

Research to Assess Branding and Marketing Needs

for DelDOT TMC's Real-Time Traveler Information System

June 2014

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Institute for Public Administration

School of Public Policy and Administration

College of Arts and Sciences

University of Delaware

for the

**Delaware Department of Transportation
Transportation Management Center**



IPA institute for
Public Administration
UNIVERSITY OF DELAWARE
www.ipa.udel.edu

*serving the public good,
shaping tomorrow's leaders*

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Preface

As the director of the Institute for Public Administration at the University of Delaware, I am pleased to provide this report, *Research to Assess Branding and Marketing Needs for DelDOT TMC's Real-Time Traveler Information System*. Funded by the Delaware Department of Transportation (DelDOT), this report is intended to help DelDOT's Transportation Management Center (TMC) align the development and marketing of its real-time traveler information system to meet the needs of the traveling public. This report also provides outcomes of a literature review, market/competitive analysis research, and focus group sessions. This research provides a foundation for recommended marketing/branding strategies that are designed to enhance the use of the DelDOT Real-Time Traveler Information Application.

In November 2012, DelDOT introduced its free mobile application, which is available to both Android and Apple iOS users. The app features DelDOT news, events, streaming traffic cameras, live traffic advisories, and real-time interactive traveler information. The Institute for Public Administration assessed the degree to which targeted customers were aware of and utilized the app. The report includes a marketing plan that reinforces the need to utilize both traditional and digital marketing tools to attract, retain, and capture new target audience users.

I would like to take this opportunity to acknowledge those who contributed time and energy toward this report's success—Project managers William J. DeCoursey, assistant policy scientist, and Marcia S. Scott, policy scientist; project staff Sarah M. Pragg, policy specialist, and Bernard Dworsky, senior project advisor, and Public Administration Fellows, Neil W. Kirschling, Geoffrey A. Heath, and Rebekah Inman Perry.

The Institute for Public Administration addresses the policy, planning, and management needs of its partners through the integration of applied research, professional development, and the education of tomorrow's leaders. This study is an important part of this effort, as real-time traveler information systems and technologies are increasingly relevant in today's society.

Jerome R. Lewis, Ph.D.

Director, Institute for Public Administration

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Executive Summary

The Delaware Department of Transportation (DelDOT) Transportation Management Center (TMC) is well regarded for its state-of-the-art Integrated Transportation Management System (ITMS), which emphasizes integration and management equally to its deployment of advanced technology. A variety of technologies are used to provide real-time traveler information to help maximize operational capacity of Delaware's heavily traveled roadways and help motorists make informed decisions about choosing and planning the best trip routes.

Real-time traffic information and traveler alerts are provided via DelDOT's website, traveler advisory radio station, and social media sites. In November 2012, DelDOT introduced its free mobile application, which is available to both Android and Apple iOS users. At present, the real-time traveler information application (DelDOT App) is most suitable for pre-trip planning. In addition to providing real-time traveler information, the app features DelDOT news, events, streaming traffic cameras, live traffic advisories, weather information, and radio traffic broadcasts.

While the launch of the DelDOT App was promoted via the DelDOT website and press releases, the agency expressed concern that the traveling public lacked sufficient awareness of the app. The Institute for Public Administration (IPA) at the University of Delaware was enlisted to conduct research to assess marketing needs for the DelDOT App. The goal of this study is to craft a comprehensive marketing plan that meets the needs of its target markets. Outcomes of this study may be incorporated into TMC's strategic plan update and may guide opportunities to guide future investments, leverage resources, and expand marketing/branding strategies to enhance use of real-time traveler information technology.

Review of Industry Guidelines

To carry out the study, the IPA research team conducted several research tasks. First, a review of industry guidelines was conducted. The team met with and interviewed DelDOT TMC Director Gene Donaldson and Holly Rybinski, Principal of Rybinski Engineering to understand the current real-time traveler information system, long-range plans, and strategies. The *1997 Delaware Integrated Transportation Management Strategies* was reviewed to better understand how DelDOT's ITMS aligns with goals of the U.S. Department of Transportation (USDOT) real-time traveler information system. Finally, this task involved conducting a literature review to address the question, "what makes a good app great?" and to determine social media best practices.

Market/Competitive Analysis

A market/competitive analysis was undertaken to determine DelDOT’s competitors, both private and public, in the real-time traveler system application (app) marketplace. A total of eleven apps were compared to the DelDOT App using four criteria—features, interface and usability, target market, and marketing strategies. Because private apps developed by state departments of transportation (DOTs) only provide real-time traveler information within a particular state, the competitive analysis focused on private apps. A full analysis of each app and matrices of marketing strategies can be found in **Appendix A**.

Focus Groups

Three focus group sessions were planned and facilitated by IPA to assess group members’ general awareness of real-time traveler information system apps (six private apps and the DelDOT App). Focus groups were comprised on University of Delaware advanced-level leadership class students, Public Advisory Committee (PAC) members of the Wilmington Area Planning Council (WILMAPCO) and Dover/Kent County Metropolitan Planning Organization (Dover/Kent County MPO), and additional stakeholder invitees. Prior to each focus group, invitees were asked to complete an online survey, and download and test the DelDOT App. Focus group summary documents are available in **Appendix B** and full survey results in **Appendix C**.

Marketing Plan

The marketing plan comprises the bulk of this report. It stresses the need for DelDOT to use its unique selling proposition (USP) of “Timely, Accurate, Reliable,” to provide outreach, communicate uniqueness, and connect app benefits to the needs of its target customers. The situational analysis affirms that plans are underway to expand and enhance ITMS and the DelDOT App. These plans align with USDOT’s Real-Time System Management Information Program goals and seek to meet growing customer demands for advanced real-time traveler information technology. A Strengths-Weaknesses-Opportunities-Threats (SWOT) analysis provides a framework for DelDOT TMC to address high priority needs and issues with the DelDOT App.

The marketing plan also asserts the need for DelDOT to use a mix of traditional and digital marketing strategies. DelDOT needs to recognize that apps now represent the “future of digital marketing” (Dholakiya, 2014) because of an exponential rise in the use of social media, growth in app downloading, and trend toward the use of mobile devices to access the Internet over laptop and desktop computers. In addition, DelDOT needs to craft a comprehensive social media strategy to create a community of DelDOT App users, engage

users through various social media platforms, exchange two-way communication on real-time traveler conditions, and address information inaccuracies. DelDOT's social media strategy will need to incorporate analytics and metrics to measure success of its marketing plan for the DelDOT App. Paid, owned, and earned social media strategies are needed to elevate DelDOT App's presence in the competitive marketplace.

A conversion strategy is recommended to direct prospective users to successfully search for and download the app. App store optimization (ASO) techniques, such as searchable keywords, visually appealing icons and screenshots, user app ratings, and social media engagement can optimize brand recognition and increase downloads. Implementing app-focused social media content is strongly suggested to increase awareness of the app. Content recommendations include engaging followers through weekly and monthly themes, partnerships with affiliate organizations and Delaware event planners, contests, and use of popular Delaware hashtags to generate Twitter posts.

Recommendations

Recommendations are based on outcomes of industry best practice research, emerging trends in advanced technology and customer market demands, and input from focus group members. Recommendations are separated into two categories: App improvements and marketing strategies.

Functionality of the App

Improve Interface and Usability – To meet customer demands and be competitive within the industry, DelDOT TMC should move forward on plans to upgrade the DelDOT App to transition it from pre-trip to (hand-free, eyes-free) en-route use. Key features sought by customers include

- Voice-guided navigation that gives turn-by-turn directions and voice alerts for traffic incidents
- Additional navigation-related features that provide the ability to search for addresses/locations/roads, personalize the app based on preferences, share estimated times of arrival
- Push notifications and voice alerts for real-time travel- and weather-related conditions
- Hands-free voice commands to enable a user to find addresses, get directions, or report traffic/weather-related problems and incidents
- Real-time incident reporting or “crowd-sourced” information from users

Improve App Menu/Features – Most private apps have two primary menu options—a “Drive” or “Map” display that enables users to tailor the app for personalized reports and “Report” display that enables users to report an accident, hazard, construction, police, or weather condition. The DelDOT menu should be revised to reflect real-time traveler information that is most in demand by users and its target markets, change the “News” feature to “Traffic Advisories,” minimize the need for users to manipulate data, and improve “home screen” options.

Improve App Support – DelDOT TMC should offer timely, personalized customer support, cultivate a community of users, create app tutorials, and post user testimonials.

Marketing Strategies

An extensive list of general, traditional, and digital marketing strategies were suggested.

General Marketing Strategies – Both traditional and digital marketing strategies should be integrated to capitalize on the DelDOT App’s USP and appeal to target markets. DelDOT needs to rename its app to accurately depict the real-time traveler information system rather than the name of the transportation agency. A branding campaign can be initiated to enhance branding awareness with a catchy name, slogan, description, and screenshots. A website for the DelDOT App can be created to help people search for and find the app via its name, category, or function. Paid, owned, and earned social media should be considered to promote the DelDOT App through traditional methods, social media platforms, and a customer relationship management (CRM) application (e.g., HootSuite).

Traditional Marketing Strategies – These include use of display ads at places with maximum visual impact, print ads in high-profile publications that reach target markets, sponsorship of traffic broadcasts in exchange for app promotion, design and distribution of promotional items, and building relationships with media and other partner organizations/businesses/companies.

Digital Marketing Strategies – Again, a CRM application (like HootSuite) should be used to improve productivity and track campaign effectiveness through the use of one social media interface. Strategies for various social media platforms were suggested such as creating a separate Twitter “handle” for DelDOT TMC and utilizing popular hashtags for Delaware, developing new YouTube videos and tutorials geared toward target markets, advertising to target audiences via its Facebook page, using social proofing to integrate word-of-mouth recommendations into marketing strategies, and broadening its social media reach through platforms such as LinkedIn, Google+, Instagram, and SnapChat.

Proposed Next Steps

Proposed next steps should be considered in consultation with directors and key personnel within DeIDOT's Transportation Solutions, Public Relations, and Finance divisions as well as the Delaware Transit Corporation (with respect to planned ITMS advancements). To enhance awareness and use of the app, DeIDOT TMC needs to

- 1) Move Forward with App Improvements** – Enhance the DeIDOT App to meet customer demands and better compete in the marketplace.
- 2) Identify and Prioritize Marketing Needs** – Suggested action items include promoting the app to target markets, rebranding and re-launching the app, building and launching new DeIDOT App website, securing a customer relationship management (CRM) application, developing a social media strategy, and forming/strengthening collaborations and partnerships.

Identify and Prioritize Staffing Support/Resource Needs – DeIDOT needs to determine whether it has sufficient in-house staffing/resources available or whether contractual support is needed for a social media specialist(s), digital marketing support and app rebranding, and outreach to target markets.

Introduction

The exponential dispersal, and connectivity, of technology and processing power has fundamentally changed the field of transportation management. The entire field is in the process of transitioning from a system that counts vehicles as they pass set waypoints and sends messages to users to a truly integrated, adaptive, and interactive one.

The Delaware Department of Transportation's (DelDOT) *Delaware Integrated Transportation Management Strategic Plan* (1997) served as the foundation for its Integrated Transportation Management System (ITMS). It defined a statewide program managed from a central transportation management center (TMC). Delaware ITMS program goals seek to manage and maintain efficiency of Delaware's multimodal transportation system on a 24 hours a day, seven days a week, year round basis through real-time monitoring, control, and information. Moreover, Delaware's ITMS program oversees planning and operations for transportation incidents and events, weather-related emergencies and evacuations, and transportation homeland security.

In accordance with U.S. Department of Transportation (USDOT) goals and Federal Highway Administration (FHWA) requirements, DelDOT is providing real-time information to the traveling public. Real-time information is made available to improve the security of the transportation system, address traffic congestion, support timely responses to weather- and traffic-related incidents and emergencies, and share information among transportation agencies.

In November 2012, DelDOT introduced its free mobile application, which is available to both Android and Apple iOS users. At present, the Real-Time Traveler Information Application (herein referred to as the DelDOT App) is most suitable for pre-trip planning. It does not limit itself solely to real-time traffic. The app features DelDOT news, events, streaming traffic cameras, live traffic advisories, weather information, travel-information radio, and real-time interactive traveler information.

Other state departments of transportation (DOTs) and private sector companies have also been very active in developing advanced technology that provides public access to real-time traveler information through applications (apps) that can be downloaded for use on Android and Apple iOS mobile devices. Apps developed by companies such as Google Maps, INRIX, Scout, Beat the Traffic, and Waze are aggressively competing for market share, while public apps developed by DOTs are geared for use within a particular state.

State-run apps, like DelDOT's, are in some ways superior to their private sector competitors as ITMS is crafted through the "diligent application of Intelligent Transportation System (ITS) technologies" (FHWA, 2010). However, the private sector apps generally outclass

government-run ones in appearance, style, and simplicity of use. Owing, perhaps, to their national branding efforts, they generally enjoy greater popularity and have taken advantage of the rapid evolution of social media that continues to reshape the real-time traffic app industry. In some ways, transportation system users are becoming an integral part of the system (reporting incidents, tweeting about delays) as opposed to simple patrons of it.

Best-practice research, focus group input, and surveys conducted by the Institute for Public Administration (IPA) at the University of Delaware support the need for both improvements to the functionality of the app and as well a comprehensive marketing plan, keyed off of DelDOT's unique selling proposition—"Timely, Accurate, Reliable." Ultimately, to ensure optimal use of the DelDOT App by the traveling public, DelDOT TMC should align planned improvements to the app and recommended marketing strategies to meet the need of its target markets.

Review of Industry Guidelines

Background

Technology has incrementally changed and advanced the field of traffic management for the past 50-plus years. The steady progression from simple magnetic loops that turn lights green to closed-circuit cameras that monitor traffic volumes seems poised to reach its zenith in the coming years as we approach a fully integrated and adaptive transportation network.

Dubbed, variably, Intelligent Transportation Systems (ITS) or Integrated/Intelligent Transportation Management Systems (ITMS), the concept of a system-wide interface allowing managers to adjust, in real time, roadways, bridges, transit, and traffic-control devices is compelling. Fifty years ago, computers filled basements and were costly and time-consuming to utilize. Today, most users of our transportation network carry computing devices hundreds of times faster, infinitely more connected, and often voice operable.

This truly groundbreaking development offers traffic operations professionals a fundamental leap forward. They now have the bones of a system that can interface directly with the people operating vehicles and utilizing transit—as opposed to the comparably less sophisticated, one-way flow of information systems that primarily monitor physical vehicles as they pass set waypoints.

Electronic tolls, advanced signal timing, variable messaging signs, bluetooth detectors, and similar innovations have incrementally advanced ITMS. However, perhaps no improvement seen to date has as much raw potential to speak to, listen to, and interact with system users as mobile devices and tablets with dedicated applications (apps).

U.S. Department of Transportation ITMS Goals

The U.S. Department of Transportation (USDOT) established four goals for ITMS *Real-Time Traveler Information Market Assessment White Paper* (2010). While goal three does not pertain to this research context, the remaining goals demonstrate opportunities for real-time traveler apps. The four goals are listed as follows:

- 1) Identify gaps in current approaches, systems, partnering strategies, and technologies relative to the real-time traveler information marketplace across the modes of traffic, transit, parking, and freight/intermodal.
- 2) Identify opportunities for closing the gaps, through emerging technologies and innovative partnerships, as well as leveraging data investments across both public and private data collection and integration capabilities, and identify the USDOT's role to support these efforts.

- 3) Document the institutional, technical, and cost issues associated with collecting real-time data from these modes.
- 4) Identify the utility of real-time data for uses beyond traveler information.

Understanding Goal One

This goal is particularly concerned with how much real-time information is available to customers across the various modes of travel. In short, there is not enough infrastructure (existing or contemplated) to alert system users on less-traveled roads or transit lines of changes in system conditions. There will never be enough variable message signs or networked bus-stop kiosks, particularly in rural areas. A clearly noted gap is the inability of agencies and managers to easily get system feedback from areas where there is no wired “system.”

Understanding Goal Two

This goal speaks directly to the potential benefits of real-time traveler information apps. Utilizing apps, coverage is radically expanded from fixed-position sensors, signs, and closed networks to privately-maintained, financed, and nearly ubiquitous cellular data networks. Mobile devices, tablets, and apps are, by definition, emerging technologies. Coupled with social media or direct-to-agency reporting features, they exponentially augment the potential for incident reporting. The potential for improving the transit experience is hard to overstate. By channeling automatic-vehicle-locator (AVL) positions and routes through customers’ mobile devices and tablets, even customers waiting at rural stops would be afforded a bird’s-eye view of the system and would know precisely when their bus would arrive and where they would go.

Understanding Goal Four

This goal explicitly involves the up-to-the minute aspects of social media. According to *Real-Time Traveler Information Market Assessment White Paper (2010)*, social media is a popular means of acquiring information. Meeting that market demand is part of the DOT’s responsibility to keep up with the times and keep customers informed, as well as they can in as real time as possible.

The same report (2010) goes on to note that emerging real-time technology is changing information needs from pre-trip (routing) to en-route information needs. More broadly, data have marketing value. Simply having and distributing data confers “trusted source” status on the providing agency. By increasing an agency’s popularity on social media, data give that agency greater reach and voice. The agency’s ability to effectively partner may increase as well. The agency would then be able to use its network of followers to attract attention to similar, relevant information related to public workshops, community outreach, or disaster/emergency management.

Delaware Department of Transportation ITMS Goals

In agency-delivered presentations adding to the *1997 Delaware Integrated Transportation Management Strategic Plan*, Delaware Department of Transportation (DelDOT) identified the following priorities.

