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Preliminary Experience Using Social Media for Survey Recruiting

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Social Media is just another new method for survey recruiting

- **Despite the icons, I am not solely focused on Social Media (SM)**
- **Instead:**
  - Proving or disproving statistical equivalency
  - Increasing the power of convenience samples

Social Media is a big deal!

- It is absolutely pervasive
- It's new, it's hip, it's fun, it's what's going on…
- Icons are everywhere! Everybody is doing it!

- It will cure what ails you! Aches, pains, surveys, samples, you name it!

Subject: [TCN] Friday, January 20, 2012

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CAMERAS

1) **Camera System Makes Torrevieja Safest City in Spain**
Link to commentary in *Round Town News*:
http://www.roundtownnews.co.uk/index.php?option=com_content&task=view&id=32443&Itemid=9

CARTOGRAPHY

2) **Google Maps Adds Mainland Britain Train Network with Help from TheTrainline**
Link to article on Tnooz:
http://www.tnooz.com/2012/01/19/news/google-maps-adds-mainland-britain-train-network-with-help-from-thetrainline

PUBLIC INFORMATION / EDUCATION

3) **Several TRB Sessions Will Focus on Social Media**
Link to article on TheTransitWire.com:
http://www.thetransitwire.com/2012/01/19/trb-sessions-on-social-media/

ROADWAYS

4) **Road Pricing Can Help Reduce Congestion, but Equity Concerns May Grow**
Link to report from the US Government Accountability Office:
http://www.gao.gov/products/GAO-12-119

TRB is Social Media savvy!

- Who's tweeting this session right now? Tell all my FB friends I say hey…

2012 TRB 91st Annual Meeting: Stay Informed by Using Twitter and Facebook

Join the conversation and share your thoughts and insights with your colleagues during the TRB 91st Annual Meeting through TRB's Twitter and Facebook pages. Twitter users can contribute to the Annual Meeting conversation by using the hashtag, #TRBAM. This hashtag acts like a bookmark to help twitter users find what others are saying about the meeting. • To view TRB twe without joining Twitter, view TRB's website . • If to receive text messages on your phone instead "follow...

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The 2012 TRB 91st Ar Papers is now availab portal . Annual Meetin any or all of the nearly compendium. Comin Final Program will be pdf version of the pri internal navigation link referenced in the Fina

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Even DOTs are using SM! And asking customers about it!

- IL Tollway Survey

Illinois Tollway

2012 Communication Survey

7. Would you be interested in receiving information from the Illinois Tollway on Facebook?

	Very interested	Somewhat interested	Neutral	Not interested
Tollway traffic/roadway alerts	○	○	○	○
Tollway travel time notifications	○	○	○	○
I-PASS information	○	○	○	○
Construction updates	○	○	○	○
Frequently asked questions	○	○	○	○

Other (please specify)

8. Would you be interested in receiving the following information from the Illinois Tollway on Twitter?

	Very interested	Somewhat interested	Neutral	Not interested
Tollway traffic/roadway alerts	○	○	○	○
Tollway travel time notifications	○	○	○	○
I-PASS information	○	○	○	○
Construction updates	○	○	○	○
Frequently asked questions	○	○	○	○

Other (please specify)

Okay, let's get real… does SM help survey recruiting?

