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RESOURCE SYSTEMS GROUP, INC.

# *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!

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## CAMERAS

### 1) Camera System Makes Torre Vieja 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](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 tweets without joining Twitter, view TRB's website . • If you want to receive text messages on your phone instead of following...

Read More

Share:    

## 2012 TRB 91st Annual Meeting: Content Now Available and Final Program



The 2012 TRB 91st Annual Meeting Papers is now available on the TRB website. The Annual Meeting Final Program will be available in pdf version of the program with internal navigation links referenced in the Final Program.

Read More

Share:    



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

## IL Tollway Survey



### 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	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tollway travel time notifications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I-PASS information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Construction updates	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Frequently asked questions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (please specify)	<input type="text"/>			

#### 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	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tollway travel time notifications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I-PASS information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Construction updates	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Frequently asked questions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (please specify)	<input type="text"/>			



# 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**



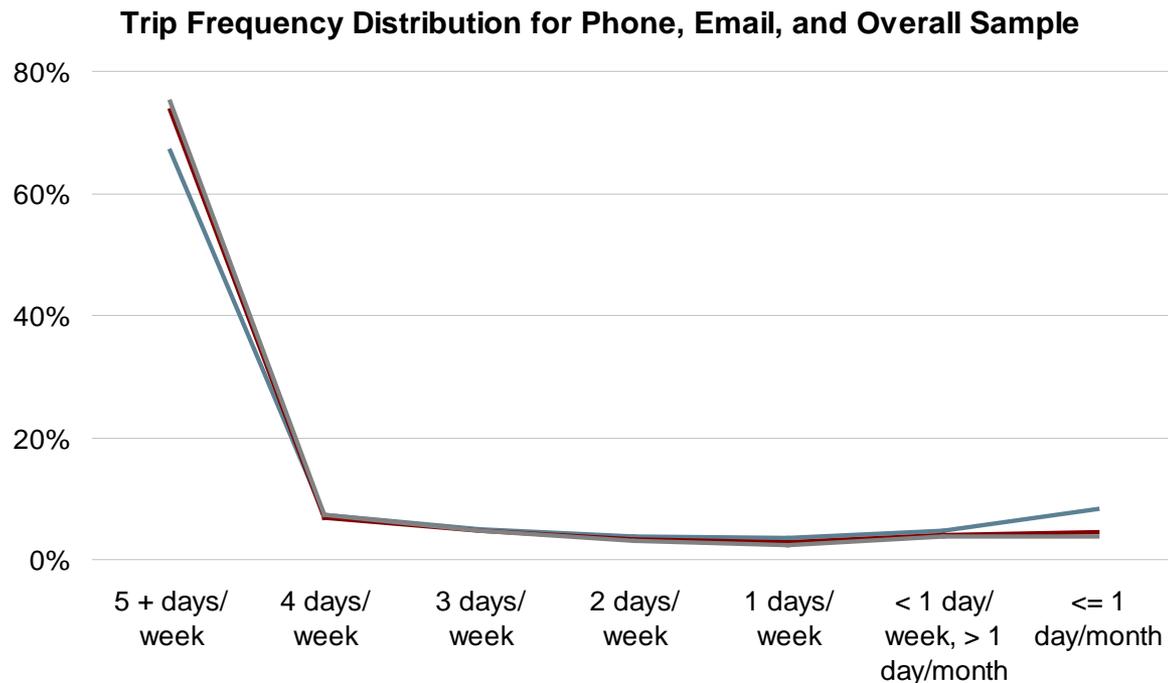
# What are we trying to accomplish by survey recruiting