- 1) Expand the Statewide Signal System and Monitoring Devices
- 2) Transportation Homeland Security and Incident Management
- 3) Providing Customer Information
- 4) Federal Highway Administration (FHWA) Real-Time System Management
- 5) Information Program
- 6) Transit Schedule Adherence System
- 7) Telecommunications

DelDOT's Real-Time Traveler Information Application (herein referred to as the DelDOT App), which plays a role in all objectives, is ideally suited for Providing Customer Information, Transit Schedule Adherence, and Telecommunications. Clearly the app will be an ever-growing piece of how DelDOT communicates with its customers and how it hears back from them. The addition of automatic vehicle location (AVL) and route information for DCT/DART First State fixed-route buses is a highly anticipated upgrade that may revolutionize transit schedule adherence. Integrating 511 services with the app may broaden its appeal and entice more users.

DelDOT Real-Time Traveler Information App (RTTIA) Goals

Members of the IPA research team met with DelDOT staff twice, once in late 2013 and again early in 2014. According to DelDOT Operations, as it exists, the DelDOT App is intended to service commuters, goods movement, vacationers, special events, regional and occasional travelers, and those impacted by weather-related incidents.

Its creation was, in part, to align with the aforementioned USDOT strategic goals and DelDOT's own long-range plans and strategies. The app's creation is one part of a broader social media strategy. DelDOT, in general, and TMC, in particular, seek to not only "push" information on system performance, roadways, and transit to its users, but also "pull" important and otherwise unavailable information on conditions, incidents, and performance back from users.

Initially designed to provide DelDOT employees with access to TMC's spatial information when not in the office, the app presently mirrors the DelDOT TMC interactive map. As such, it works best as a pre-trip planning tool.

DelDOT aims to improve the app with an interface readily accessible on the go or hands free—possibly en route. DelDOT staff listed these additional goals:

- Integrate an interactive voice recognition capability
- Provide a two-way interface
- Install the ability to predict and react to conditions
- Display estimated travel times
- Track and display DART bus locations
- Show flooded roadway segments
- Feature an improved, real-time incident reporting function for app users
- Provide easy access to personalized or event-specific information

The agency also is anxious to partner with area businesses and venues to mitigate the traffic associated with tourist attractions and annual events. These enduring partnerships could include pre-event coordination and joint publicity.

Moreover, many of the same goals were specifically mentioned by survey-takers and focus-group participants when recommending app improvements. Refer to **Appendix C and Appendix E**.

What Makes a Good App Great?

The IPA research team reviewed over a dozen sources on what constitutes an excellent app and how best to improve existing applications. The state of play and rapid evolution of the field makes pinning down any lasting “best practices” difficult. All app authors will likely have to work to stay “ahead of the curve” for the foreseeable future. Even so, six key points quickly emerged.

- 1) Make the app look good and work well
- 2) Keep it simple
- 3) Ask yourself, “Has this been done before?”
- 4) Make consumers’ lives easier by solving a problem
- 5) Eliminate user interface hangups
- 6) Prioritize marketing

Make the App Look Good and Work Well

According to the article “Mobile Apps: A Look at What Makes a Good App Great” written by Matt Brian (2011), the first important step in making a good app great is making it look and operate well. Remember that most people using apps are doing so with a small touchscreen, so the app should not be too big (or too small) to see on the screen (Brian, 2011).

Employees at Apple Incorporated shared this sentiment; the “Apple User Interface Guidelines” simply stated, “Make targets finger-tip sized” (Apple Incorporated, 2011).

Keep it Simple

In “Five iPhone Experts Share What It Takes to Make a Great App” by the Dailytekk Organization, an expert wrote, “Users should be able to understand and use your application without needing to open a user manual... Pay a lot of attention to the information design, layout, and graphical elements of your application. The most important graphical assets are your icon and primary splash screen because this is what users see before they decide to download it” (Forrest, 2012).

The “Apple User Interface Guidelines” (2011) noted the following

- Give people a logical path to follow, make usage easy and obvious, use user-centric terminology, and minimize the effort required for user input.
- Downplay file-handling operations.
- De-emphasize settings.
- Make search quick and rewarding.
- Entice and inform with a well-written description/be succinct.
- Ask people to save only when necessary. Make modal tasks occasional and simple.

Zack Chia is a freelance creative director in Singapore. He recommends “mak[ing] your app easy to digest and modular” (Chia, 2013). Complicated apps will frustrate, confuse, and irritate the user. This is dangerous territory because app users could become disinterested in the app and delete it from their mobile device or tablet altogether (Chia, 2013).

Ask Yourself, “Has This Been Done Before?”

In “What Makes an App a Good App – Seven Pointers,” by Den Delimarsky (2011), he stressed the importance of being unique among other apps and not simply mirroring content available on the Internet. Delimarsky (2011) advised:

Don’t copy an app that has already been created, or charge money for an app that has the same qualities of a website that can be accessed via mobile device for free. Make sure your app has a purpose unique to itself and is valuable to users.

Other experts are less concerned with every app’s concept and content breaking new ground, but do insist that an app at least own a niche and serve it better than more broadly based competitors.

Make Consumers' Lives Easier by Solving a Problem

In "What Makes a Good App Idea a Great App Idea," *AppMuse* CEO, Mark Stetler framed three fundamental questions users ask themselves when considering whether to fill limited space in their device's memory (Stetler, 2011).

- Do I need this?
- Would I use this?
- Would this product improve my life, in some small but useful way?

Clearly, users are apt to be more forgiving if they *need* the service offered by the app. For example, they may suffer through a poor design or lackluster functionality if they must use an app to do their taxes. The app's functionality and aesthetic can weigh heavily on whether a user would or would not use a given app that they don't *need*, but may want or find useful.

The "Appsolute Genius" blog summed up the sentiment nicely. The app must make the user's life *easier*. Even if the service has definite value, if it's not easier than the alternative (another app, mobile website, or taking no action), it will not be adopted (Cauble, 2013). A user who could spend ten minutes fumbling with an unwieldy app to avoid five minutes of delay would not continue to utilize said app.

An absolute key to "easy," stated by all experts was minimal touching. All icons should be easy to click with one finger (without having to zoom), menus should be simple and as minimal as possible, and voice interaction is a significant plus.

Eliminate User Interface Hangups

User interface (UI) hangups typically arise when an app developed for one platform is used on another. Keep in mind that an app designed for one platform will not work well on a competing one. Trying to have users run an app on a platform other than the one it was specifically tailored for will result in continuing freeze-ups. Users will think the app is broken or "buggy" and discontinue use. It is standard practice to develop platform-specific apps. A single app will not work well across various platforms.

Prioritize Marketing

Apps tend to be here today and gone tomorrow. When browsing for apps, users are more likely to be looking for "the next big thing" than a reliable stand by.

Market the app feverishly in order to draw attention and create a stir and excitement. In her article titled "iPhone and iPad: How to Make a Great App in 6 Easy Steps" written for CBS MoneyWatch, Kathy Kristof said very simply, "market like crazy" (Kristof, 2011).

“Four Essentials for Mobile Apps” (Varshneya, 2013) also advised advanced marketing:

Divide your marketing plan into three phases: pre-launch campaign, launch campaign and post-launch campaign. Create banner images that will go up on your app store profile page. Use absolutely stunning screenshots of your app in the app store description. Write a fantastic app description and use the right keywords. These are just a few examples of all that you can do to gain visibility among your target audience.

Similar strategies should be employed when significant upgrades or new features are added to the app.

Social Media Best Practices

During the University of Delaware’s eighth annual Employee Development Roundtable held in June 2013, many questions were posed concerning social media and the best practices when utilizing different social media outlets. Meredith Chapman, director of digital communications at the University of Delaware, moderated the panel. The three panelists were Kelly Bachman, social media manager for Delaware Gov. Jack Markell; Kristin Davis, vice president of communications and marketing for the Delaware Alliance for Nonprofit Advancement (DANA); and Lori Seaman, social media director for AAA Club Partners (Zelluk, 2013).

These four experts offered many valuable pieces of advice, such as:

- Social media environments are about building relationships and community (Zelluk, 2013). According to the panelists, it is important that an audience cares about the information being sent to them via social media. If followers feel that the only purpose of an organizations’ social media page is to promote and sell their product, people will lose interest.
- Social media may not be for everyone (Zelluk, 2013). An organization should do a self-evaluation to see if its target audience could be reached appropriately through social media outlets. Choose the social media platform that the target audience uses.
- Be cautious with your message (Zelluk, 2013). Make sure the content of the post is appropriate. Keep in mind that posts are seen instantly and are often copied and re-posted by other people. Ask the question “would this make an appropriate newspaper headline?” before clicking the post button.
- Create a flow of information within the organization (Zelluk, 2013). Utilize avenues such as a content submission form, an in-house social media calendar, and team meetings to pass along information within the organization to ensure that everyone is kept in the loop with new information.

- Build on existing marketing and communication efforts (Zelluk, 2013). Lori Seaman advised, “Social media is simply a new tool that can support our organizations’ existing strategies more effectively, or with a wider reach. There might be a desire to use social media for any and all purposes, but it may be more effective to prioritize and choose a few appropriate goals that an organization wants social media to help achieve.”
- Create a crisis management plan. For an internal crisis, plan how to respond if misinformation—or inappropriate content—is posted on the organization’s social media feeds by an employee. For an external crisis, plan how to respond during a natural disaster or major event.

Market/Competitive Analysis

Methodology

The IPA research team's initial scan of the market for traffic-related applications (apps) revealed two categories: private applications and state departments of transportation (DOTs) applications. The following twelve apps were chosen from the Apple App Store and Google Play for Android apps based on their popularity in the market and their collective representation of some of the current best practices:

- Private Applications
 - Beat the Traffic
 - Google Maps
 - INRIX
 - Scout
 - Sigalert
 - Waze
- State DOTs
 - 511NY Mobile App (New York State)
 - Way To Geaux (Louisiana)
 - MoDot's Traveler Information Map App (Missouri)
 - Minnesota 511
 - VDOT511 (Virginia)
 - DelDOT App

Although the initial project proposal also identified transportation agencies and long-distance trip-planning websites as other potential competitors, a literature scan did not reveal apps that corresponded to these categories.

Sources of information used to complete the competitive analysis include state DOT websites, traffic-app websites, Apple and Android app stores, online user comments and reviews, news coverage, press releases, blog posts, YouTube channels, and social media sites including Facebook and Twitter. Additionally, each app was downloaded and tested. The full analysis of each app and matrices of marketing strategies and app features is located in **Appendix A**.

Competitive Analysis of Traffic Apps

Evaluation

Each app was compared using the following four criteria: features, interface and usability, target market, and marketing strategies.

Findings

Features

All but one app includes a feature that details current traffic speeds and delays. Other common features include the ability to save a favorite route, destination, or road (8/12 apps); live traffic cameras (7/12 apps); and, the ability to search for addresses, locations, or roads (6/12 apps).

Incident self-reporting, navigation, and a predictive traffic feature are currently exclusive to private apps. Waze was the first app to crowd source traffic information from users. Other private apps have since adopted this strategy. The leading private apps offer navigation in addition to traffic information. The ability to share an ETA via social media, text, or email is one of the latest navigation-related features, as is the ability to reroute based on traffic. Only INRIX has a predictive traffic feature. It allows users to compare predicted travel times based on their time of departure.

Interface and Usability

According to online reviews, the most appealing interface is one that loads quickly with high-quality graphics, looks uncluttered, and lacks in-app ads. The interface should be intuitive to use.

Most apps require the user to interact with the interface, either by glancing at the screen or touching icons, in order to receive information. However, many apps have made efforts to minimize these interactions in order to balance usage and safety needs.

Best practices include voice navigation, voice alerts, and voice commands. Users receive alerts about upcoming road incidents based on their location. Users utilize the phone's voice recognition ability to find addresses, get directions, or report traffic and incidents. Waze and Scout have introduced hands-free voice commands to reduce physical interaction with the phone while driving. These features allow users to trigger voice recognition by waving their hand near the screen or voicing a certain phrase rather than having to locate and click a certain button.

Target Market

The various state DOTs that have developed apps are not competing with one another for users since they serve distinct jurisdictions. However, none of the private apps are limited to a certain state and therefore have larger target audiences. Every app targets commuters and promotes time- and money-saving benefits.

Vacationers and travelers are other major target customers. Waze dominates this niche for social media users. It targets people who want to belong to a community and stay connected while driving.

Virginia's VDOT511 targets vacationers with its "Reach the Beach" feature, which provides beach-goers with the latest travel times for certain routes to Virginia Beach and the Outer Banks. As the user approaches a key point where a route decision would be made, the app informs the user of the current travel times from that point to the chosen destination. When leaving the beach, the user would choose from one of four "Home" destinations (Richmond, Fredericksburg, Hampton Roads, and Skippers) for corresponding traffic information and route choices.

INRIX introduced INRIX Drive Time™, a new home-buying feature for real estate agency websites that informs potential buyers of the length of their daily commute. Windermere.com and HomeSeekers.com have adopted this technology.

Marketing Strategy

The IPA research team IPA evaluated each app's marketing strategy based on a checklist of best practices divided into the following three categories:

- 1) Engaging the user
- 2) Employing social media
- 3) Creating an online presence

Research indicated that submission to the app store was the bare minimum. Apps that stand out have catchy names, logos, slogans, descriptions, and screenshots. Branding is critical. All the private apps in this analysis have created an online presence by developing an app-specific website and having their product featured on an app review website.

Private apps take advantage of multiple social media sites including Facebook, Twitter, YouTube, and blogs. Each use these sites to interact with users, receive and respond to feedback, and promote the use of their app. State DOTs tend to utilize social media for one-way communication. They mainly disseminate information about road closures and construction.

Most apps are updated regularly. Private apps typically market their new features through YouTube tutorials and social media posts in order to keep users excited about using the app.

All state DOTs display the links somewhere on their website to download their app from various app stores. However, not all created a full page on their website devoted specifically to promoting their app.

Focus Groups

In preparing the marketing analysis for the DelDOT App, the IPA research team conducted several focus group sessions, each preceded by an online survey. Only after completion of the online survey were group members asked to download and use the DelDOT App. The survey was designed to capture users' awareness and disposition toward the app in relation to private-sector alternatives prior to their having had used it (unless they happened to already be using it). The follow-up focus groups enabled the research team to document the group's sentiments after they had downloaded and used the DelDOT App.

Methodology

Full summary documents for each of the three focus groups are available in **Appendix E**. Specifically, the focus groups were designed to assess

- General awareness of the app
- Effectiveness of the branding of the app
- Likes and dislikes about the app
- Ease of accessing and downloading the app
- Ease of navigating and using app features
- Whether the existing app meets the stated, or anticipated, needs of target audiences
- Whether the app needs to be tailored for use by different target audiences, or if different apps need to be developed to achieve different functions
- Whether there is a gap between what DelDOT provides and what travelers want
- Ways to promote use of the app
- Ways users could better find and download the app

The group sessions and accompanying survey were conducted between December 2013 and February 2014. Three groups were chosen. The first was an advanced-level leadership class of University of Delaware undergraduate students. Nicknamed the “young, techies,” their relevance to app research is axiomatic. At roughly 19 to 22 years old, these students represented the generation DelDOT, and others, hope to entice and serve with mobile, accurate, up-to-the-minute, real-time information and services. This cohort has grown up with social media. Their first phone was likely of the “smart” variety and they were adolescents when Facebook came of age. Concepts such as tweeting, posting status updates, or using platforms other than radio, television, print media, or even traditional websites are as natural, instinctual, and engrained into them as email, the Internet, and cable television were to previous generations.

The remaining focus groups were conducted with the Public Advisory Committees (PACs) of the Wilmington Area Planning Council (WILMAPCO) and the Dover/Kent County

Metropolitan Planning Organizations (Dover/Kent MPOs). Representatives from Delaware organizations and agencies specializing in tourism, hospitality, sports promotions, business, transit, economic development, planning, and events were also invited by IPA to attend.

The purpose of utilizing the MPOs was twofold. For one, they offered the opportunity to access transportation-literate citizens from across the state. Moreover, while literate, MPO members are, first and foremost, citizens and consumers, not transportation planners, engineers, or professionals.

Second, PAC members' primary function, in regards to the MPO they represent, is to advise the agency on how best to perform public outreach, build awareness, and gain buy in from the public at large for the agency's activities. The MPO's reliable volunteer base, their familiarity with traffic and transit issues, their competence in public outreach, and their willingness to expand the circle to other interested professionals made them ideal candidates.

DelDOT App Survey

Each focus group member, and a number of individuals who were not able to attend the group sessions, were emailed an online survey prior to IPA's presentation and the focus group session. This survey captured a baseline on user awareness, perceptions of, and general attitudes toward real-time traveler information system apps before users were directly exposed to the DelDOT App.

The goal of the survey was to assess awareness of real-time traffic information apps (either by brand name or logo) and compare the DelDOT App side-by-side with its likely competitors in the marketplace—the private sector apps Waze, INRIX, Scout, Google Maps, and Beat the Traffic. It seemed unlikely the DelDOT App would be in direct competition with many, if any, other public-sector apps in the traffic app market that are designed for use exclusively in a particular state.

The full results of the survey are available in **Appendix C**. The survey questions included

- Have you ever used a real-time traffic information app that provides current information on traffic conditions?
- Rank what features you would look for in a real-time traffic information app.
- Do you recognize logos for the following real-time traffic apps?
- Which of these real-time traffic information apps have you used?
- Of the following apps that you have used, which features did you like?
- Of the following apps, what features did you dislike?
- Have you ever used the DelDOT Real-Time Traveler Information App?

Focus Group One (Young, Techies) Survey Results Summary —December 3, 2013

Sixty-one percent of the first focus group indicated they had used a real-time traffic app before. The group rated accuracy, ease of use, and real-time information as the most desirable features. Ease of download on a mobile device, the ability to keep eyes on the road, and the inclusion of free features rounded out the top five, likely speaking to the cohort's comfort and ease of dealing with technology and apps, as well as their expectation that the interface is seamless and dynamic.