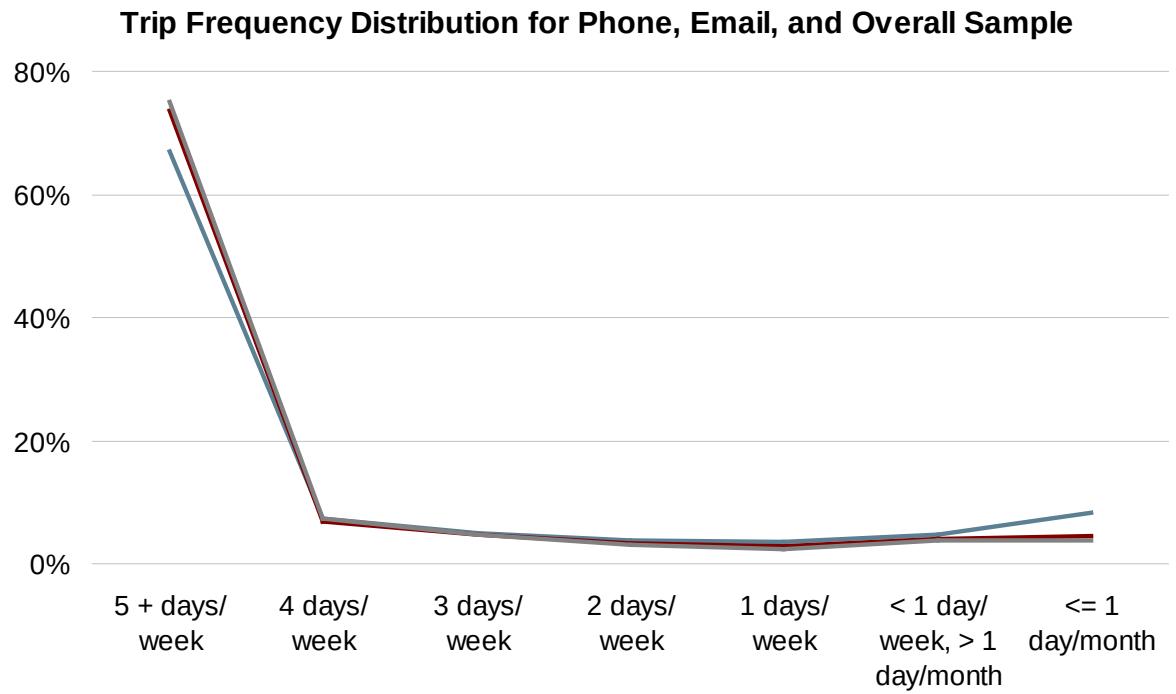
- Question: What are we trying to do here? What do we want from our projects?
- Answer: We want to understand our transportation markets (customers and potential customers) using accurate, robust, and cost effective research methods
- Is there a place for Social Media in this?
- Yes!
- Will it change research as we know it? Probably not, but it can help

What are we trying to accomplish by survey recruiting

- **Survey recruiting should be probabilistic, with as little coverage error as possible**
- **Coverage error means ensuring that as many people as possible in the target population have a non-zero probability of being able to respond to the survey**
  - For example, say you want to sample transit riders—you could randomly sample buses and trains to represent the transit rider population
  - Say you wanted to sample a region to do a transportation survey, then you could randomly sample addresses to represent HH's in a geographic area

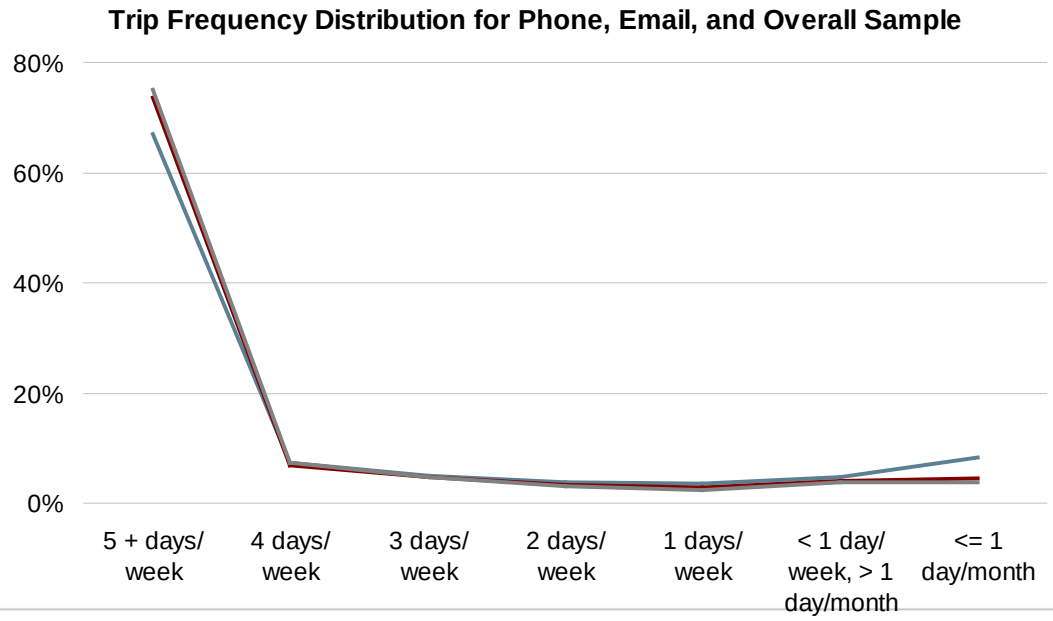
So what can SM do for us recruiting-wise?