- **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



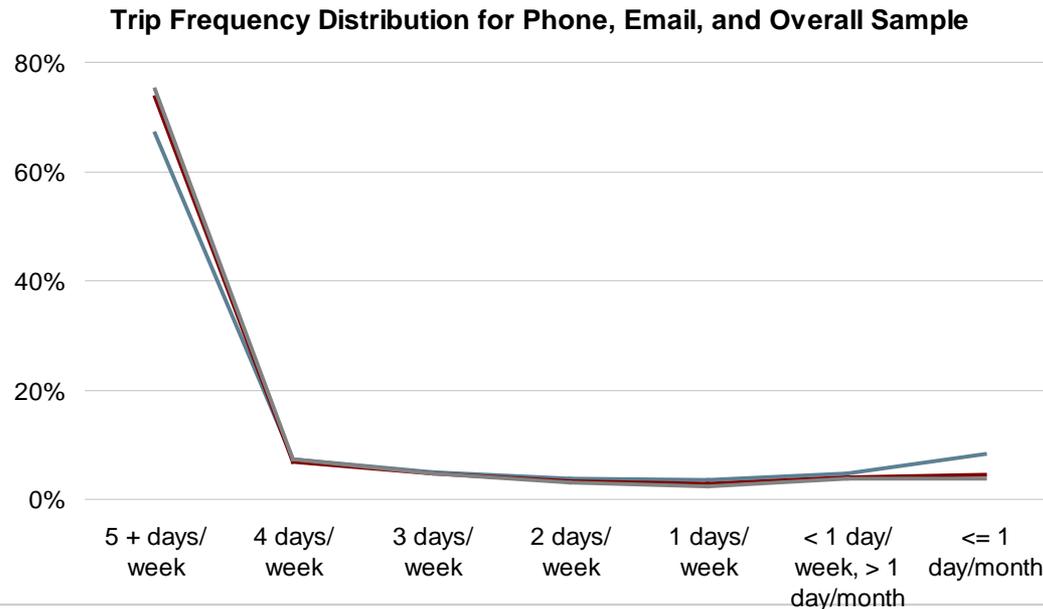
# So what **can** SM do for us recruiting-wise?

- SM Recruiting 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?