Nearly 90 percent recognized the Google Maps logo, 17 percent recognized Waze. DelDOT and all other apps scored eleven percent recognition. None reported having used the DelDOT App. Roughly 72 percent had used Google Maps and 17 percent Waze.

The narrative was little changed when respondents were provided with the app's names. One respondent indicated they'd used the DelDOT App with the vast majority claiming Google and a handful Waze.

By and large, they had overwhelmingly used Google Maps. Google Maps users especially appreciated the fact that it was free; provided travel times; voice navigation and search by address; and, displayed congestion visually. The chief complaint was app crashes.

Focus Group Two (WILMAPCO PAC & Guests) Survey Results Summary —February 24, 2014

The second focus group was largely comprised of the WILMAPCO PAC members along with marketing staff from a New Castle County (NCC) casino/race track and an economic development professional from a municipality in NCC. Sixty-three percent reported having used a traffic app before.

Ease of use, accuracy, having real-time data, and hands-free operation were their primary interests. Based on logos, 61 percent of respondents recognized DelDOT and Google Maps, with no other providers above 20 percent. Sixty-four percent reported having actually used Google Maps; 41 percent said they had used the DelDOT App. In most all categories, INRIX ranked third, likely as it is also a popular traffic-modeling platform. The results were little changed when apps were ranked by name.

Respondents enjoyed the fact that the DelDOT App and Google Maps were free above all. DelDOT App users liked the traffic cameras, the streaming travel-information radio, and the conditions map.

Google Maps users ranked travel time display, voice-guided navigation, saved destinations and routes, and map showing current traffic conditions as most desirable. Regarding dislikes, respondents largely gave the competing apps a pass. It's important to note the survey was administered for the expressed purpose of gathering feedback for DelDOT. Respondents most disliked the DelDOT App because it needed a data connection, required users to look at it (potentially while driving), and did not support voice-guided navigation.

Focus Group Three (Dover/Kent MPO PAC & Guests) Survey Results Summary—February 25, 2014

The final focus group was largely comprised of Dover/Kent MPO PAC members, but had significant participation from Kent County and State tourism professionals. Only 40 percent indicated they had used a real-time traffic app previously.

Based on logos, nearly 70 percent recognized Google Maps and DelDOT. Also based on logos, this group was the only one in which DelDOT outscored Google Maps (one person) in having used the app. When switched to name recognition, three more people indicated they had used Google Maps. Overall, Google Maps and the DelDOT App dominated the usage statistics.

Regarding features they looked for in an app, the results were nearly identical to the other groups. Respondents valued ease of use, accuracy, and real-time information above all else. The question asking features liked/disliked of apps used was again a virtual comparison of the DelDOT App and Google Maps. DelDOT users valued the app most because it was free, streamed traffic cameras, and provided weather information. Google Map users liked that it was free, that the map shows current traffic conditions, that it displays travel times, and saves common destinations and routes. Dislikes of all apps were minimal. In a bit of an anomaly, 74 percent of respondents answered the last question, "Have you ever used the DelDOT App?" in the affirmative, despite only 40 percent indicating they'd used a traffic app of any sort. This could be a statistical error, or could speak to the fact that some who had used the app didn't know of the traffic feature.

Focus Group Results

Below are brief synopses of the input gathered at the in-person focus groups. More inclusive summaries are available in **Appendix E**.

Focus Group One (Young, Techies)

Many group participants feel that the app is geared only toward Delaware residents, and questioned the applicability and accessibility for out-of-state travelers and students. When it was understood that the DelDOT App is limited to use in Delaware, the group agreed that many would not use the app when other apps offer a broader service across multiple states.

Of the 21 participants, only two people said that they would continue to use the app. However, the majority of the group self-identified as largely campus-bound and said they did not drive much. Sixteen said they would use the DelDOT App if it incorporated features of Google Maps (e.g., voice navigation, navigational services, map “search” function, and real-time traffic alerts). Increasing downloads through mobile app marketing strategies (e.g., strengthening keyword services in app stores and improving the appearance and description of the app) were suggested.

The Apple iOS platform was far more common than Android and virtually no one utilized the Quick Response (QR) code to download the app. In-state students had some familiarity with DelDOT, but overall brand recognition was poor. Many felt that the branding didn’t speak to the app’s primary function as a “real-time traffic” application.

The news, travel-information radio, and social media features received fairly positive input. Public workshops did not. The group seemed unclear whether the app was driver-oriented or intended for general public engagement.

The traffic-related aspects of the app received generally favorable reviews. Red light cameras, traffic conditions, closures and traffic cameras all scored well. While respondents felt the app was intuitive enough to operate, they felt upgrades were needed for it to be practically usable. The top suggestion was the ability to search for a road, route, or address. Most assumed the app had a navigation and/or voice navigation feature and stated they are unlikely to use the app at all unless one were incorporated.

Most felt the app was most appropriate for commuters and area motorists, discounting truckers. Almost all felt that app stores were the best place to promote the app.

Future marketing strategies should specifically focus on enhanced customer preference research, in-person marketing and research, and video tutorial and promotional videos targeted to the younger demographic. The University of Delaware IPA proposes a second phase of this project, which would include ongoing marketing research with a DelDOT App advisory panel and college-aged focus groups, preparation of a tri-fold display and “tabling” at special events, and production of online, tutorial and promotional videos that can be uploaded to YouTube.

Focus Group Two (WILMAPCO PAC & Guests)

Some focus group members had not tested the App beforehand, but were able to during the course of the meeting. Their exploration of the app and its features, in effect, guided the discussion. Many questioned the usefulness of the app if it is to be used only pre-trip; does not offer voice-guided navigation; does not allow users to configure alerts related to preferred driving routes; doesn’t provide “push notifications” to alert users to incidents;

and, does not provide re-routing options in the event of an emergency. Most feel that the app is geared toward Delaware residents and commuters who are familiar with the DelDOT logo and brand and that it does not have broad appeal to out-of-state travelers, tourists, or visitors passing through Delaware.

Again, Apple iOS, by far, bested Android and no one understood the meaning of or used a QR code. Participants were generally aware of the app's features and understood the menu. Some felt there should be a "search" or "preference" feature to bypass the menu once the app was downloaded and used initially.

Participants generally liked the news feature, though felt it should be pared down to ongoing events or news from the past 24 to 48 hours and perhaps sorted by county. The group saw utility in the workshop feature as public outreach, but worried about granting access to their calendars. Most felt the travel-information radio feature to be redundant. The group liked the social media function, commenting they felt Twitter to be the most appropriate outlet.

Only two members used the app en route. The majority felt it was best used to pre-plan a trip. Some felt a useful feature would be to "push" notices for expected delays or road closures based on the user's geography. There was consensus that while most of the available layers were useful, altogether it was too much information, particularly to digest while driving.

Voice guidance, real-time alerts, and a more intuitive feedback feature were the chief comments regarding usability. Participants were split as to whether "DelDOT" was the preferred brand, but most felt that the real-time traffic component of the app was not sufficiently addressed and should be augmented.

Focus Group Three (Dover/Kent MPO PAC & Guests)

While only 6 participants had downloaded and used the app, those that did provided constructive feedback on their experiences. There was a general consensus that the DelDOT logo/brand doesn't accurately reflect the content of the real-time traffic app and the logo is not recognizable by non-Delawareans. Many believe that there are too many menu choices and admit that they would only use the traffic map feature.

With respect to the traffic map feature—the majority felt that there were too many layers and some layers were geared toward DelDOT personnel rather than motorists. While the app is generally easy to use, suggestions for improvements were made:

- Improvements to real-time aspects of traffic- and weather-related incidents
- Narrowing the broad focus of the app by limiting menu features

- Having it function as a GPS, allowing the option to enter a route of travel and having it recognize frequently traveled routes
- “Push notification” incident alerts
- Voice-guided navigation system

Apple iOS again outscored Android eight-to-two and nobody used the QR code to download the app. More than a quarter of attendees were aware of the app prior to the meeting. However, few felt that “DelDOT” was the best branding strategy, echoing the other groups that it would have limited appeal to all but knowledgeable Delaware residents. Though the group felt “DelDOT” was analogous with transportation in Delaware, they did not think it shouted real-time traffic info.

Though the group had no issues with the menu itself, they were somewhat critical of the features contained within. Most felt the point of the app was traffic and that the rest was somewhat extraneous, or at least subordinate. The group felt the workshop feature inappropriate for a traffic app, the radio feature redundant, and the news feature better repurposed as “traffic advisories” sorted by county.

Members saw value in social media, particularly Twitter, but not in the interface provided by the app. They noted that social media apps already have immense popularity and marketing one’s Facebook page or Twitter handle could be more impactful.

The group was very supportive of the real-time traffic concept, but less so of the user interface and display. Understanding the layers could be turned on and off, respondents still felt there were too many to be of practical use. They also disliked the interface, noting that one had to zoom in and finger-tap small dots for information.

Regarding marketing, the group was very much in favor of a narrow, targeted approach. Some felt the app was “trying to be everything to everyone,” or was largely a mobile version of the website. The general consensus was to internally define the precise purpose of the app and aggressively market it to that audience.

Analysis/Summary

The good news is that the DelDOT Real-Time Traveler Information App’s only significant competition in state is Google Maps. The bad news is that most respondents seem to heavily favor style and ease of interface over superior data. If the DelDOT App is to compete for the traveling public’s attention, planned improvements to streamline the interface, provide a GPS function, a road/route search feature, and display travel times between chosen destinations may well be required. Some felt that the planned addition of AVL data on DART buses and routes could be a game changer and provide the app with a dedicated user group.

Likes/Dislikes

There was no clear consensus on “what the app should be.” Some viewed the app primarily as a traffic advisor/navigation system. Others saw great value in an “Involved/Informed Citizen” app. A nearly universal suggestion was some polishing and tweaking to make the app more appealing to the average person.

Participants nearly universally appreciated that the DelDOT App and the agency were excellent sources of data, but generally felt the interface was at a disadvantage compared to Google Maps and similar private traffic apps. The traffic cameras were a broadly popular feature, aside from battery life complaints.

Branding

There was also a fairly even split between those who felt “DelDOT” and its logo perfectly embody all things road, traffic, and data, and those who felt it did not adequately speak to “real-time traffic.” Many out-of-state University of Delaware students lacked awareness of DelDOT and its logo. Many focus group members suggested an app-specific logo to more directly convey that message. It might also be possible to modify the “DelDOT” brand, through a marketing campaign, to include the message of real-time traveler information in addition to construction and snowplows.

Menu

Opinions varied widely about the utility or need for a number of the top menu items. Some were of the position that more should be added: tourism destinations, transit stops, recall of frequently traveled routes. Others argued strongly for a leaner, meaner version dedicated to traffic data. Regardless, most felt that the varying options entailed in the app would require different marketing strategies. Different people are interested in the next public workshop and agency press releases than those trying to avoid congestion at the beach or on Route 202. A suggestion to have a “favorites tab”—meaning once a user had downloaded and used the app that they would be provided the ability to set it to open to their preferred feature—from then on enjoyed modest support.

Social Media

All the groups saw great potential for DelDOT’s traditional community outreach and for the distribution of real-time alerts and information via social media, particularly Twitter. Many questioned including these social media outlets in the app since the platforms already enjoy popularity and recognition. Still, the idea that DelDOT staff could proactively push info and alerts and respond to social media reports was widely supported.

Marketing Plan

Marketing Plan at a Glance

The ultimate goal of the DelDOT App marketing plan is to increase brand awareness and to grow a customer base that will actually download *and* use the app. The recommendations included in this plan were designed with the needs of DelDOT's target audience in mind.

Identification of target customers – DelDOT could consider and address why each target audience needs the app, how they will use it, and how it will improve their lives. DelDOT could create a user profile and develop marketing campaigns that appeal to the needs of each target audience as follows:

- Large-scale event planners/managers
- Vacationers and tourists
- Employers and businesses
- Commuters and area motorists
- Institutes of higher education
- Transit riders
- Commercial drivers

Unique selling proposition (USP) – DelDOT could distinguish its app from its competitors in the marketplace. An USP-marketing orientation would generate more app downloads and provide “brand engagement.” DelDOT could develop marketing strategies to communicate its USP of “Timely, Accurate, Reliable.”

Situational analysis – As the foundation of the marketing plan, the situational analysis examines DelDOT's mission in relation to USDOT goals, its current deployment of real-time information, and its competitive environment. An extensive market/competitive analysis was also undertaken to compare features of other private and public real-time traffic apps. A Strengths-Weaknesses-Opportunities-Threats (SWOT) Analysis was conducted to examine ways to leverage positive aspects and minimize negative aspects of both DelDOT's internal environment and its external influences. DelDOT could use planned enhancements to the DelDOT App, as well as *any* updates to the app, as opportunities to launch promotional campaigns across all media. In addition, high-priority needs and issues that were identified in the SWOT analysis, would serve as a foundation to direct investments for planned app enhancements and corresponding promotional strategies.

Promotional strategy – The extensive promotional strategy section first explains the need for a balanced marketing approach that incorporates both traditional and digital tools. It

provides detailed descriptions and visually shows “best practice” marketing tools that have successfully been used by private real-time traffic app competitors. It suggests that DelDOT

- Strategically plan traditional marketing strategies that would provide the “most bang for the buck,” to minimize costs, maximize audience reach, and overcome social engagement limitations.
- Consider traditional marketing strategies, such as TV and radio commercials, sponsorship of traffic reports, print advertising (in media, on buses, and billboards) directed to target markets, preparation and distribution of press kits, event sponsorship and networking, and endorsements from prominent Delaware leaders.
- Generate a positive, “feel-good” experience through the use of engagement marketing strategies.
- Adopt digital-content marketing that goes beyond simply promoting features of the DelDOT App to provide utility, a personal connection, and opportunities for interactive engagement with users.
- Elevate DelDOT’s current social media presence by communicating at ideal log-in times, energizing real-time traffic app enthusiasts, coordinating efforts (particularly with other state agencies) engaging its community of users, generating compelling content, and monitoring/evaluating app usage.
- Provide original content/posts on each social media platform.
- Measure the success of its social media strategy by incorporating analytics and metrics.

Conversion strategy – This section highlights on-page and off-page App Store Optimization (ASO) techniques that could be used by DelDOT to increase brand awareness and app downloads. Strategies include keeping an app title short and specific, using searchable keywords, and designing a visually appealing app icon.

Recommendations – This section details specific strategies, which include incorporating app promotion into social media, developing a content strategy to incentivize app downloads, and tying promotions to monthly themes and annual Delaware special events.

Target Customers

The ability to clearly define the target customers will help pinpoint advertising, return on investments, and improve communications with prospective customers. In defining the target market, DeIDOT should consider whom the product is meant for (consumer/user) and what is unique about the product (Boundless, 2014). DeIDOT should also verify that there are enough potential customers in the target groups to support the use of the app and that app features are actually needed for each niche (Boundless, 2014).

According to DeIDOT's stated marketing strategy and desired target markets, it will need to provide outreach to

- Commercial drivers that need to expedite delivery of goods
- Public (DART First State) and private transit providers (e.g., intercity bus, tour bus, and motor coach operators)
- Area motorists traveling for pleasure or commuting to work
- Residents and visitors who may be impacted by adverse weather conditions
- Vacationers and tourists traveling through the busy I-95 corridor to the Delaware beaches and/or key attractions and destinations (e.g., Main Street communities, Wilmington Riverfront, Winterthur, Dover Downs)
- Sports fans and event attendees heading to major events/venues—including university football games, Wilmington Blue Rocks baseball games, Dover International Speedway NASCAR races, and the Firefly Music Festival
- Major employers and businesses in Delaware
- Community groups (civic associations, metropolitan planning organizations, etc.)



Creating a Customer Profile will help get the true picture of customers.

Source: <http://www.boundless.com/marketing/marketing-strategies-planning/steps-to-creating-a-marketing-plan/define-the-target-market/>

- Institutes of higher education, including:
 - University of Delaware
 - Wesley College
 - Goldey-Beacom College
 - Delaware State University
 - Wilmington College
 - Widener Law School
 - Delaware College of Art and Design

Unique Selling Proposition

A successful marketing campaign requires DelDOT to find a way to communicate uniqueness and connect it to the needs of the target audience and focus groups (KiwiTech, 2011). A strong Unique Selling Proposition (USP) distinguishes the organization from competitors and is critical for advertising the mobile application. In order to develop a successful marketing strategy for mobile applications, there should be unique properties that create the desired “buzz” among users (KiwiTech, 2011). DelDOT TMC already has the slogan, “Timely, Accurate, Reliable,” which could be the basis of its USP to resonate strongly with potential users.



*Waze's USP, "Outsmarting traffic, together."
Source: <http://blog.fingra.ph/en/app-review-waze-social-gps-maps-traffic/>*

Situational Analysis

Mission Statement – DelDOT Transportation Solutions

According to DelDOT’s 2012 Annual Report (DelDOT, 2013) the mission of its Transportation Solutions division is “to provide exceptional service by developing, constructing, and maintaining the State’s infrastructure in an efficient manner, resulting in a first-class multimodal transportation network that enhances safety, mobility, and livability for the public.”

