ANINDUSTRY ON HE MOVE





LETTER FROM THE CEO

August 15, 2013

Dear Transportation Professional:

Thank you for taking the time to review our survey of the transportation industry. It's a fascinating look at the people within the sector: the issues, the priorities, the way we use, and feel about, technology.

The most important revelations revolve around the future of our industry and our communities. We all want to see vibrant, livable communities; breathe cleaner air; experience well-planned transit systems; and realize a more efficient use of resources. We don't all agree on specific industry goals and what challenges we'll need to overcome, but we all have ideas about transportation systems of the future.

Why did we do this survey? Three reasons:

- As a technology company that provides data to the transportation industry, we feel we have a social responsibility to provide insights, particularly technology-driven insights, to the industry.
- We want to understand what professionals in every segment of the transportation industry are thinking, so we can improve our products and services.
- We couldn't find evidence of anyone else performing a comprehensive survey like this, so we thought, "Why not us?"

Communications and transportation are two staples of the economy. Our ability to provide insights allows us to contribute to a more efficient transportation system; it's our corporate responsibility and ingrained in our culture.

We plan to make this survey an annual event, with even more detailed questions moving forward, and invite your ideas, your suggestions and, of course, your participation. We very much appreciate the openness and cooperation we received when we did this survey, and we're looking forward to your contribution and thoughts for next year.

Speaking of contributions, your participation and votes allowed AirSage to support your favorite charity. You chose the Institute of Transportation Engineers (ITE), so AirSage awarded the "on the move" donation to the LeadershipITE scholarship fund.

Our goal is to create and provide better information for the transportation industry. The survey results in this eBook are one way for all of us to help improve this industry that touches so many lives every day.

Thank you,

Cy Smith Founder and CEO AirSage





MIRRORЯОЯЯІМ

TRANSPORTATION PROFESSIONALS LOOK AT THEMSELVES

Welcome to what will be the first in an annual look at the transportation industry and the professionals in it.

In May-June 2013, 126 respondents in the transportation sector, ranging from those still in school to veterans with decades of experience, were asked a series of questions about the industry. These men and women talked about how they keep up with industry trends and news, how they use social media, why they go to work every day, where they see the industry going, and many more issues.

The good news: Technology is changing the industry in many subtle and profound ways, though not everyone agrees that new technology is a good thing (or is in a rush to adopt it). The more sobering news: Regulatory and social challenges, along with budget constraints, will make it difficult for transportation infrastructure to keep up.

Do you prefer to get your industry news from Transportation Issues Daily or Twitter? Do you work for the challenges or the check? How many women see a glass ceiling for themselves trying to advance in the industry?

Read on for insights into how transportation professionals view themselves, the sector, their organizations and the future of the industry.

"This survey paints a revealing picture about how the field of transportation is changing and what we can expect to see in the next couple of decades... Despite the challenges we face, it's an exciting time to be engaged in this line of work."

> - Christopher McCahill, Ph.D. Project for Transportation Reform with the Congress for the New Urbanism in Chicago

"Today's professionals must keep current in new and emerging technologies to recommend the most cost-effective, site-specific solutions. In addition, we need to encourage new partnerships between the public and private sectors to develop collaborative solutions for transportation needs at all stages: planning, design, implementation and maintenance."

- Thomas W. Brahms, Executive Director and CEO, Institute of Transportation Engineers

"The results of this survey indicate that there remains a need to preserve our nation's transportation infrastructure. Modern datasets, passive data-collection devices and out-of-the-box innovations, all will contribute in providing transportation planning partners, stakeholders and decision-makers with state-of-the-art solutions."

 Guy Rousseau (ABJ40 Travel Survey Methods Committee Chair),Travel Surveys & Transportation Model Development Manager, Atlanta Regional Commission

CAUTION: COMMENT AHEAD LOOK FOR COMMENTS FROM SURVEY RESPONDENTS IN THESE SIGNS.





WHAT GETS YOU TO WORK (AND KEEPS YOU GOING)?

You may work hard for the money, but that's not what gets you all out of bed in the morning. Lack of money is a top challenge, though, at least when it comes to getting things done on the job. Are men different from women? Well, one prefers the challenge; the other is more motivated by the paycheck.

BUT THAT DEPENDS ON WHOM YOU WORK FOR AND HOW OLD YOU ARE.