- SM Recuriting can potentially increase sample sizes (sometimes significantly) if we can prove it is equivalent to a probability sample that is conducted in parallel or previously
- This comparison requires statistical tests that prove "noninferiority" and which require a little more effort, but it's not hard



Hypothesis Testing

- Null Hypothesis: A equals B
- Alternative Hypothesis: A is diff from B
- If we can't reject the null and prove a difference, **that doesn't mean that A is statistically equivalent to B!!**
- We need to rework the problem somewhat:
- New Null: A minus B is greater than a threshold
- New Alternative: A minus B is less than the threshold (within acceptable range)



So what can't SM do for us recruiting-wise?

- It's not a probability sample
- Your current/previous probability sample must stand on its own
- Equivalent or not, you still learn a lot (with very low marginal costs)
- If statistically equivalent you get low cost additional sample

- More than SM applies here—remember stodgy old email?

Case studies

- Utah Transit Authority OD Study
- 33 completes from UTA's social media sites—Twitter and FB
- 34 completes from link posted on UTA's website
- No avalanche of data, but simple to do
- No inferences to be made between website vs. SM. This was just trying to maximize response

Alamo Transportation Study: using SM recruiting with ads

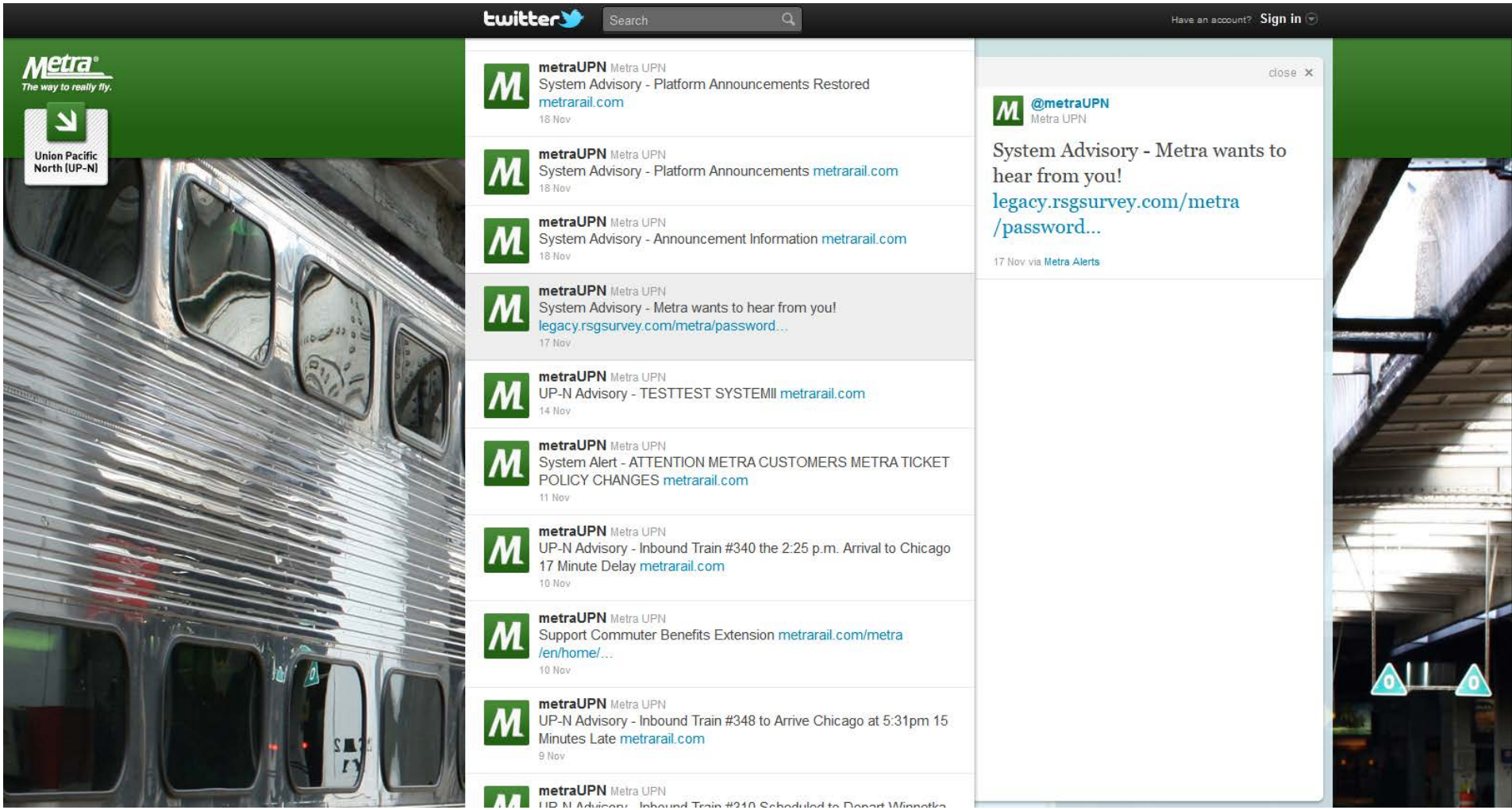
- **It was inexpensive but also ineffective**
- **The client (Alamo RMA) was interested in trying this approach vs. purchased sample**
  - SM thought to be more representative and less expensive