This mission aligns with the USDOT Federal Highway Administration’s (FHWA) initiative to advance its Real-Time System Management Information Program, which was authorized by Section 1201 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A

Legacy for Users (SAFETEA-LU). A final rule, published in November 2010, required “monitor[ing] in real-time the traffic and travel conditions of the major highways across the U.S. and provid[ing] a means of sharing these data with state and local governments and with the traveling public” (Real-time system management information program, 2010). This rule (FHWA, 2010) provided a framework for State DOTs to provide accessibility, in a sharable format, of real-time traffic and travel conditions information to

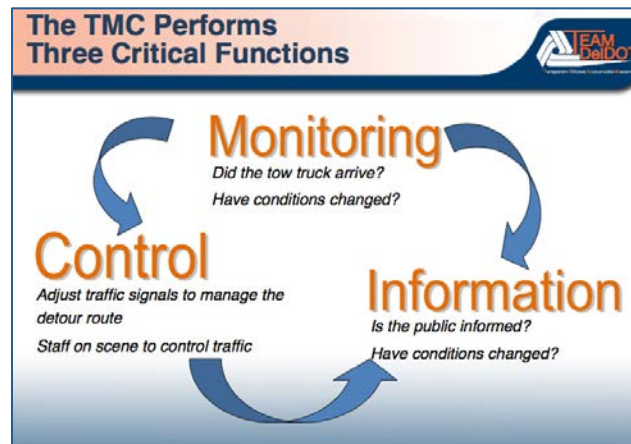
- Improve the security of the surface transportation system
- Address congestion problems
- Support improved response to weather events and surface transportation incidents
- Facilitate national and regional highway traveler information

DelDOT Transportation Management Center

The Delaware Integrated Transportation Management Strategic (ITMS) Plan (Parsons Brinkerhoff Quade and Douglas, 1997) provided a foundation for the program and management from a central

transportation management center.

DelDOT’s Transportation Management Center (TMC) is the heart of its ITMS. TMC operates 24 hours a day, seven days a week, year round. TMC monitors and coordinates the management of the transportation system; coordinates DelDOT’s response to incidents and events; and, houses system hardware, software, telecommunications, and personnel (Donaldson, n.d.). As illustrated in the graphic, TMC performs three critical functions—monitoring, control, and information.



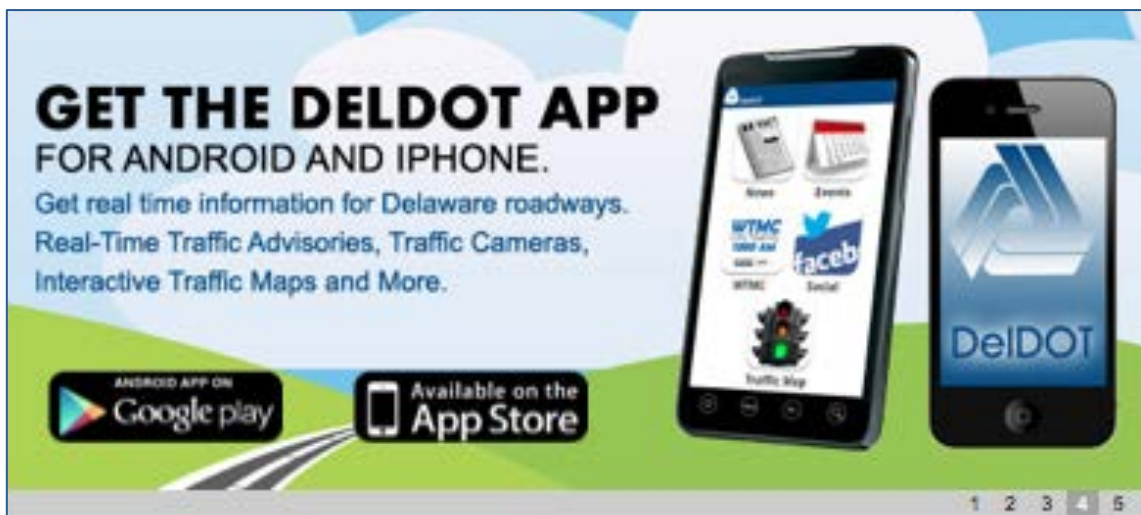
Three Critical Functions of DelDOT TMC

Source: <http://www.wilmapco.org/freight/Delmarva/ITMS%20Freight%2012-4-2013.pdf>

Current Deployment of Real-Time Customer Information

DelDOT TMC disseminates real-time and accurate information to allow customers to make informed decisions regarding travel routes, times, and mode choice. Current operational systems include

- Travelers advisory radio system (WTMC 1380 AM)
- Variable message signs
- DelDOT website (www.deldot.gov); the homepage provides
 - Scrolling banner that features “Get the DelDOT App”
 - Recent news (including traffic alerts)
 - Traffic information (including radio station)
 - Weather information
 - DelDOT weather stations
 - Current weather
 - Traffic information
 - Live traffic (cameras, real-time advisories, road closures/restrictions, message boards)
 - Interactive maps (real-time traffic maps, bridge restrictions, evacuation routes)



Scrolling Banner on DelDOT Homepage

Source: <http://www.deldot.gov/>

Social Media

DelDOT uses several social media platforms to connect and engage with the traveling public including a MyDelDOT free email subscription service, Rich Site Summary (RSS) feeds, DelDOT blogs, Facebook, Flickr photo stream, Twitter, and YouTube. These social media platforms are used by all DelDOT operations; none are exclusively used or targeted to real-time travel information.



*Links to Social Media on
DelDOT Homepage*

Android and Apple iOS Applications

In November 2012, DelDOT launched its real-time travel app for use on Android and Apple iOS mobile devices and tablets. The app allows users to view streaming video from traffic cameras; see advisories for roadway incidents; get updated on travel delays; know the current, average speed of roadways; get virtual travel times; learn about lane restrictions and road closures; see red light enforcement camera locations; get roadway weather information; and, listen to WTMC 1380 AM (DelDOT's travel-information radio station).



*Ad for App on
DelDOT Homepage*

Needs and Goals

The IPA research team met with DelDOT TMC Director Gene Donaldson and Rybinski Engineering's Principal Engineer, Holly Rybinski on December 4, 2013. Information was gathered to conduct the situational analysis and to assess DelDOT TMC's needs and goals. DelDOT TMC recognized the following needs and goals.

Expand/Enhance ITMS Device Deployment

The following are planned enhancements.

- **Delaware 511 Plus** – This automated, telephone-based travel information system would provide a single portal for all traveler information statewide, an Interactive Voice Recognition (IVR) system, location-based customer notifications and alerts, and personalized traveler services via “My511.”
- **Multi-modal travel information** – An automated vehicle location (AVL) system for public transit that would allow for real-time locations of fixed-route and

paratransit DART First State buses to be tracked. In addition, planned AVL system enhancements would provide customers with real-time transit information; real-time schedule and information via mobile devices and tablets; and, variable message signs that display bus locations.

- **Multi-agency electronic information exchange** – Upgrades to computer-aided dispatch (CAD), the electronic operations (EOPS) application, and mobile device and tablet apps would provide for greater coordination and collaboration among agencies responsible for transportation services, emergency and incident management, and homeland security.

Enhance the Existing DelDOT App

Currently, the app is intended for pre-trip use and can be downloaded on Android and Apple iOS mobile devices and tablets. The app was built to mirror the online DelDOT interactive map, which was designed for TMC to remotely monitor and control travel-related incidents, emergencies, and roadway conditions.

- **Two-way user interface** – To be responsive to the traveling public, TMC plans to provide for a two-way exchange of information (where a motorist could report an accident or roadway incident).
- **Greater predictability** – System enhancements are planned to build greater predictability as to how traffic conditions would impact travel times and provides travel times for specific routes.
- **Future map layer** – Information on roadway flooding is planned.
- **App tutorial** – DelDOT is considering the need for a YouTube video that instructs on use, highlights map-layer features, and/or showcases future enhancements to the app.
- **Improved, real-time incident reporting** – Presently, the app and website have an obscure incident reporting feature where the user sends an email to DelDOT. In the future, improvements may allow users to report incidents by email, phone, social media platforms, and/or the app itself. However, DelDOT resources and staffing would need to support responses to real-time incident reporting.

Improve Marketing of App

Target audiences, as identified by DelDOT include commuters and area motorists, vacationers/tourists, special-event planners, transit, commercial drivers, and institutions of higher education. Marketing should reflect the USP of “timely, accurate, reliable,” consider all target audiences, and include social media strategies.

Competitive Environment

Real-time traveler information systems continue to evolve to meet customer demand for predictive, crowd-sourced, navigation, and location-based service apps for use on mobile devices and tablets. Many state DOTs are developing real-time traffic apps to meet the federal mandate established by FHWA's Real-Time System Management Information Program. However, because these state DOT apps limit traffic information to a particular state, they are regarded as peers rather than competitors to DelDOT. Private real-time traffic apps should be considered primary competitors to the DelDOT App. Private apps, which may be available for a fee or at no cost, often offer key features, such as:

- Re-routing features to provide alternate routing and guidance around traffic congestion
- Traffic alerts via push notifications
- Estimated travel time, traffic flow, incidents and traffic cameras all on one screen
- Voice-navigated, turn-by-turn directions along a route
- Crowd-sourced traffic information that allows a two-way exchange of real-time travel information to/from fellow drivers
- Ability to personalize the app with preferred routes, locations, travel times, and push notifications

The Market/Competitive Analysis (see previous section and **Appendix A**) provides a comprehensive review of the competitive landscape for the real-time travel information system industry.

SWOT Analysis

A Strengths-Weaknesses-Opportunities-Threats (SWOT) Analysis identifies characteristics that may impact to the success of a product or service. In this case, "characteristics" are the elements and functions comprising the DelDOT App. Generally, strengths and weaknesses focus on the internal environment to an agency/company, while opportunities and threats examine external influences, such as the competitive environment, evolving technology, and customer demands for new features.

<p style="text-align: center;">STRENGTHS</p> <p>What are the favorable elements of the app that should be leveraged for success in the future?</p>	<p style="text-align: center;">WEAKNESSES</p> <p>What are the unfavorable elements of the app that need to be acknowledged, addressed, and/or minimized?</p>
<p style="text-align: center;">OPPORTUNITIES</p> <p>What are the key needs where DelDOT TMC would have a substantial impact?</p> <p>What elements should be seized upon?</p>	<p style="text-align: center;">THREATS</p> <p>What are the external influences that DelDOT TMC needs to address or resolve?</p>

The SWOT analysis may be used to guide DelDOT TMC’s development and prioritization of strategic initiatives. SWOT analysis outcomes may provide context around further developing those priorities and future actions. By acknowledging existing strengths and successes, as well as identifying key gaps and opportunities, real-time traffic app development initiatives would be structured to address high priority needs and issues while keeping in mind internal weaknesses and external threats. The following SWOT analysis incorporates input from the initial “kickoff” meeting with DelDOT TMC, three focus group sessions, and outcomes of the market/competitive analysis.

SWOT Analysis

Strengths

- “Timely, accurate, reliable”
- TMC’s advanced technology
- Detailed Delaware-specific information
- Mobile access to traffic cameras
- Mobile access to travel-information radio
- Map layers are customizable for user
- App is available for users for free
- Provides information not offered by other apps (e.g., road closures due to flooding)

Weaknesses

- Perception that Delaware does not have a traffic problem
- Ineffective marketing efforts to date
- DelDOT lacks universal “brand” recognition; State residents familiar with DelDOT may not know about TMC
- Purpose of the app is not obvious from the name, logo, and branding
- App navigation is tedious (many steps to get to map and layers)
- Map opens to Dover, instead of identifying user’s current location
- Map loads slowly on 3G network
- Lack of search feature
- Too many features in one app

Opportunities

- Interest in voice-guided navigation with real-time alerts and push notifications
- No other app is Delaware specific
- Variety of potential partners and avenues for distribution
- DelDOT TMC has ability to grow its social media presence and utilization
- Each app update will be an opportunity for a new marketing campaign, especially transit-tracking system, voice activation, and navigation capabilities
- Ability to apply technology to other modes (e.g., transit)

Threats

- Private traffic apps have more brand recognition and offer additional features, such as navigation
- Private apps are constantly updating and building brand recognition
- Cannot use app while driving
- Legal issues associated with using the app while driving

Leverage

Problems

Promotional Strategy

Introduction

Traditional vs. Digital Marketing

Traditional marketing includes print advertisements (newspapers and magazines), TV commercials, radio spots, billboards, brochures, and in-person marketing approaches. Traditional marketing is oriented toward mass marketing and focuses on the four P's: Product, Place, Price, and Promotion. Newer traditional marketing approaches are customer-service oriented and consider the four C's: Customer, Cost, Communication, and Convenience.

Digital marketing relies on digital devices and technology such as mobile devices, tablets, the Internet, digital billboards, gaming consoles, or computers to reach an intended audience. It encompasses strategies such as engagement ads on standard and mobile websites, visual platforms (e.g., YouTube) and branded online videos, social media, pay-per-click (PPC) ads, sponsored blog posts, search-engine optimization, Short Message Service (SMS) text messages, and email distribution.

Advantages and Disadvantages

Most people are familiar with traditional marketing strategies. However, these strategies could be costly, reach a limited audience, and lack audience interaction. Digital marketing strategies are proven to be more cost effective than traditional approaches. They would be targeted toward a specific audience or demographic group (especially through social media platforms), interactive, easily measured, and accessible via most mobile devices (Raheel, 2013 and NetLZ Consulting, n.d.) In addition, brands that post content to social media sites have "viral value." They are able to connect, communicate, and have a social exchange with consumers who may wish to share that content within their social or business networks (Kreutzinger, 2013).

Need for a Mix of Strategies that Recognizes Rise in App Usage

As described in the situational analysis, DelDOT currently uses both traditional and digital marketing strategies. However, the rapid growth in the use of mobile apps over personal computers to access the Internet requires a greater assimilation of technology and social engagement into traditional marketing strategies. Traditional marketing strategies should be used to provide a foundation for and solidify the DelDOT App in the real-time traffic app marketplace. Concurrently, the enhanced use of digital marketing is needed to engage, educate, provide updates, and obtain feedback from customers (Duncan, 2013).

This blended approach of traditional and digital marketing would be effective if it provides DelDOT customers with experiences associated with a brand or product; engagement of the senses through digital and traditional marketing interactions; customer service that provides human interaction; and, physical presence that provides three-dimensional space and optimal impact.

In the case of DelDOT TMC, the user experience should be synonymous with its tag line of “timely, accurate, reliable.” Engagement marketing strategies offer consumers opportunities to interact with the brand directly within an ad unit. Digital examples include providing video views, social shares, searches, and rollover/hover expansions. In addition, consumers would be enticed to interact by browsing products, answering questions, playing games, entering contests, or experiencing other engagement experiences across mobile, web, and social channels (Conn, 2013). Some studies indicate that a good app should generate a positive brand or “feel-good” experience. Other experts insist that non-game or entertainment apps should provide quick access to information and a quick exit from the app (Wasserman, 2013).

If a customer experiences a problem with the use of the DelDOT App, they want to be able to obtain timely, personalized customer support. This aspect wins customer loyalty, repeat customers, and referrals to new customers.

In addition to static billboards being placed along major roadways in Delaware, DelDOT should advertise in places that provide maximum visual appeal and interest in places where people may be captive audiences, e.g., DART transit, popular buildings, and interactive kiosks/displays in places where crowds gather (Krenn, 2014).

Traditional Marketing Tools

Traditional marketing involves advertising through direct sales, TV, radio, mail, and print materials (Forbes, 2013). The traditional marketing approach focuses on a one-way sales push and relies on reaching high numbers of people to ensure success. Although many traditional marketing opportunities have changed dramatically due to technology, traditional media outlets remain the most trusted sources of information, according to the 2012 Edelman Trust Barometer survey. Advertising is a costly marketing tool; however, traditional marketing strategies could be reliable ways of keeping DelDOT in the public eye and generating new customers without breaking the bank (Etree, n.d and Lavinsky, 2013). All of these strategies are meant to engage target audiences offline, but should be integrated with digital marketing strategies as well.

Television and Radio

The typical traditional marketing strategy for television and radio is a commercial. A DelDOT advertisement on television or radio should always include a strong call to action since the ultimate goal is to encourage downloads of the app.

In addition to this approach, DelDOT has the potential to uniquely utilize its traffic information to garner valuable sponsorships with local stations. INRIX, for instance, offers “INRIX TV” and “INRIX Radio,” two packages of traffic information built specifically for the broadcast environment. Using “drag-and-drop” content creation and editing tools, television and radio stations would quickly develop a comprehensive picture of traffic conditions for their broadcasts (INRIX, 2014). “INRIX TV for iPad allows traffic and travel news editors to seamlessly combine traffic flow, incidents and camera image feeds to create customized, visually compelling and accurate real-time traffic news reports from the studio or via an outside broadcast” (INRIX, 2014). “INRIX Radio is a software-as-a-service (SaaS) based platform that intelligently integrates both traffic incident and cause data to enable the production of customized traffic news scripts for radio broadcasts” (INRIX Radio, TV). Television and radio stations benefit from these services through reduced news-gathering costs and increased accuracy of traffic information. In return, INRIX builds its brand’s exposure and trust. DelDOT could adopt a similar strategy here in Delaware.

Since Delaware does not have a state-specific television station, DelDOT may have greater success developing a sponsorship package for local radio stations. Additionally, this may have a larger return on investment because many people listen to the radio while driving.