Differences in motivation by age and industry

Most motivated by challenges:





GOVERNMENT EMPLOYEES (64.7%)

Most fascinated by industry:

29-35 YEAR-OLDS

Most motivated by paycheck:

18-28 YEAR-OLDS

Most motivated by challenges and least motivated by co-workers: 36+ YEAR-OLDS

5.5% OTHER

18.2% MY PAYCHECK

20.0% FASCINATING/CAN'T IMAGINE DOING ANYTHING ELSE

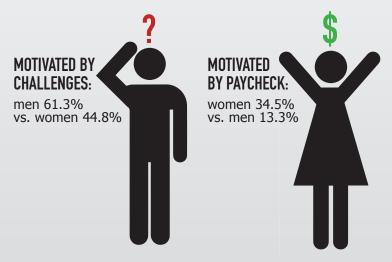
I ENJOY MY CO-WORKERS

YOU LOVE A CHALLENGE.

What motivates transportation professionals to go to work in the morning

CHARLIE LOVES THE CHALLENGE, BUT DIANE PREFERS THE DOLLARS.

Differences in motivation by gender



All respondents did not disclose their gender.





TRIED AND TRUE VS. SHINY AND NEW

Younger people don't always embrace new tools and methods, and older professionals don't always prefer the tried and true. Government is seen as more traditional in its approach, but the lines between who's innovative and who's more conservative don't always follow an obvious path.

YOUNGER FOLKS THINK THEY WORK FOR PIONEERS; VETERANS THINK THEY WORK FOR PROGRESSIVES. GOVERNMENT EMPLOYEES? USUALLY, MIDDLE OF THE ROAD.

How different age groups view their organizations' innovation

23.1%

18–28 YEAR-OLD EMPLOYEES HAVE THE HIGHEST PERCEPTION THEIR CO. IS PIONEERING 30.4%

56+ YEAR-OLD EMPLOYEES HAVE THE HIGHEST PERCEPTION THEIR CO. IS VERY PROGRESSIVE 20%

PRIVATE COMPANY EMPLOYEES HAVE THE HIGHEST PIONEERING RANKING

EDUCATIONAL INSTITUTION EMPLOYEES FEEL THEY ARE LEAST TRADITIONAL; GOVERNMENTS, THE MOST

DOES YOUTH = CUTTING EDGE?

IT'S NOT AS SIMPLE AS YOU MIGHT THINK.

How innovative different age groups feel they are

	& INNUVALIVE	EDGE
18-28	46.2%	53.8%
29–35	75.0 %	25.0%
36–43	40.0%	60.0%
44–56	74.8%	25.2%
56+	82.6%	17.4%

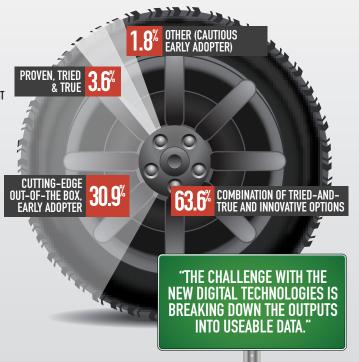
YOUR ORGANIZATION MIGHT BE INNOVATIVE. OR TRIED AND TRUE. BUT THE MAJORITY OF YOU THINK BOTH.

How progressive or traditional respondents feel their organizations are



WHEN IT COMES TO TRIED AND TRUE VS.
PROGRESSIVE, MOST OF YOU ORDER ONE
FROM COLUMN A AND ONE FROM COLUMN B.

How innovative transportation officials believe they are







BUDGETS AND BALANCE: YOUR TOP CONCERNS GOVERNMEN

The challenges you face at work vary, depending upon whether work is for the government or a private company. Your age affects your outlook on that issue as well. But there are some challenges on which many agree: there's never enough money, balancing work and home life isn't easy, and new technologies come with a learning curve.

YOU'RE CONCERNED ABOUT MONEY AT WORK AND TIME AT HOME.

Top challenges at work

20.5% Limited budgets and resources

15.3% Maintaining a positive work-life balance

13.7% Learning new technologies

10.4 Working with different generations

8.8% Staying current with trends and issues

8.8%

Managing employees and/or clients

6.2% Not being able to use new technology

6.2% Maintaining an edge over other professionals

6.2% Developing new business/ generating revenue

Other

GOVERNMENT AND PRIVATE INDUSTRY BOTH KEEP THEIR EYES ON THE BUDGET.

Top challenges for government vs. private industry

Top Challenges for Companies

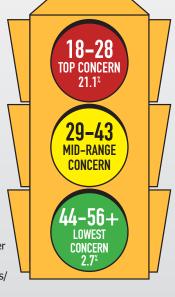


Top Challenges for Government



TECHNOLOGY? MOVE FAST OR WAIT AND SEE?