- **San Antonio area was the geographic boundary**
- **Targeted people based on profile: anyone with "Truck Driver" as a profession or an interest**
-
- **Results:**
  - ~116,000 "impressions"
  - 36 clicks on ads
  - 0 completes
  - cost: $45.40

Case studies

- **RTA customer satisfaction study: Metra commuter rail**
- **Same link put on Metra's website (carousel) and sent out to Metra's twitter feeds/FB**
- **Results: 788 completes! Though we don't know which came from which recruiting method (web or SM?)**
- **Twitter suspected to be the main source of sample due to the proactive nature—like an email as people are looking for alerts…**
  - It also irked a number of folks on Metra's "alerts" email list, "You have been alerted there is a survey going on!"
  - Over 4,100 email completes!

Metra Twitter Feed

- Lots of reasons for pax to read this—similar to email



We actually got RT'ed

- I wouldn't say we went viral, but we got some traction…

Future research/conclusions

- **Statistical equivalency analysis is important for these new convenience sampling techniques –and not just SM techniques**
- **Good way to supplement your studies, but not a complete substitute for probability recruiting**
  - By using these overlapping "frames" it is possible that you will recruit the same person twice, which requires some care
- **Future research to be more systematic about understanding SM statistics (separate links, etc.) vs. other recruiting methods**
- **Not all information must be collected scientifically: can be a good way to contact many customers quickly and easily**