Examples of FCC-Licensed Radio Stations in Delaware

Station	Broadcast Location	Slogan/Format
WAFL 97.7 FM	Milford, Del.	“Delaware’s Best Music”
WDDE 91.1 FM	Dover, Del.	“Delaware’s source for NPR News”
WMPH 91.7 FM	Mount Pleasant High School in Wilmington, Del.	Collaborating with WDDE to provide NPR broadcasting in New Castle County
WGMD 92.7 FM	Rehoboth Beach, Del.	“The Talk of Delmarva” Talk Radio
WJBR 99.5 FM	Wilmington, Del.	“Today’s Hits and Yesterday’s Favorites”
WSTW 93.7 FM	Wilmington, Del.	“Delaware’s Best Music”
WDEL 1150 AM	Wilmington, Del.	News, Talk Radio
WTMC 1380 AM	Wilmington, Del.	DelDOT’s travel-information station
WDOV 1410 AM	Dover, Del.	News, Talk, Sports Radio

Print Ads

Print advertising is one of the simplest ways to promote the app. According to *Forbes* (2012), print media is advantageous over digital forms because it provides

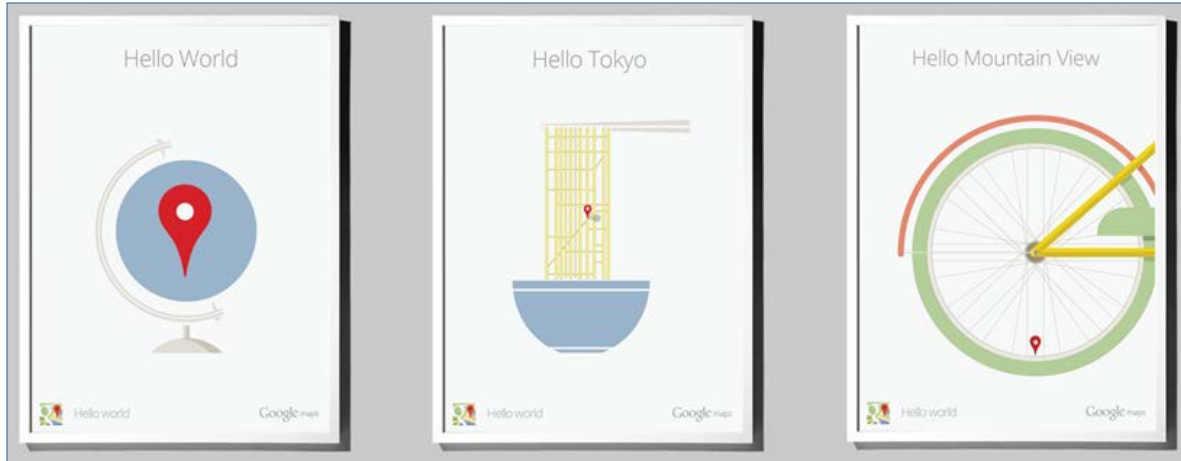
- **Tangibility** – In physical form, printed pieces last longer than fleeting Internet ads.
- **Credibility** – Printed ads have a sense of legitimacy over Internet pop-up ads that could be construed as spam.
- **Brand identification** – Printed ads establish and reinforce brand recognition.
- **Reader engagement** – Consumers reading print material absorb the material better than when skimming digital content.
- **Uniqueness** – What’s old is new again. Print ads are now considered a fresh marketing approach as opposed to the crowded digital marketing landscape.

DelDOT could purchase ad space or “advertorials” (advertisements in the form of editorial content) in national/regional magazines such as *Southern Living*, *Coastal Living*, and *Delaware Today*. Ads could also be placed in state and local print media (and their online editions).

Examples of Delaware Publications

Statewide	New Castle County	Kent County	Sussex County
The News Journal	Newark Post Citylife Magazine (Wilmington) Middletown Transcript Out and About Magazine	Dover Post Delaware State News Harrington Journal Milford Beacon Smyrna-Clayton Sun Times	Cape Gazette Coastal Point The Wave Milford Beacon Delaware Beach Life Magazine

DelDOT could target its audiences with ads in more specific publications, such as those directed to tourists and vacationers. Examples of chamber of commerce and visitor bureau’s visitor guides include, “Sunny Day Guide” for Delaware beaches, outlet coupon books, and commercial visitor guides such as VistaGraphics’ *Visitors Guide* for Delaware. Online ads, in addition to print ads, should be considered as well since many publications do not offer a print addition.



An ad campaign for Google Maps

Source: <http://designtaxi.com/news/359881/Google-Ad-Campaign-Cleverly-Incorporates-Iconic-Google-Maps-Graphics/>

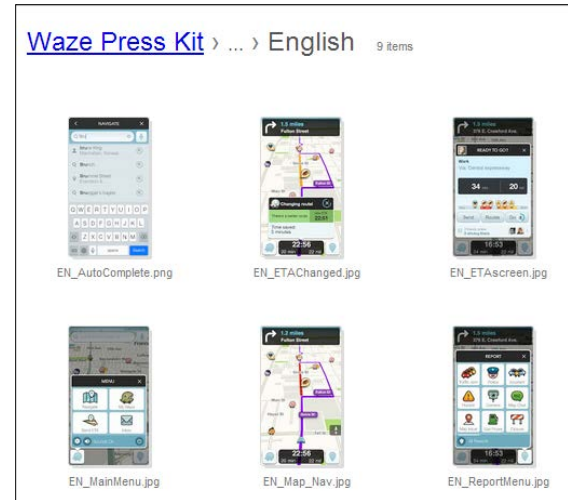
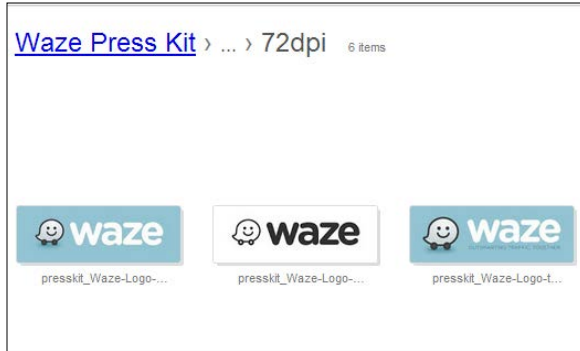
Press Kit and Press Releases

A press kit is a compilation of items that helps sell an app's story to the media. Preparing a detailed press kit makes it easier to proactively earn media coverage because all the relevant information is packaged together in one location (Anderson, n.d.). It could be displayed on the DelDOT website and sent directly via email to media sources.

The press kit should include the following background information:

- App description
- Description of DelDOT Traffic Management Center
- The needs the app fulfills
- Key features
- Unique selling point
- Any key statistics
- User testimonials
- A "Frequently Asked Questions" page
- High resolution logos and screenshots
- Contact information

Beyond these basics, a press release should tell a personal story that will interest readers, listeners, or viewers. A press release should be issued when DelDOT issues a new feature of the app; an enhancement of the app; and, any new developments regarding the app (e.g., partnerships, industry accolades, newsworthy content).



The online press kit for Waze includes versions of the logo and high-resolution Apple iOS, Android, and Windows screen shots. The files are stored online in Google Drive.

Source: http://www.waze.com/about/press_resources

Sponsorship

Many events and programs look for sponsors to help defray costs. DelDOT could strategically choose to sponsor events that would improve its perception by its target audiences. In other words, sponsoring events that appeal to its market is likely to shape attitudes toward the app, help generate a positive reaction, and ultimately encourage downloads (Friedman, n.d).

DelDOT may wish to sponsor events where sponsorship signage or electronic messages are prominently displayed at large gatherings (e.g., within sports stadiums, arenas, or racetracks). DelDOT could sponsor events (or a portion of an event) that are attended by a target audience that would help promote awareness of the app (e.g., Delaware Hotel and Lodging Association's Annual Stars of the Industry Awards).

Event Networking

In addition to financial sponsorship support, DelDOT could devote time to network throughout the state at events attended by the app's target audiences. In person networking has a major return on investment because it builds trust, increases awareness, and would provide potential customers the opportunity to get hands-on exposure to the product. According to Ehrenberg, "This will encourage the customer to spread word of mouth, which is the most influential and valuable part of marketing because it means more if someone else has something to say from their personal experience and familiarity with the product" (2013).

“Tabling”—setting up a table with information about the app—could be adapted to fit many local events and enables prospective users to walk up to interact with DelDOT representatives and pick up print and promotional materials.

The increased use of kiosks, which incorporate an additional interactive element of having users download and test out the app, is another option that could continue to be used strategically at key locations in Delaware. Although a kiosk would require an up-front investment, these face-to-face strategies would mainly depend on manpower.

Beginning on Black Friday in November 2009, the Virginia Department of Transportation (VDOT) used public information displays at kiosks set up at major public places in Virginia. Two Virginia Welcome Centers were selected to provide long-distance travel information to I-95 holiday drivers and the Tysons Corner Center, a major shopping center in Metropolitan Washington, D.C. was selected to provide information to large numbers of holiday shoppers. The large flat-panel displays provided information on multi-modal travel options, real-time traffic



Bike Delaware, DelDOT, the Delaware Bicycle Council, and the Newark Bicycle Committee come together to interact with the public at Newark Community Day

Source: <http://www.bikede.org/2010/09/22/newark-community-day-gang-of-4-may-be-unprecedented/>



Public information displays, at strategic locations, were used by VDOT to launch its traveler information system.

Source: <http://ntl.bts.gov/lib/38000/38500/38510/ch13.htm>

information, traffic camera views, transit maps, and other local traffic and construction alerts (USDOT, 2009).

DART First State Bus Ads

An ad on the inside of a bus—once the transit feature of the DelDOT App is implemented—would appeal to transit users looking to plan their trip. In the meantime, ads on the sides and back of DART First State buses would reach drivers, especially those stuck in traffic.

Billboards

Since the overarching target market for the app is “drivers,” a billboard along the I-95 corridor is one way to reach many potential users, although it would require a larger budget. Scout rented billboard space to entice prospective travelers to download the app to avoid Bay Bridge traffic during peak travel times.

Endorsements

Delaware is a small state where high-level public officials are visible and accessible. DelDOT could take advantage of this by requesting endorsements of the app. For instance, Governor Cuomo of New York posted an article on his website endorsing the 511NY app.



Prototype of ad space on the back of a local bus

Source: <http://gfx9.com/bus-blank-billboard-pictures/6175/index.html>



Billboard for Scout

Source: <http://instagram.com/scoutbytelenav>

CUOMO CENTRAL

The latest news and updates on Andrew Cuomo's campaign for Governor

January 25

GOVERNOR ANDREW M. CUOMO ANNOUNCES CREATION OF NEW MOBILE APP FOR NEW YORKERS TO GAIN REAL-TIME TRAVEL INFO

by Cuomo

Contact Information:
Governor's Press Office
NYC Press Office: 212.681.8840
Albany Press Office: 518.474.8410
press.office@nyc.gov
Albany, NY (January 25, 2011)

Governor Andrew M. Cuomo today announced that the state Department of Transportation has upgraded its 511 New York system, including a new free mobile device application that provides New Yorkers with up-to-the-minute information regarding traffic, transit and emergency service notifications as well as weather advisories.

The 511NY Mobile Application is a free app that BlackBerry, iPhone and Google Android mobile device users can download to easily access weather, transit and traffic conditions. The app, which is operated by the state Department of Transportation (DOT), can be found in respective app stores and will be made available on additional platforms in the near future. The new services make real-time travel information, already available via phone and Web through 511NY, more accessible to people as they are traveling.

"As we've seen with this harsh winter, it's vital that New Yorkers have immediate access to urgent information regarding travel, transit and emergency notifications," Governor Cuomo said. "This new app, along with additional features to this innovative DOT program, is an example of how government is making full use of the technological platforms that are not just gaining popularity, but revolutionizing how we interact."

The new app is part of an upgrade to DOT's existing 511 New York system, which was created in 2008 to provide real-time critical information to travelers, such as road closures, accidents, construction, transit delays and inclement weather information. Other additions to 511 New York include:

511NY Mobile Web: A new Web page formatted specifically for ease-of-use on smart mobile devices, available at <http://m.511ny.org>, www.511ny.gov or www.511ny.org/511NYMobile.

My511NY: A free, personalized service where accounts can be customized for both phone and Web service. Users can define and save up to six traffic and transit trips and access specific information relevant to those routes. More information is available at www.511ny.org/My511NY.

January 25

GOVERNOR ANDREW M. CUOMO ANNOUNCES CREATION OF NEW MOBILE APP FOR NEW YORKERS TO GAIN REAL-TIME TRAVEL INFO

by Cuomo

DOWNLOAD HERE

CLEANER GREENER NY
DOWNLOAD HERE

URBAN AGENDA: READ THE PLAN
DOWNLOAD HERE

Governor Cuomo endorses the 511NY app

Source: <http://andrewcuomo.com/CuomoCentral/press/press-release/2011-01-governor-andrew-m-cuomo-announces-creation-of-new-mo>

Promotional Products and Premiums

Promotional products provide customers with a tangible reminder of a company's brand. As the Promotional Products Association International stated in their 2013 Fact Book, "Promotional products—usually imprinted with a company's name, logo or message—include useful or decorative articles of merchandise that are used in marketing and communication programs. Imprinted products that are distributed free are called promotional products. Imprinted items given as an incentive for a specific action are known as premiums." These products are often retained because they are useful, which repeats the imprinted message many times without added cost to the advertiser (Fact book, 2013). DeIDOT could purchase automotive-related



One example of an automotive promotional item

Source:
<http://www.pinnaclepromotions.com/promotional-product/jelly-sticky-pad-tire-tread/1441/20928/>

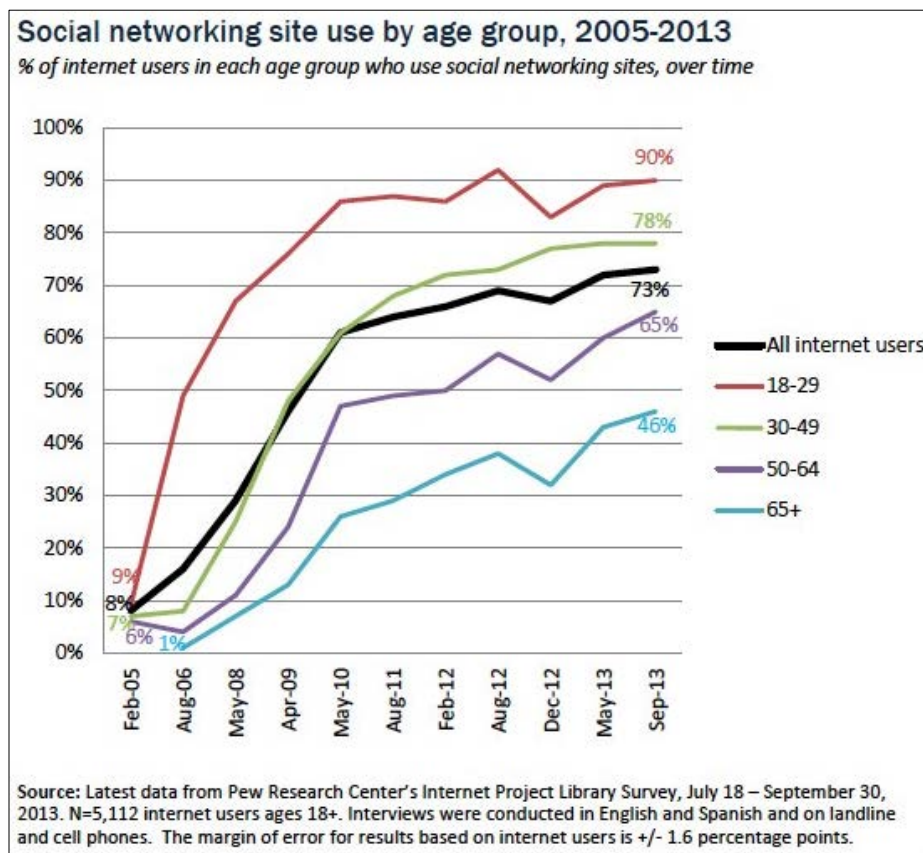
items (such as visor clips, ice scrapers, or Jelly Sticky Pads®) and either give them away or offer them as an incentive for downloading the app. This strategy could be incorporated with the previously mentioned tabling and kiosk strategies.

Digital Marketing Tools

Why Digital Marketing Tools Matter

Digital marketing tools matter because a majority of Americans use social media, mobile devices, and smart technology to be part of a connected culture.

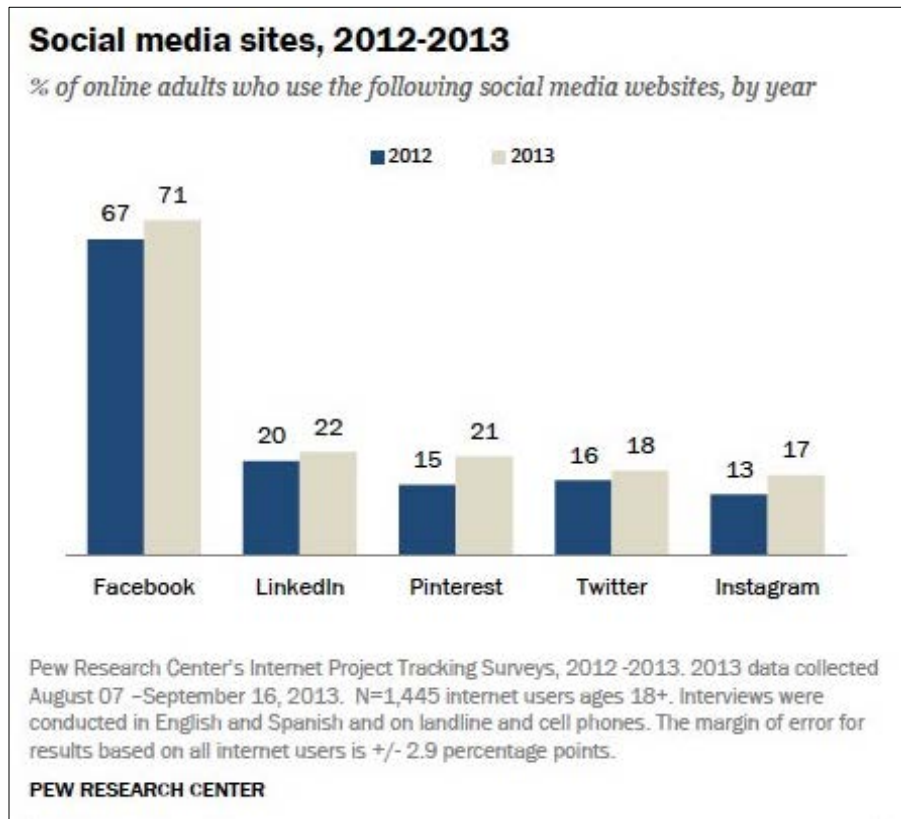
Use of Social Media – According to Pew Research Center, the use of social media among all age groups has steadily increased from 2005–2013. While it’s not surprising that 90 percent of 19–29 year olds use social media, research indicates that 65 percent of 30–64 year olds now use social media.