Not being able to use new technology in my organization



THE YOUNGER YOU ARE, THE MORE AWARE YOU ARE OF GENERATIONAL DIFFERENCES.

Working with different generations













KNOW MEANS KNOW: HOW YOU KEEP UP WITH THE INDUSTRY LISTSERVS. CONFERENCES, WORKSHOPS WEBINARS, TRAINING COURSES WEBINARS, TRAINING COURNALS PROFESSIONAL JOURNALS PUBLICATIONS, NEWSLETTERS PUBLICATIONS, NEWSLETTERS

Trade journals and websites have their place, but a lot of you still like to go old school by attending trade shows and workshops. Face-to-face still beats Facebook, and seasoned professionals are the most likely to feel that way.

NEWSLETTERS NETWORKING BUSINESS NEWS SOCIAL MEDIA SOURCES OTHER

YOU PREFER TO GET NEWS FROM TRADE SITES AND NEWSLETTERS, BUT NETWORKING EVENTS ARE GREAT. TOO. (ESPECIALLY IF THERE ARE FREE DRINKS.) Respondents' primary sources of industry information

YOU FIND INDUSTRY Respondents' other

sources of information

WHAT DOES YOUR AGE SAY ABOUT YOUR READING HABITS? PLENTY.

How different age groups get their information



FROM INDUSTRY WEBSITES (17.1%)



INFO FROM SOCIAL MEDIA





THE SOCIAL SCENE: HOW YOU USE SOCIAL MEDIA

The younger you are, the more often you're checking LinkedIn, Facebook and Twitter.

No surprise there. But you're not just checking videos of kitties and kiddies: you're sharing ideas, swapping information, checking credentials, and keeping up on projects.

AGE 18 - 28 66.7%

AGE 29 - 35 40.9%

AGE 56+ 24.0%

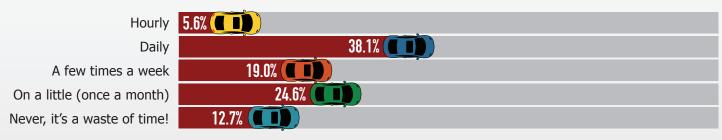
AGE 44-56 20.9%

ABOUT TWO-THIRDS OF YOU USE SOCIAL MEDIA MORE OFTEN THAN YOU FLOSS. (THIS IS JUST A GUESS.)

How often do you use social media?

A DAY JUST ISN'T COMPLETE WITHOUT A LITTLE SOCIAL MEDIA.

How many transportation professionals use social media on a daily basis

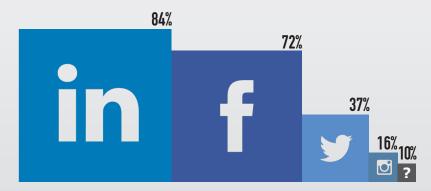






AND SOME OF YOU USE IT AS YOUR PRIMARY INDUSTRY INFORMATION SOURCE.

Social media is the primary source of information for only 16.0% of transportation professionals



AT LEAST YOU KEEP IT PROFESSIONAL. (MORE OFTEN THAN NOT.)

Which social media sites you use





TECHNOLOGY: THE YOUNGER YOU ARE, THE BETTER IT LOOKS

To say that younger professionals embrace new data collection technologies with more fervor than older professionals is only part of the story. Everybody, it seems, has an opinion on new and traditional traffic-monitoring technologies. And even those who see digital technologies as the industry's inevitable next step have some cautionary comments.

SKEPTICAL, LEERY, UNSURE OR LOVE IT? AGE AND ENTHUSIASM FOR NEW TECHNOLOGIES GOES HAND IN HAND.

How respondents feel about new technology

	Very Skeptical	Leery	Will Sometimes Use	Strongly Prefer
<29	1.4%	1.3%	2.0%	65.4%
29-35	1.4%	7.7%	18.4%	26.7%
36-43	2.9%	10.2%	50.0%	6.9%
44-56	12.9%	57.7%	18.4%	1.0%
57+	81.4%	23.1%	11.2%	0%
	<u> </u>	<u>Q</u>	<u></u>	<u> </u>

AND YOU SURE HAVE PLENTY TO SAY ABOUT IT.

"As a traffic engineer, I want as much origin-destination data as possible."

"Digital is usually faster and slightly more accurate, while costing less."

"Traditional methods are resource intensive and expensive compared to digital technologies."