- **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

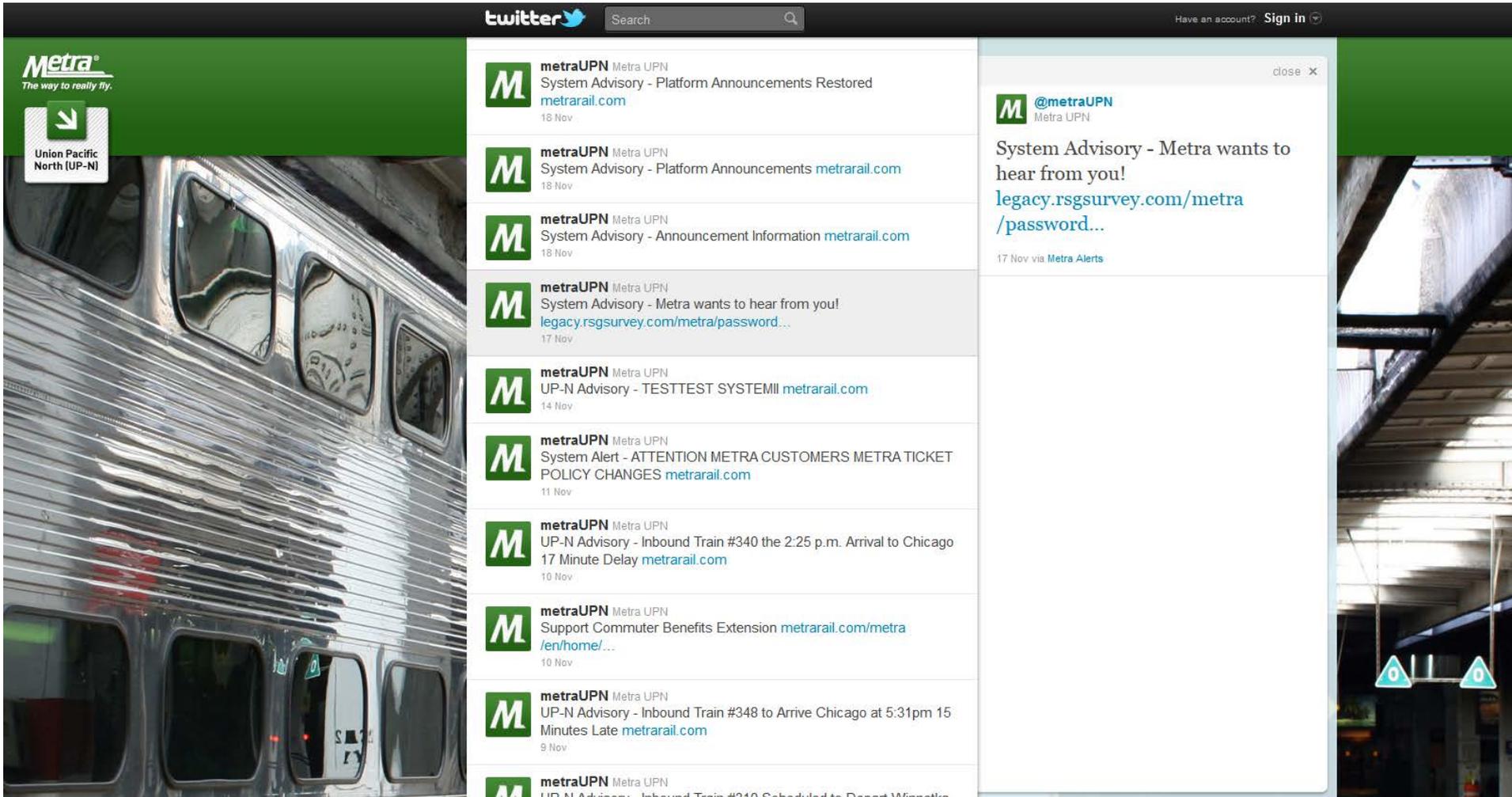


- RTA customer satisfaction study: Metra commuter rail
- Same link put on Metra's website (carousel) and sent out to Metra's twitter feeds/FB
- Results: 788 completes! Though we don't know which came from which recruiting method (web or SM?)
- Twitter suspected to be the main source of sample due to 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



The screenshot displays a Twitter interface with the following elements:

- Header:** Twitter logo, search bar, and "Sign in" link.
- Profile Card (Left):** Metra logo with tagline "The way to really fly." and a "Union Pacific North (UP-N)" badge.
- Image (Left):** A photograph of a silver Metra train car.
- Twitter Feed (Center):** A list of tweets from @metraUPN:
  - 18 Nov: "System Advisory - Platform Announcements Restored" (metrarail.com)
  - 18 Nov: "System Advisory - Platform Announcements" (metrarail.com)
  - 18 Nov: "System Advisory - Announcement Information" (metrarail.com)
  - 17 Nov: "System Advisory - Metra wants to hear from you! legacy.rgsurvey.com/metra/password..."
  - 14 Nov: "UP-N Advisory - TESTTEST SYSTEM!!" (metrarail.com)
  - 11 Nov: "System Alert - ATTENTION METRA CUSTOMERS METRA TICKET POLICY CHANGES" (metrarail.com)
  - 10 Nov: "UP-N Advisory - Inbound Train #340 the 2:25 p.m. Arrival to Chicago 17 Minute Delay" (metrarail.com)
  - 10 Nov: "Support Commuter Benefits Extension" (metrarail.com/metra/en/home/...)
  - 9 Nov: "UP-N Advisory - Inbound Train #348 to Arrive Chicago at 5:31pm 15 Minutes Late" (metrarail.com)
  - 9 Nov: "UP-N Advisory - Inbound Train #340 Scheduled to Depart Winnetka"
- Expanded Tweet (Right):** A larger view of the tweet from 17 Nov: "System Advisory - Metra wants to hear from you! legacy.rgsurvey.com/metra/password..."
- Image (Right):** A photograph of a train station platform with overhead lights.



# We actually got RT'ed

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

tweetbuzz

TOP All Topics Biz Entertainment Game Lifestyle Politics Tech S

**30 TWEETS** <http://legacy.rgsurvey.com/metra/passwordw.asp>

a mins

Tweet tumblr + Like

URL: <http://legacy.rgsurvey.com/metra/passwordw.asp>  
[legacy.rgsurvey.com](http://legacy.rgsurvey.com)

Add a comment...

Warning: this comments plugin is operating in compatibility mode, but has no posts yet. Consider specifying an explicit 'href' as suggested in the comments plugin documentation to take advantage of all plugin features.

### Tweets

If you ride Metra or have any thoughts, they are conducting online surveys. Go to complete the survey.  
leaaronfoley 2 weeks ago

RT @gridchicago Take #Metra 's rider habits/satisfaction survey will take almost 10 minutes #transit  
wrigleyfielder 2 weeks ago

Take Metra's rider habits/satisfaction survey will take almost 10 minutes #transit  
mikelikesbikes 2 weeks ago

Take Metra's rider habits/satisfaction survey will take almost 10 minutes #transit  
gridchicago 2 weeks ago

Take Metra's rider habits/satisfaction survey will take almost 10 minutes #transit  
stevevance 2 weeks ago



## 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**