Social Networking among Internet Users

Source: <http://www.pewinternet.org/2013/12/30/social-media-update-2013/>

In addition, as of September 2013, 73 percent of online adults use social networking sites. Of the online adults using social networking, 71 percent use Facebook, 22 percent use LinkedIn, 21 percent use Pinterest, 18 percent use Twitter, and 17 percent use Instagram (pewinternet.org, 2013). While 42 percent of online adults use multiple social networking sites, Facebook remains the preferred platform. Facebook, Instagram, and Twitter are the platforms that provide the highest level of user engagement (Duggan and Smith, 2013).



Preferred Social Media Platforms, 2012 and 2013

Source: <http://www.pewinternet.org/2013/12/30/social-media-update-2013>

Attachment to Social Media

A 2014 *Brand Dependence Social Media Survey* by UTA Brand Studio and uSamp reveals that attachment to social media, or the “degree to which consumers believe a brand is like themselves and the degree to which thoughts and feelings about a brand come to mind,” varies by age and gender. For adults ages 18 and older, Facebook was the top social media platform, followed by Instagram, YouTube, Pinterest, and Reddit. Women’s favorite social media outlets were Facebook, Instagram, and Pinterest while men preferred YouTube, Snapchat, and Reddit (Champagne, 2014).

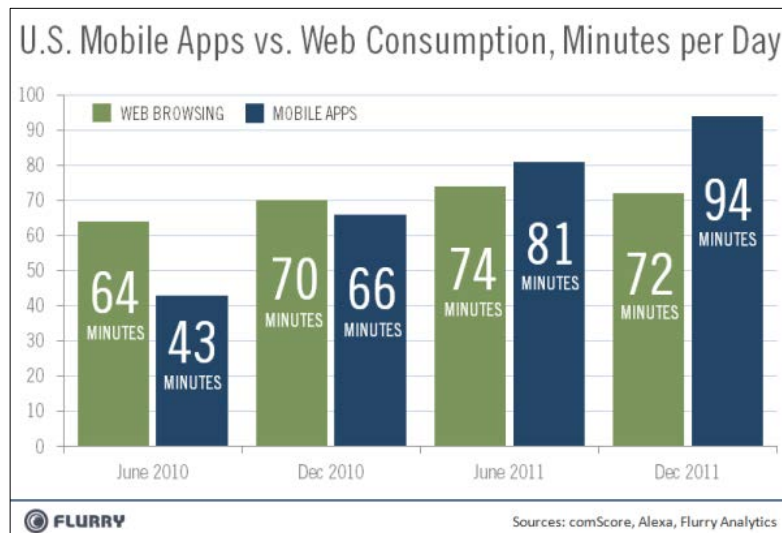
When survey results were analyzed by age group, the top three social media outlets for those under age 24 and those between 24 and 44 were Instagram, Facebook, and Pinterest. People 45 years of age and older preferred Facebook, Instagram, and Foursquare. Although Twitter was used by 59 percent of survey respondents, it was surprisingly not ranked among the top five preferred social media platforms either by age or gender (Champagne, 2014).

The market for social networking is not stagnant and continues to evolve to keep pace with Americans' growing appetite for virtual connectivity. There is evidence that Facebook's dominance is giving way to newer social platforms like WhatsApp—a worldwide messaging app with more users than Twitter, Snapchat (which sends short-lived “selfie” photos), and Vine (which sends short video segments).

Growth in Downloading of Apps

Pew Research Center has also studied the growing app culture and the trend toward use of mobile devices. As of 2011, over half of all adults in the U.S. had apps on their mobile devices and 34 percent of adults had downloaded apps to both mobile devices and tablets. Not surprisingly, while more adults are downloading apps, use of mobile apps is prevalent among young adults who are highly educated, affluent, and live in urban and suburban areas (Purcell, 2011).

In addition, there is a distinct shift away from the use of both desktop and laptop computers in favor of mobile devices to access the Internet. According to Flurry Analytics, a company that specializes in how users interact with mobile applications, Americans spend 80 percent of their mobile time in apps.



Growing Use of Mobile Apps in U.S.

Source: <http://searchenginewatch.com/article/2321254/Why-Apps-Will-Dethrone-Content-as-King-of-Digital-Marketing>

Because people want apps that provide both content and interaction, apps are regarded as the “future of digital marketing” (Dholakiya, 2014). According to Flurry Analytics, mobile-app use increased 115 percent in 2013. The use of messaging and social apps grew 203

percent in 2013. It is predicted that the trend will continue in the use of apps as social tools to connect people, provide forums for discussion, and share online content (Fox, 2014).

This has important implications for the DelDOT App users who may wish to gain real-time information from other users who are experience traffic delays, weather issues, or want to share suggestions for time-saving routes or points of interest.

Use of Apps

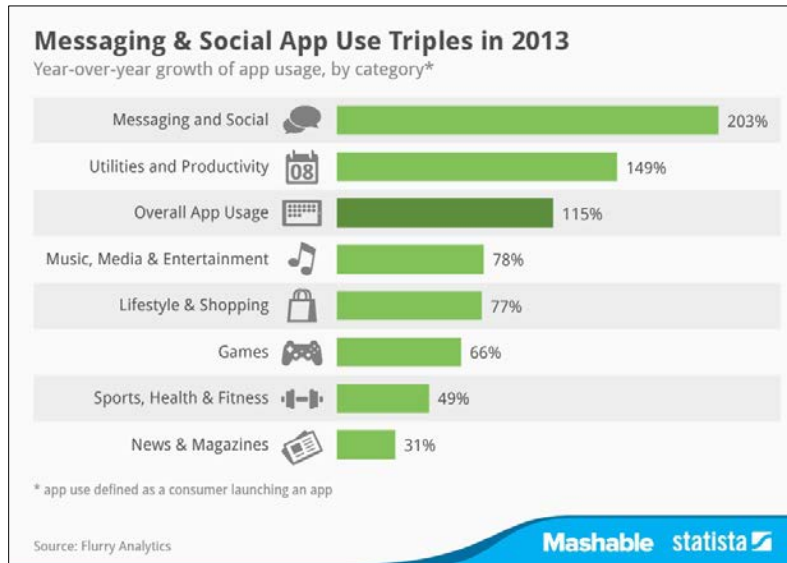
Once a person downloads an app to his or her mobile device, there is no guarantee that the app will be used. Pew's Internet data showed that only 68

percent of adults who download apps actually use them. Paid apps are used

the most, followed by apps for weather, social networking, maps/navigation/search, music, and news. This research clearly shows there is a market demand for the use of an app that provides a combination of up-to-date, real-time traffic information and traffic intelligence that provides route guidance and navigation. In addition, further developing two-way communication that would allow app users to report incidents would build a community of loyal users and contributors.

Apps and Digital Marketing

More apps are being used for content marketing that creates stories to attract customers, enhance brand awareness, and enlarge demand for a product or service. However, simply creating content would not provide a connection to customers or potential customers. Using social media to simply broadcast the greatness of a product or service is a customer turnoff. Instead, interactive, digital-content marketing needs to be entertaining, interesting, or useful. Digital marketing should provide utility to a user and build awareness rather than focus on marketing a product or a service. Examples of interactive digital-content marketing include videos, blog posts, how-to-guides, images, photographs, infographics, and podcasts (Ratcliff, 2013).



Increased Use of Apps as Social Tools

Source: <http://mashable.com/2014/01/14/mobile-app-use-2013>

For example, DelDOT could use YouTube videos as a strategic tool to highlight positive customer experiences using the real-time traveler information app (e.g., avoiding a traffic incident, getting to work on time, early arrival at a large-scale event, vacationers enjoying beach time rather than congestion). Vine or Instagram videos could be used to quickly showcase key app features like how to turn off map layers. Social media management applications (e.g., Sprout Social, HootSuite, Postling, Vertical Response, Buffer) could also be used to strategically stimulate engagement, determine type and frequency of social media content, and manage social media channels (Chaney, 2012). These applications enable content to be managed through a single source; distributed on a routine or scheduled basis; and interactive by providing customer engagement strategies such as blogs, content posting, and responses to messages.

General Social Media Strategy

DelDOT could develop a social media strategy to

- Create a community of DelDOT App users and encourage connections among users
- Engage with users to foster two-way communication on travel issues by utilizing multiple social media platforms
- Communicate real-time information, updates, and alerts for traffic incidents and accidents, weather conditions, and emergency management situations
- Address inaccurate information about traffic issues or other travel concerns

According to Tinu Abayomi-Paul (Abayomi-Paul, 2013), CEO of website promotion services company *Leveraged Promotion*, seven steps can elevate an entity's social media presence.

- 1) **Perfect timing**—Post messages when the audience is looking. Several login patterns are predictable. People tend to log in
 - When they wake up
 - When they first get to work
 - At lunch
 - After work
- 2) **Bond and Blend**—Tell a story and care about what is happening in the consumers' lives.
 - People gravitate toward content that interests them and is applicable to their lives. By caring for the same topics, spreading the message would be easier.

- As an ongoing process, evolve with the needs of the consumer and adapt as necessary.
- 3) **Energize “Evangelists and Enthusiasts”**— Energize the individuals most likely to discuss the app. Allow them to share and spread the message to their followers.
 - 4) **Coordinate**—Once enthusiasts have been identified, coordinate efforts to ensure the content is compelling and inform enthusiasts of app changes/updates and enlist them to spread the word.
 - 5) **Commune**—Shape a community and keep in contact.
 - 6) **Small Bricks, Huge Castle**—Tailor content to make it resonant with specific communities.
 - 7) **Research, Survey, and Repeat**—Research social media trends, evaluate usage, and conduct surveys/polls to determine what the consumers want in an evolving digital age.

Evans (2012) found that social media environments are about building relationships and community. Therefore, content could not be strictly agency focused. More general posts about the content area would keep users engaged. Ensure that the content on each social media platform is original. DelDOT could not replicate or share the same posts on Facebook and Twitter (Evans, 2012). DelDOT staff could also be mindful when responding to its customers. The agency needs to be cautious with messages and know when to address negative comments and crisis management issues. Often, the way social media managers deal with negativity is by ignoring, deleting, confronting, or pacifying with an insincere apology. Research (Billingsley, 2012) suggests that DelDOT could address conflict by offering both an apology and a clear solution to an issue. DelDOT could have a customer service plan that identifies the types of posts that should be deleted, addressed, or ignored.

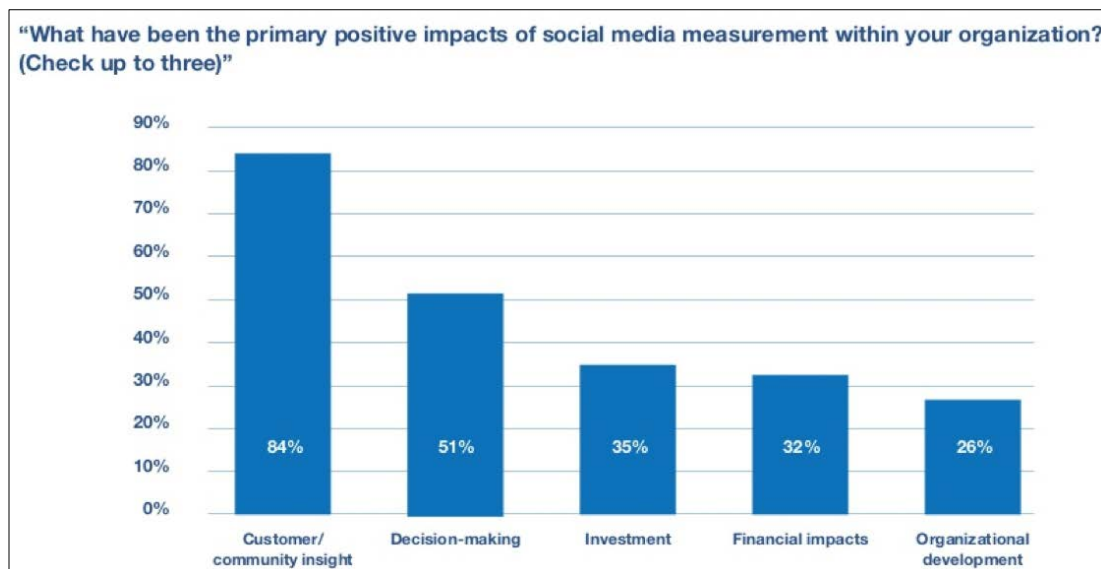
Successful social media strategies incorporate analytics and metrics into their marketing plan. To measure success of the marketing plan for mobile applications, DelDOT could monitor the social media sites over a designated period of time, often in segments of three months to one year. Research identifies metrics that have been applied primarily to Facebook, but could be adapted for other platforms (Ernault, 2013 and Etlinger, 2012).

- **Fan Reach**—corresponds to the number of fans of a page who have seen any given post.
- **Organic Reach**—corresponds with the number of people, fans, non-fans, and followers, who have seen a given post.
- **Engagement**—the number of people who clicked anywhere in the post and have interacted with the content. This includes “liking,” commenting, and

sharing on Facebook, as well as retweets and shares on Twitter. Negative feedback metrics are equally important to track.

- **Followers, Downloads**—the number of individuals who followed and/or downloaded the application within a given time frame.
- **Revenue Impact of Social Media**—the *Social Media ROI Cookbook* (Etlinger, 2012) offered six primary top-down and bottom-up approaches and case-study examples of effective “recipes” for measuring the revenue impact of social media. It acknowledged that tracking the return on investment (ROI) in an e-commerce environment is achievable through metrics like an increase in sales or profits, but more difficult in an environment that is not revenue driven. However, in a survey conducted by *Cookbook* researchers, 84 percent of survey respondents reported that instead of revenue generation, the primary social media business impact was “insight that helped [to] meet customer experience goals” (Etlinger, 2012).

To measure social media ROI, for example, DelDOT could provide customers and fans a clear assignment or opportunity for engagement, then measure responses by tracking clicks and post-click landing pages and forms. DelDOT could also measure user-generated content like the “Share your Story” Facebook app to encourage DelDOT App users to describe positive experiences such as navigating traffic congestion, avoiding an accident scene, or getting to an event on time. DelDOT could also use social-media analytics companies, vendors, and software to measure the ROI of social media campaigns.



Social Media Positive ROI Impacts

Source: www.slideshare.net/Altimeter/the-social-media-roi-cookbook

Paid, Owned, and Earned Social Media

Paid Media includes all advertisements seen on websites, apps, posters, and billboards, as well as TV and radio commercials, Facebook advertisements, display advertisements, PPC advertising, and email marketing (Shaw, 2014). Paid media gets the company's message out to a sizeable audience and in a timely manner.

Paid Media: Facebook

Advertisements can now hit “moving targets”—users as they switch from laptops to mobile devices to tablets. The “custom audiences” category allows businesses and developers to fine-tune their campaign to reach specific users based on specific criteria, like age or gender. Banner advertisements and sponsored stories are useful techniques for social media sites that appear at the top of the user's webpage. Often, they are “catchy” advertisements that are appealing to the eye and have a unique USP (Adweek, 2013). An easily accessible download link for the mobile application could be included in the banner advertisement.

The Facebook Help Center (Facebook, 2014) provides several techniques and cost options for paid banner advertisements. DelDOT could choose between a daily and a lifetime budget, as well as cost-per-thousand-impressions bid (CPM) or cost-per-click bid (CPC). DelDOT would only pay for the clicks or impressions received up to the amount set in the budget, and could view the costs of ads in real time from the ads manager.

- **Cost per mille (CPM)**—this bid type is best for getting people to view the ad.
- **Cost per click (CPC)**—this bid option is best for getting people to click the ad and is a strategy for performance advertisers.
- **Optimized cost per mille (oCPM)**—this bid type is best for showing the ad to the people who are most likely to take action on the ad.
- **Cost per action (CPA)**—when available, this option is best for enticing people to take action on the ad (e.g., “liking” the page or clicking a link). CPA has a known, set cost at the outset. Further charges would not be incurred once the bid amount is reached. (Facebook, 2014).



Facebook Promoted Advertisement

Source: <http://stream-seo.com/facebook-ads-experiment/>

Paid Media: Twitter

The following terms have been defined to provide insight common Twitter terminology.

- **Handle** – a Twitter username is called a handle. Each Twitter user has one.
- **Tweet** – each message that DelDOT sends through Twitter is called a “tweet.” Each tweet must be 140 characters or less. Best practitioners tweet in 120 characters or less to allow other Twitter users to share, respond, or quote the tweet without running out of characters.
- **Feed** – refers to the constant updating list of tweets. These are usually sorted chronologically with the most recent updates at the top of the page. Each user’s feed is populated by tweets from the other users they follow.
- **Followers** – When a user “follows” DelDOT, updates from the DelDOT Twitter handle would appear on the users feed and in DelDOT’s feed. As DelDOT gains followers, its power of influence on Twitter grows.
- **Retweet** – Re-post or forward a message from another user by clicking the “retweet” button. This makes the tweet appear in the followers’ feed.
- **@Mention** – Direct public messages to other users by inserting an “@” sign immediately followed by the handle. Note: If mention begins a tweet, the tweet is semi-private. It would not show up in all followers’ feeds. To make the tweet

public, start the message before the handle or type a period before the “@” symbol (@DelawareDOT versus .@DelawareDOT).

- **Direct Message (DM)** – this enables a tweet-like message to be sent in private between two Twitter users.
- **Hashtag** – a message becomes easily searchable by people seeking updates on a specific topic when a hashtag is inserted into tweets to provide context. To create a hash tag, a keyword is preceded by the pound symbol (#). For example, #netDE is a popular hashtag used to tag Delaware-specific news and information.
- **Trending** – this term describes something that is extremely popular at any given moment via social media. On Twitter, current trending topics are listed in the navigation panel.