"The biggest problem with data collection that does not question respondents is that motives must be inferred."

"Digital
technologies still
do not provide the
socioeconomic
information available
from traditional
methods."

"There's no question that cell phone data will replace all other surveys."

"The next
generation of planner
will no doubt embrace
digital studies
because they accept
the credibility and
cost of the new
technology."

"The more data you have, the more scrubbing and checking you have to do."

"Garbage in is garbage out!"

NEW TECH OR OLD, ONE THING NEVER CHANGES.





WE'RE FROM THE GOVERNMENT <u>AND WE'RE HERE TO HEL</u>

Older professionals are more approving of government actions and policies, younger professionals less so. But everyone agrees that government policies sometimes get in the way.

forward economy arduous strings continued patterns project arduous strings continued patterns project arduous strings continued patterns project building experiment solutions building experiment solutions building experiment solutions fair-access multi-decade productively businesses land unsustainable political enforceable cost downsizing non-intrusive local-city/county straightpolicies governments inability state use nation's inability ability withoutseriously vision public ideally funds perception much making Infrastructure Politics perception much used Stingy Dependence perfectionistneeded approval maintaining personal design meaningless impede subsidizing erreviewbudget dominance ensure deadlock agendas funding industry arbitrary supports market address financial Politicians deliver deliver HEY, TELL US lock agendas funding industry arbitrary supports markets financial Politicians delivered system become needs efficient deliver

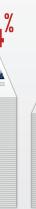
HOW YOU REALLY FEEL. Other sentiments about the effects of government policy

YOU'RE NOT ALWAYS A FAN OF GOVERNMENT-RELATED CONSTRAINTS.

How government policy affects the transportation industry



GOVERNMENT SLOWS OR KILLS **SOLUTIONS THAT CAN IMPROVE** COMMUNITIES



POLITICS MAKES IT DIFFICULT TO **OFFER GREEN** SOLUTIONS



GOVERNMENTAL **BUDGETS LIMIT** PROJECT DEADLINES AND SCOPES



POLICIES PROTECT TAXPAYER FUNDS AND THE LIMITATIONS ARE OK



OTHER

AND YOUNGER PROFESSIONALS ARE THE LEAST LIKELY TO BE FANS.

Opinions about government policies by age





56+ YEAR-OLDS: MOST OK WITH LIMITATIONS



WHERE ARE WE GOING? THE FUTURE ISN'T CLEAR.

Transportation planners and designers agree that the future means more provisions for walkers, cyclists and mass transit users. Will the United States embrace wholesale changes to traditional suburbia? Not everyone is sure.

EVERYONE HAS AN IDEA OF WHAT THE FUTURE OF TRANSPORTATION WILL BE.

What respondents expect to see in the future

> Expand current roads; people prefer traditional suburbia

Dense neighborhoods connected by transit and multi-use roads for walking/biking

AND EVERYBODY HAS PLENTY TO SAY.

Comments about the industry's future

18-28

"We need a transportation policy that fixes what's broken by subsidizing only according to extérnal benefits.

"People should stop seeing transportation as a zero-sum game and encourage more cross-modal cooperation.

"Innovation comes from looking outward as well as inward!"

"A visionary government must devise a transportation system with the same innovation used to create the interstate highways.

44-56

IDEAS ABOUT WHAT THE FUTURE SHOULD BE? A LITTLE DIFFERENT.

What respondents want to see in the future

High-speed rail (and other new forms of transporta

More transportation projects to solve environmental problems

64%

Faster and cheaper access to data to make better decisions

More collaboration between

and NGOs

U.S. embraces successes we've seen government in other countries

Cut infrastruc- Develop ture costs with more efficient

systems

Expand transit options

more flexibility

Other entirely sustainable development transportation projects

"The future? An autonomous vehicle that replaces low-ridership transit systems and makes single-vehicle travel safer and more efficient."

"THE MARKET SHOULD DETERMINE WHAT HAPPENS."





SUBURBAN TIME, AND THE LIVING IS EASY.

There's a bit of a disconnect between how (and where) you think people **will** live in the future vs. how they **should** live. You'd like to see more changes than you think communities are willing to accept, but you think some change is inevitable.

HERE'S WHAT YOU'D LIKE TO SEE HAPPEN.

Comments about the future of housing and neighborhoods

"Maintain what we have and retrofit it for pedestrians and cyclists." "Optimize
existing
systems within
budgetary and
political
constraints."

"Build dense office/retail and offer all densities for residential."

