost of utilities (crowdsource the data) (maybe infer from how old the buildings are)

    Source:
    1. http://www.forrentuniversity.com/Purdue-University
    2. http://www.commercialbrokersinc.com/php/apartments.php
    3. http://cochranapartments.com/rental_listings
    4. http://www.granitestudentliving.com/purdue-rental-properties
    5.

1. Restaurant wait times
   Task: try collecting data for a few nights to a week
3. Graduate Student Career Position: show career position of graduate students
    - Need to update data from LinkIn
    - Need to update data from departments
    - focus on only one department or the latest year of most graduated students

Kris:

1. US Income tax rates vs. actual tax collected (total)
    a. Source: the Department of Revenue publishes this data
2. “Cost” of having low income - unable to take advantage of the economies of scale
3. Beer branch map (with mouseover recipes?)
    a.
4. Environmental something: emissions or energy usage on a world map?
5. Smoking on a world map?
6. Tuition breakdown - compare different schools (they publish budgets)
7. smartphone sales globally (normalized for population?)
8. social media usage/traffic regionally/globally?
9.

Taejin

2.

Rsource:

Bruce:

- This is a competition website for data scientist. There are lots of associations provide their data and topics for developers to solve. This is a great source as a reference to think about our topic by digging through the datas and displaying novel ideas. https://www.kaggle.com/
- 30 places to find open data on the web: http://blog.visual.ly/data-sources/
- Datasets for Data mining and Data Science: http://www.kdnuggets.com/datasets/index.html