According to Twitter’s Help Center (Twitter, 2014), DelDOT would only be charged when people follow the promoted account or retweet, reply, favorite, or click on the promoted tweet. DelDOT would never be charged for organic activity on Twitter. Twitter would automatically stop showing advertisements once the set budget has been reached, and DelDOT would never be charged more than what has been spent. Twitter would also provide suggestions for bidding to optimize campaign goals. After promoting the account or tweet, check back and analyze the progress of the advertising campaign.



Twitter Promoted Advertisement—British Airways

Source: <http://marketingland.com/twitters-promoted-tweets-become-a-pure-ad-product-16724>

Paid Media: HootSuite

Social network management websites, like HootSuite, improve by enabling an organization to send and schedule updates, view others’ updates, monitor feeds and engagement, and schedule and distribute reports and analytics through one interface. HootSuite can manage Twitter, Facebook, LinkedIn, Foursquare, Myspace, Google+, Wordpress, Mixi, and App Directory in one place. Hootsuite’s three pricing plans are free, pro, and enterprise (“Social Media Management Plans - HootSuite Social Media Management,” n.d.).



Hootsuite Social Media Management

Source: <http://mashable.com/2013/09/18/hootsuite-beginners-guide/>

Paid Media: YouTube and TV Traffic Reports

TV Stations use and promote traffic apps, such as Beat the Traffic, for on-air traffic reporting. The use of real-time traffic systems is generally bartered for the exchange of on-air promotion.



Beat the Traffic Advertisement

Source: www.youtube.com/watch?v=POEyRQRJxuM

Paid Media: Pandora and Spotify

DelDOT could purchase online radio advertisements through commercial music-streaming services to target commuters, tourists, and other audiences traveling in Delaware. These advertisements can be visual, audible, and targeted to people in a specific location.

Paid Media: Advertising Networks

DelDOT could use standard, in-app advertising networks to monetize its real-time traveler information application. Users could click on the banner and a larger ad would appear. For example, Admob is a mobile application promotion site that could be used by DelDOT to create an advertisement for its app. DelDOT could determine the ad's appearance, cost, and display placement in other apps. DelDOT would only pay when other users click on the advertisement, which then potentially may turn into app downloads ("Promote your mobile apps with AdMob advertising to increase downloads," n.d.). Adfonic, a similar mobile application promotion site, provides features that could enhance the branding of the DelDOT App ("Marketing Website," n.d.).



Pandora Radio Targeted Advertisement

Source: www.pandora.com



Use of Advertising within Mobile Applications

Source: <http://googlemobileads.blogspot.com/2010/08/samsung-uses-admob-ads-to-drive.html>

Owned Media belongs to and would be managed by DeIDOT. It would consist of all the websites, applications, mobile sites, Facebook business pages, Twitter accounts, and blogs owned by DeIDOT. It is often a cost efficient type of media and connects a brand directly to its clients (Shaw, 2014).

Owned Media: YouTube

DeIDOT could produce tutorials and guided-tour videos, on a micro site and across social media channels, to raise awareness about the mobile apps features. Prospective DeIDOT App users could be educated on new app features or updates, through a relatable story, while watching a YouTube clip.



INRIX YouTube Tutorial

Source: www.youtube.com/watch?v=WcCf93dG_8&list=PLB8A8DD2258AB0C76&index=2



Waze YouTube Tutorial

Source: http://www.youtube.com/watch?v=y_7yoEUrVhw&src_vid=GdxsBx_FzKI&feature=iv&annotation_id=annotation_207434

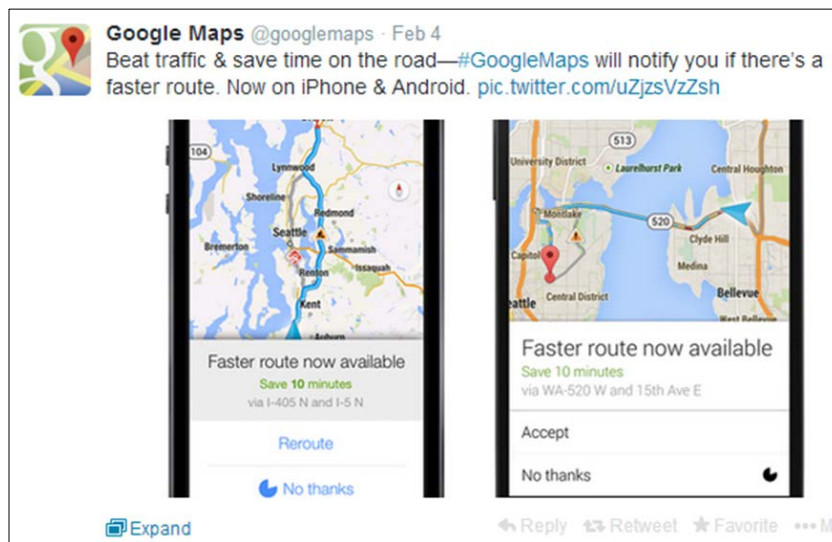
Owned Media: Twitter

DelDOT could advertise and converse with its audience through Twitter feeds.



INRIX Twitter Account

Source: <https://twitter.com/INRIX>



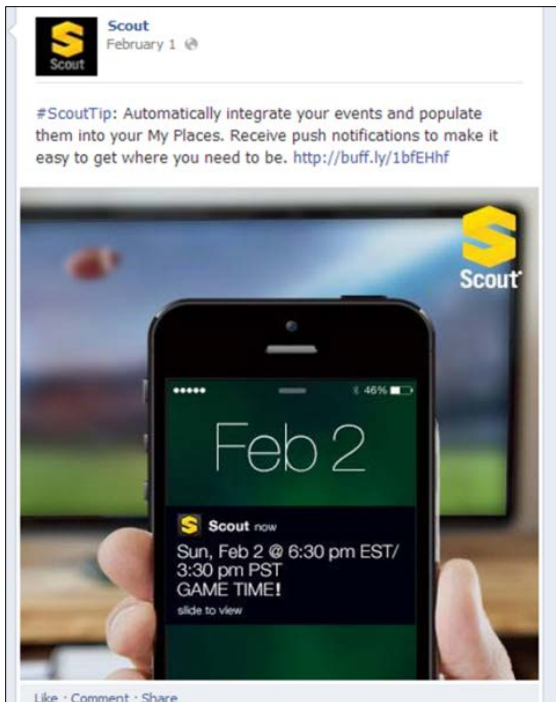
Google Maps Twitter Account

Source: <https://twitter.com/googleapps>

Owned Media: Facebook

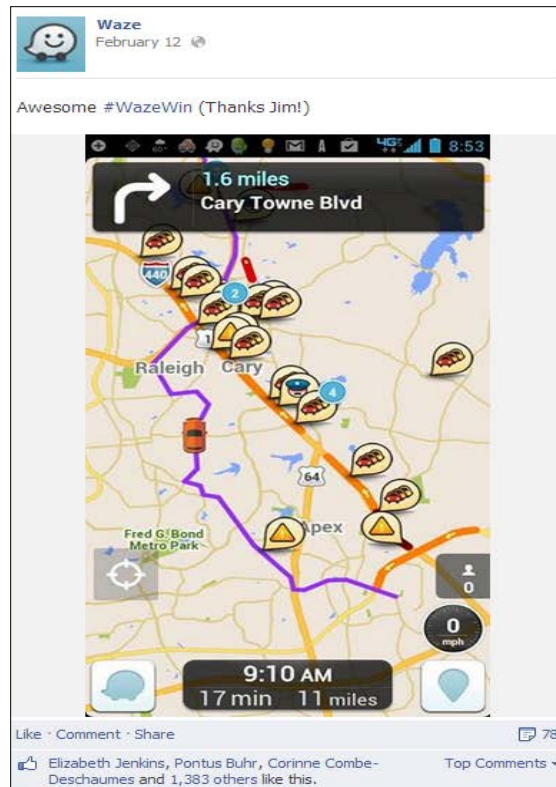
Similar to Twitter, DelDOT could use Facebook as a platform to advertise and talk with its audience. Facebook is a platform for more variety in public engagement than Twitter. Like in the Scout example (below), DelDOT could provide push notifications to Facebook followers about major traffic- or weather-related incidents or travel advisories.

Waze uses community-based traffic and navigation, or “crowdsourcing,” to gather real-time traffic information. Facebook’s one-way crowdsourced information is gathered on possible alternative routes, enabling users to avoid traffic.



Scout Facebook Account

Source: www.facebook.com/scoutbytelenav



Waze Facebook Account & Consumer Interaction

Source: www.facebook.com/Waze

Owned Media: Blog

DelDOT could encourage users to blog to highlight good experiences using its app. For example, Waze clipped a Facebook message from a driver who used the app during Winter Storm Leon that crippled Atlanta metropolitan area motorists on January 29, 2014. Waze created a blog post entitled, "Driver in Atlanta Saves Himself from 16 Hours of Traffic by Using Waze."

I cannot thank you enough for suggesting the Waze App! It has saved me from being late to work on more occasions than I can count...BUT yesterday it REALLY SAVED ME! It rerouted me around all of the horrible traffic that was caused by the winter storm. I had no idea where it was taking me but it worked. I got home in a little over 2 hours whereas my co-worker who left at the same time did not get home until 11AM this morning . I hope that she gets Waze now! 😊 Thanks Again!

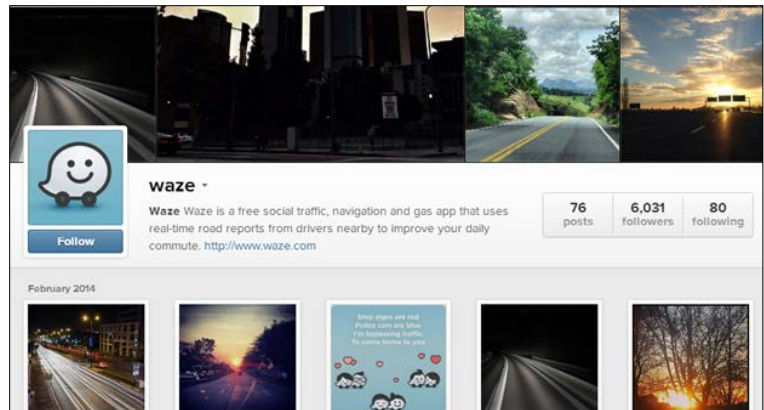
Unlike · Comment · January 29 at 1:51pm

Facebook Post Featured in a Waze Blog Entry

Source: http://blog.waze.com/2014_02_01_archive.html

Owned Media: "Chat Apps" and Instagram

According to Information Week (Zeman, 2013), in 2012, 19 billion messages were sent each day from mobile chat apps, while 17.6 billion were sent from Short Message Service or text messaging. With the increasing popularity of chat apps among mobile device users ages 25 and under, DelDOT could benefit from using this social media format to engage with its younger target audience. Vine, the social platform with six-second videos, has at least 40 million users, and has continued to grow despite the introduction of Instagram's video feature (Isaac, 2013). WhatsApp, the world's most popular messaging app, currently has 450 million active users. WhatsApp is also working on an application programming interface (API) that would also allow users to share content with each other, but in a private setting more intimate than Facebook. It's one of many messaging apps, which together with texting, account more use than Facebook (Goetz, n.d.).



Waze Instagram Account

Source: <http://instagram.com/waze>

Owned Media: Collaborations

DelDOT could collaborate with partners listed in the Target Audience Matrix (see **Appendix F**) to provide mutually beneficial information on estimated drive times getting to special events and key destinations and commuting to employment. For example, INRIX collaborated with Windermere Real Estate to provide commute estimates for interested home buyers, through a widget on the real estate website. An INRIX blog stated, “In order to address what over 70 percent of home buyers surveyed by the National Association of REALTORS® cite as a key buying criterion, we’re teaming up with Windermere Real Estate to introduce INRIX Drive Time™—a new home-buying feature on Windermere.com that helps people know how long a commute they could expect between work and any home for sale on the site” (Jacobi, 2013).

The screenshot shows a real estate listing on Windermere.com. The main listing is for a 'Big Rock Area Residential' property at 27327 NE Big Rock Rd, Duval, WA 98019, priced at \$639,950. The property information includes: MLS #: 413780, Price: \$639,950, Lot Size: 5.17 acres, Year Built: 1993, Views, County: King Co., Bed/Bath: 4 / 2.75, Price per sqft: \$154, Square footage: 4,160 sq ft, Taxes: \$1,912 (2012), Type: Residential, and Style: 2 Story. A widget for INRIX Drive Time is highlighted with an orange circle, showing a graph of drive time from a home to 815 Western Ave, Seattle, WA, with a peak of 64 minutes and a 54-minute commute time highlighted. Below the graph is a 'Walk Score' of 20.

INRIX & Realtor Collaboration

Source: www.windermere.com/blogs/windermere/posts/search-a-lot-smarter-with-windermere-s-new-inrix-drive-time-tool

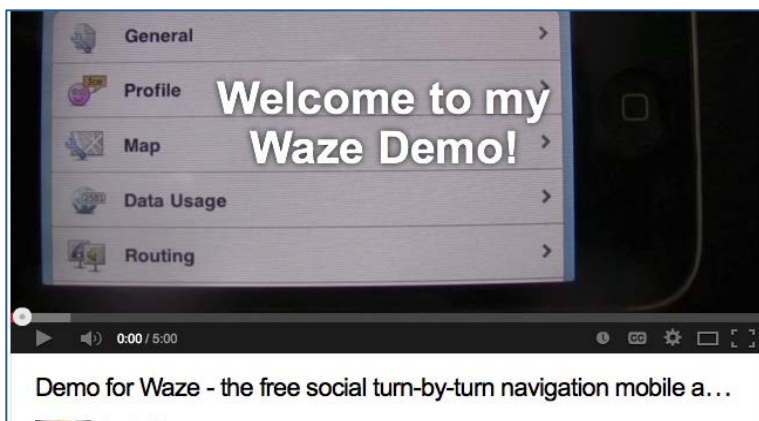
DelDOT could collaborate with organizations for contractual services that could enable real-time travel content to be added directly on business websites. For instance, the Firefly Music Festival may wish to obtain, for display on its website, customized real-time travel information along major travel routes entering and exiting the venue. Costs could be determined by the degree of customized traffic information (e.g., location of traffic cameras, banner alerts for major incidents, display of key routes and travel times). INRIX, for example, offers a service where businesses can add customized traffic news to their Web pages. The customized Web pages are built using web widgets, such as a local incident list, incidents on a fully interactive map and a traffic quality indicator (INRIX.com, n.d.). Beat the Traffic also provides companies with an option to add a live traffic widget to their home page or blog. The Beat the Traffic live traffic widget shows real-time traffic information for

main roads in a specific area and can be personalized to display a city, color, framework style, and transition time (beatthetraffic.com, n.d.).

Earned Media refers to public relations, recommendations, reputation management, sharing, organic search traffic, and news articles. Earned media has the potential to go “viral.” Because earned media is not managed by DelDOT, it is the most credible to the consumers (Shaw, 2014). As an added bonus to DelDOT, earned media is free.

Earned Media: “Mediaphile Enthusiasts”

Social media gurus have developed their own followings and readily endorse new technology that has provided them with a good user experience. For example “mediaphile enthusiast” Ian Rathbone endorsed Waze media and achieved over 27,000 views of his Waze Demo on his YouTube channel.

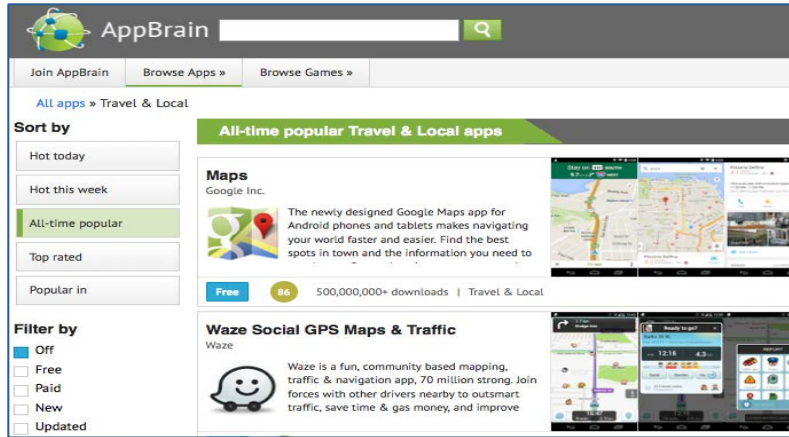


Waze YouTube Demo

Source: www.youtube.com/watch?v=4x70V894Igc

Earned Media: AppBrain

AppBrain is a website that allows users to find Android apps. AppBrain users view the "all-time popular" list of apps to decide what apps to download on their Android devices. Currently, the DelDOT App is available for review on AppBrain. As of April 16, 2014, the AppBrain reviews of DelDOT's App include: 4.6 Android Market Rating, an AppBrain score of 92/100, and installs of over 5,000 (App Brain, 2014). DelDOT could monitor AppBrain and take note of any recommendations or concerns mentioned by reviewers.



All-Time Popular Real-Time Traffic Navigation Apps on App Brain

Source: <http://www.appbrain.com/search?q=real-time+traffic+navigation&sort=popular>

Earned Media: Customer Input

DelDOT could acquire prospective app users based on customer recommendations and positive messaging via social media. Waze encourages its users to register to become community members. These members and their cars become avatars who through their input and collaboration are “outsmarting traffic together” (Waze 3.6., n.d.)



Waze Customer Input Section

Source: www.rappler.com/life-and-style/technology/22744-waze-3-6-gets-road-closure-crowdsourcing

Earned Media: Online Community Support

DelDOT could strive to earn support online through social engagement. Waze has assembled a cadre of “map editors” who help to improve routing, ensure that maps are

accurate, and recommend map edits and corrections. The map editor community is open to anyone who wants to contribute. The Waze map editor site provides a video tutorial to become a mapper, a forum to obtain advice from experienced mappers, a community wiki with learning tools, and a tool to practice mapping skills (Welcome to the Waze Map Editor, n.d.)