HOW WILL IT BE? HOW SHOULD IT BE?

What respondents think future housing will be vs. should be

Traditional, suburban, single-family homes will continue to dominate

Dense, mid- to high-rise, mixed-use housing will be more common

Low-rise, mixed-use or rowhouses in transit-oriented neighborhoods will be the norm

Single-family homes will be built, but will be smaller, on smaller lots, with more community features

Will	Should
31%	12%
13%	27%
13%	30%
43%	31%

of zero-pollution, automated vehicles will require us to rethink our transportation and land-use decisions."

"The arrival

"I favor dense development but for one factor - hi-fi music. I don't want to ever share walls with anybody again!"

"Provide more options to the public."

"Redesign transportation to take advantage of technologies that allow smart, automated vehicles."

"When land, transportation and construction costs are weighed against what you get for your money, single-family homes are a better value."

"Denser residential neighborhoods only reduce auto travel if they surround commercial development where people work and shop. Boutique mixed-use developments do not usually offer the right mix."



IS IT A MAN'S WORLD? MANY WOMEN SAY 'YES.' THE GOVERNMENT MAY PRESENT

Women face many of the same issues in transportation that they do in other industries, including glass ceilings and a lack of female role models. But some women say that men and women face the same challenges.

THE MAJORITY OF WOMEN SEE **ISSUES AND CHALLENGES FACED** BY WOMEN IN THE INDUSTRY.

The issues women face in transportation

No differences based on gender; we all face the same challenges 30.0%

Many quiet/hidden challenges for women, including the "glass ceiling"

Male-dominated industry with few women to serve as role models.

Other 13.3%

Lack of female role models higher: Private Goverment Company

FEWER CHALLENGES. BUT IT ALSO

OFFERS FEWER ROLE MODELS. How women's issues vary

by industry

Hidden challenges

higher:

Goverment

IS CHIVALRY DEAD? CHAUVINISM CERTAINLY ISN'T. **Comments by women**

"THE GOOD OLD BOY SYSTEM IS STILL ALIVE AND WELL. BUT IT MAY BE SLOWLY CHANGING."

"THERE IS STILL DISPARITY IN PAY IN MANY ORGANIZATIONS, WHICH IS UNACCEPTABLE.

"SOME MEN ARE CHAUVINISTIC, AND WOMEN HAVE TO BALANCE STICKING UP FOR THEMSELVES AND DEALING WITH THIS.

Private

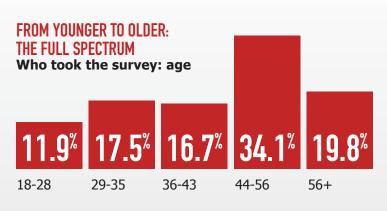
Company

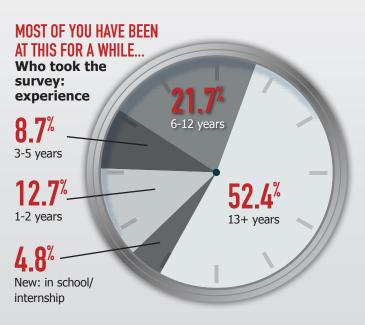




THE SURVEY BY THE NUMBERS

This survey covered a lot of ground: men, women, older, younger, newbies and veterans. About half of you work for the government, and a few of you don't work at all. (Well, being in a classroom is work, but you know what we mean.)











SAME TIME NEXT YEAR?

This ebook contains results from the survey conducted in 2013. You can the most recent survey here.

DOWNLOAD THE MOST RECENT SURVEY

All surveys are anonymous, and the more people who participate the better the survey will reflect the entire industry. <u>Send us an email</u> if you'd like to participate next year. Is there a question you'd like to see asked as a part of this survey? Let us know that in your email too!

A LITTLE ABOUT AIRSAGE

Founded in 2000, AirSage pioneered use of the rich data from wireless devices to help predict time-of-day traffic patterns. Today, AirSage provides accurate location and movement information – as well as population analytics – to government, private industry and academia.

AirSage has the widest coverage of any real-time, location-based service provider in the country. We collect and analyze real-time mobile signals to produce more than fifteen billion anonymous locations every day. By turning every mobile device (cell phones, tablets, PDAs, etc.) into a mobile data sensor, AirSage provides unmatched scale and accuracy, while fully protecting user privacy.

Private businesses, government agencies and other organizations can use this aggregated information to model, evaluate and analyze the location, movement and flow of people and assets.

The power of where and when