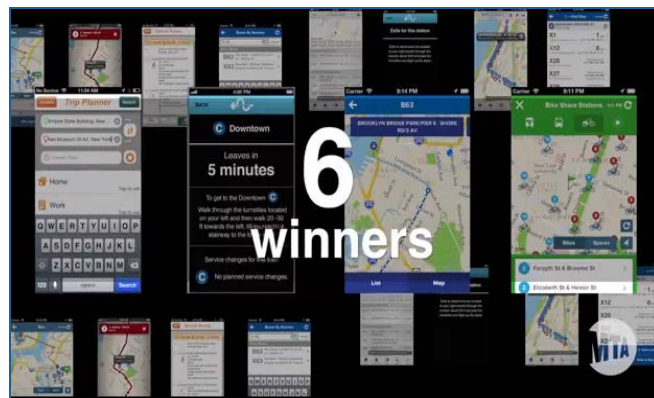
Waze YouTube Community Guide

Source: www.youtube.com/watch?v=HVksbb1Z4SQ, 2012

Earned Media: Building New Apps from an Existing Application

DelDOT could take advantage of the growing number of tech-savvy individuals who love to show off their app development skills.

For example, the Metropolitan Transportation Authority (MTA) and AT&T jointly sponsored a contest to entice contestants (individuals, teams, app developers, and organizations) to create applications that include the MTA's publicly available data and application programming interfaces (APIs). The



Screenshot of MTA Competition

Source: <http://2013mtaappquest.challengepost.com/>

goal of the competition was to create apps that would significantly and positively impact the way the MTA's 8.5 million riders commute every day. The contest attracted 49 submissions from eight different countries and awarded prizes to six winners ("See how developers changed the way 8.5 million people commute every day," n.d.).

If DelDOT planned a similar contest, these amateur app developers could be inspired to develop spin-off apps based on the DelDOT App. Inadvertently, DelDOT could gain fans who provide endorsements and offer recommendations to improve existing app features.

Conversion Strategy

App Store Optimization (ASO), a subset of Search Engine Optimization (SEO), is a tool used to ensure that an app appears in a search of relevant keywords. As Robi Ganguly (2013) wrote, "The goal of ASO is to drive more traffic to your app's page in the app store, so searchers can take a specific action: **downloading your app.**" Moreover, in a 2012 study conducted by Forrester Research, Inc., 63 percent of all new mobile app downloads on the Apple iOS platform came from searching the app store (58 percent for Android users). Word of mouth was the second most popular response (50 and 40 percent respectively). Therefore, the easier an app is to find, the more likely it would be downloaded.

ASO Techniques

Each component of an app's storefront should be optimized to represent the brand and increase downloads. ASO uses two primary techniques: on-page and off-page. The app's management team implements on-page techniques to make the app's storefront easy to find, informative, and attractive. Alternatively, it's the app users who have control over off-page optimization: app ratings, reviews, and downloads. While DelDOT doesn't have control over these metrics they could encourage users to rate and review the app to increase optimization.

On-Page Techniques

Keywords

The core principal of APO and SEO is to use relevant, searchable keywords within titles, descriptions, and metadata. According to Ganguly (2013), "Having a keyword in your title can improve your app's search ranking for that keyword by an average of 10.3%." Identify the keywords that target audiences will use to search. Tools like the Keyword Planner from Google Adwords assists with identifying keywords that would best promote the app.

The app title should be short and specific. If the app has a specific geo location, the app name should be localized (Palsovic, 2014). Take advantage of the 100 characters in the keywords field to enter alternative keyword options not included in the title—without

spaces (Palsovic, 2014). For example, if the app name is Real-Time Delaware Travel the keyword field would be: “traffic,DelDOT,info,alert,delay,drive,road,navigate,transit,update,live,construction,transport,map.”

The app description should describe the app and its benefits. The description is the primary location to fully explain and market the app (Shah, 2013).

Visuals

As evidenced by focus-group feedback, the app’s icon should clearly express the app function and brand (Shah, 2013). App screenshots should display the most exciting and important features of the app so that users know what to look forward to if they download the app.

Off-Page Strategies

Off-page strategies can be promoted in two ways. Within the app, users could be prompted to review and rate the app. Secondly, the app’s marketing campaign could include social media engagement that requests followers to review, rate, and share the app. Furthermore, as a general SEO technique, external links that direct web users to a site increase the page rank in search engines. The app storefront will rank higher in search results as more websites review, discuss, and share the app.

Ultimately, ASO is an ongoing process. The app management team could routinely monitor download activities and update storefront content as needed. Each time the app is updated, the app description and tutorials must be modified to reflect the changes. App updates could not only produce new downloads but also retain existing users.

Recommendations

DelDOT TMC must clearly define what distinguishes the DelDOT App from all others in the marketplace and then brand the app accordingly. DelDOT should use its USP of “Timely, Accurate, Reliable,” to provide outreach, communicate uniqueness, and connect app benefits to the needs of its target customers. In addition, since Delawareans do not face regular traffic problems in the state, DelDOT TMC needs to develop its sales pitch to demonstrate why each target audience should download the app. What problem will it fix or what benefit will it provide? Once branding is formalized, DelDOT TMC has the potential to build strong relationships with organizations in the state to implement various promotional strategies.

The following recommendations are based on outcomes of research of real-time-traveler-app industry best practices, emerging trends in advanced technology and customer market

demands, as well as input from focus group members. Recommendations are separated into two categories. The first category focuses on suggestions for **improving the functionality** of the app, in terms of interface/usability, menu/features, and app support. The second category emphasizes the need to **develop general, digital, and traditional marketing strategies**.

App-Related

Improve Interface and Usability

- Complete and integrate planned app upgrades
 - Transition from pre-trip use to (hands-free, eyes-free) en-route use
 - Provide voice-guided navigation that gives turn-by-turn directions to keep eyes on the road
 - Add navigation-related features that provide the following abilities
 - Search for addresses, locations, or roads
 - Personalize the app with preferred routes, locations, destinations, travel times, and push notifications
 - Share estimated times of arrival (ETA) via social media, text, or email
 - Use transit AVL technology to track and display DART bus locations; communicate information to users
- Use push notifications and voice alerts to give users real-time information on travel- and weather-related conditions, incidents, and emergencies.
- Send push notifications on road and weather conditions to Delaware-oriented media outlets (e.g., TV, radio, print media)
- Offer hands-free voice commands
- Improve load time of traffic camera feature
- Improve hierarchy of the app based on primary uses by target audiences (e.g., commuters, vacationers)
- Provide real-time incident reporting or “crowd-sourced” traffic communication that allows a two-way exchange of real-time traffic information to/from fellow drivers
- Display estimated travel times, traffic flow, incidents, and traffic cameras all on one screen
- Offer re-routing capabilities to provide alternate routing and guidance around traffic-related incidents and congestion
- Show better, real-time weather information (e.g., how drivable are roads during winter emergencies?)
- Display toll information (e.g., location, cost)

Improve App Menu/Features

- Clean-up map layers
 - Delete layers that are not customer oriented (e.g., DelDOT buildings)
- Refine app menu/features
 - Most private apps have two primary features
 - “Drive” or “Map” feature – that enables users to tailor the app for personalized travel reports and traffic predictions
 - “Report” feature – for users to report an accident, hazard, construction, police, weather condition
- Delete “Workshops” feature
- Delete “Social Media” feature
 - Deemed unnecessary – why do you need to go through the DelDOT app to access social media platforms?
 - Need to improve accuracy of social media platforms (incident/emergency updates)
- Change “News” feature to “Traffic Advisories”
 - This menu option can be eliminated with push notifications for travel alerts
 - Delete old posts
- Sort the “News” (or Traffic Advisories) feature by county so users can quickly assess only the information that is relevant to travel vicinity
- Continue to refine the app to minimize the need for users to zoom or manipulate data layers
- Improve the “home screen”
 - Enable users to open to a preferred function or “favorites” upon startup
 - Target the location of the app user or vehicle rather than default to Dover
 - Make it as exciting, attention grabbing, and uncluttered as possible; prioritize features as “top line” and “secondary” (accessible through a menu)

Improve App Support

- Offer timely, personalized customer support to address any issues with the app
- Cultivate a community of users (e.g., Mediaphiles) who are willing to share knowledge, ideas to improve the app, and create conversations (e.g., blogging) to build interest and identify others willing to test “new and improved” app features
- Create app tutorials and post user testimonials

Marketing Strategies

General Marketing Strategies

- Integrate and use both traditional and digital marketing strategies.
- Use paid, owned, and earned social media to promote the DelDOT App through traditional methods, social media platforms, and social network management websites (e.g., HootSuite).
- Develop weekly and monthly social media themes for consistent marketing and outreach campaigns.
- Change the logo of the app (from the general DelDOT logo) to accurately depict what the app represents—real-time Delaware traveler information.
- Consider renaming the app, with an easy to remember, easy to search name. The app name should accurately reflect the content of “real-time traveler information,” not the name of the agency.
- Initiate a branding campaign.
- Provide timely responses/engagement via social media platforms.
- Increase downloads through mobile-app marketing strategies (e.g., strengthening keyword searches in app stores, improving the appearance/description of the app).
- Use of engagement marketing strategies—generate a positive, “feel-good” experience.
- Capitalize on the USP of the app and use it as the backbone for marketing efforts.
- Create a website for the app to help people find it when people search for the app via its name, category, or function.
- Increase the presence of the DelDOT App on websites of partner organization/companies and other state agencies (e.g., Delaware Office of Economic Development, Delaware Tourism, Downtown Delaware, and Delaware Parks and Recreation Division).
- Regularly update and market new app features.
- Like VDOT 511’s “Reach the Beach” feature, target Delaware beach vacationers and tourists with a “Beach Bound” feature and encourage posting of photos with the hashtag #DEBeachBound.
- For prospective customers, consider framing the app as a tool to help deal with unexpected travel and weather events. For example, “DelDOT TMC, the agency that ensures timely EMS vehicle response, now has a tool to help you to get to <work on time> <your Delaware vacation destination>.”

- Work to increase DelDOT following on Facebook, Twitter, and other platforms by nurturing a community of traffic wonks, much as meteorologists do with weather bugs.

Traditional Marketing Strategies

- Conduct marketing with 3-D ads and display ads at places with maximum visual impact (on and in DART transit buses, buildings at prime locations, stadiums, interactive kiosks/displays).
- Purchase print ads in high-profile publications that reach target markets.
- Purchase a billboard ad on I-95, SR-1, or other route that serves as a major thoroughfare for commuters and vacation travelers.
- Purchase TV/radio ads that provide a call to action (download the app!).
 - Sponsor traffic broadcasts (TV/radio) to build brand exposure.
 - Barter to provide customized traffic news in exchange for sponsorship of the traffic broadcast.
- Enlist DelDOT’s public relations staff to directly approach and build relationships with partner organizations/businesses and media to issue press releases, write feature stories, and create media content to generate publicity on the DelDOT App.
- Convey awareness of the DelDOT App, demonstrate its unique attributes, and build relationships through personal contact with target markets. In-person contacts or “tabling” at special events can be achieved at a variety of events and venues statewide.
- Design and distribute promotional items (such as “giveaways” at tabling events or contest prizes) to increase brand awareness and encourage people to download the app.

Digital Marketing Strategies

Again, a social network management service (like HootSuite) should be used to improve productivity through the use of one social media interface. Depending on the target audience, various social media platforms can be used to send updates, monitor feeds and engagement activities, and generate reports and analytics to measure effectiveness of campaigns. Specific social media strategies include:

- **Twitter** – DelDOT should create a separate Twitter “handle” for DelDOT TMC. This separate account may be used to enhance the marketing presence of its real-time traffic app, provide for traffic-related two-way communications,

feedback on the use of the app, and pertinent updates. In addition, DelDOT needs to:

- Utilize popular hashtags for Delaware, including: #netDE, #DriveDE, #StormDE, #TrafficDE, #Delaware, #DelDOT, #govDE, #DEbeaches.
 - Develop a specific hashtag to allow users to report app problems, concerns, or feedback, for instance #DEtraffic or #TMCTip.
 - Develop response protocols to ensure that replies and “retweets” on Twitter (and other social media outlets) are timely, informative, and well crafted.
 - Engage public officials, key members of target markets, partners in marketing campaigns, newsmakers, popular accounts, and other stakeholders through @mentions, direct messages, and hashtags. This will increase the exposure of the app through a potential “retweet,” “follow” or “favorite.”
 - Use this as a forum to run a small competition or offer incentives to share information about the app.
- **YouTube** – DelDOT should develop new YouTube videos and tutorials that are geared toward each of the target markets (the sole YouTube video was created and posted in 2012). In addition, DelDOT needs to create a tutorial video for both Android and Apple iOS users and create a YouTube Channel for the app.
 - **Facebook** – DelDOT needs to advertise to target audiences via its Facebook page. Strategies include
 - Reaching out to diverse audiences, who may be unaware of the app, through earned, owned, and paid social media. Whether through advertisements or posts, Facebook can be used to target a message to ensure certain audiences are aware of app features best suited for their needs.
 - Using this as a forum to run contests or offer incentives to share information about the app.
 - **LinkedIn, Google+, Instagram, Snapchat** – These social media platforms should be directed for use with particular target markets to keep them interested and engaged.
 - **Social proofing** – DelDOT needs to integrate word-of-mouth recommendations or endorsements via social media, or social proofing, into its digital marketing strategies. Many apps have a feature that allows users to instantly share thoughts, positive experiences, and photos about an app on social media. Assuming that DelDOT App experience is positive, personal stories and testimonials can be used to generate social proof and create positive influence for others to download the app.

How to Incorporate App Promotion into Social Media

While developing a full social media content plan for DelDOT is outside of the scope of this project, the IPA research team does recommend implementing app-focused social media content to increase awareness of the app. The weekly and monthly themes outlined below could be used for Facebook and Twitter.

The research team recommends as part of the social media plan that DelDot “like” the Facebook pages and follow on Twitter potential partners, e.g., [Firefly Music Festival](#), [Dover International Speedway](#), [Delaware State Chamber](#), [AAA Mid-Atlantic](#), [Delaware Tourism Office](#), and any other affiliate organization that could help share travel-related content.

“Afternoon App TIP”

Post an app function with a screenshot and brief explanation on how to

- See traffic reports in your area
- Contact DelDot from the app
- View traffic cameras
- View travel times
- Select map layers
- Access the travel-information radio
- Utilize a map layer (one explanation per week)
- Understand the legend
- Locate the information section

“Behind the Scenes at TMC”

Post a photo of something happening at DelDOT TMC to emphasize the timely, accurate, and reliable source of the app data. Using Instagram/Facebook or TwitPic.

Including but not limited to

- Spotlight on a TMC employee
- Spotlight on TMC technology feature
 - Specific screen display on a monitor
- Demonstration of “real-time” activity

“App Download Contests”

Incentivize downloading, reviewing, and rating the app to support off-page app store optimization goals. Language could state: “To enter, [download/review/rate] the DelDOT App and complete the entry form.” Or, “To enter, share this post” about the app. Or, “To enter, tweet a photo of a friend using the app.”

Including but not limited to

- Giveaway of event tickets (concert, sporting event)
- Giveaway of E-ZPass transponder/ and or E-ZPass credit
- Giveaway of DARTCard (Especially when transit tracker is added to app)
- Giveaway of \$10 giftcard
- Giveaway related to Work Zone safety or other DelDOT campaign
- Giveaway of DelDOT promotional item

Peak Travel Bug

For special events, inclement weather, beach weekends and holidays, mention these events on social media and encourage use of downloading the app to help navigate the drive.

#DEBeachBound

Like VDOT 511's "Reach the Beach" feature, target Delaware beach vacationers and tourists with a "Beach Bound" feature and encourage posting of photos with the hashtag #DEBeachBound.

"Wishful Wednesday"

Engage followers by asking what they would like to have added to the DelDOT App for improvements. Could be a poll of pre-selected options that TMC is working on. This topic doesn't have to be app-centric. DelDOT could also ask for feedback on other campaigns and customer-service related goals. The same DelDOT TMC employee who handles the incoming complaints about road issues could monitor comments. *Note: DelDOT could have a set of social media guidelines for monitoring and responding to comments and crisis management.*

#DelawareDrive

Engage with followers by requesting that passengers post photos of their Delaware drives through the hashtag #DelawareDrive. Here is an example:



*Instagram User “thecompanyman” posted this photo with the hashtag #DelawareDrive.
Source: <http://instagram.com/p/KgQTrMGhrc/#>*

Popular Delaware Hashtags

Contribute to conversations on Twitter. Use the following popular Delaware-related hashtags when posting information about the topics in parenthesis.

- #netDE (Delaware news)
- #StormDE (weather-related news)
- #TrafficDE (traffic-related news)
- #Delaware (when typing Delaware in a tweet)
- #DelDOT (general DelDOT news)
- #govDE (references to the Governor)

Major Events in Delaware & National Holidays

Delaware has an array of special events, festivals, and sporting venues that impact travel times and routes. Marketing campaigns and social media content could be planned around these events. The following table provides a list of major events in 2014 that generally take place annually in Delaware, as well as national holidays. The list was compiled from website sources that include:

Delaware Tourism www.visitdelaware.com

Delaware Sporting Commission www.delawaresports.org

Southern Delaware Tourism www.visitsoutherndelaware.com

Kent County and Greater Dover Convention and Visitors Bureau www.visitdover.com

Greater Wilmington Convention and Visitors Bureau www.visitwilmington.com

Major Delaware Events - 2014			
Month	Date(s)	Type	Event
January	Various	Sporting	University basketball games
	Month	Theme	National Thank You Month
	1	Holiday	New Year's Day
	20	Holiday	MLK Day
February	Various	Sporting	University basketball games
	2	Event	Polar Bear Plunge, Lewes
	14-20	Theme	Random Acts of Kindness Week
	17	Holiday	Washington's Birthday
March	1	Festival	Annual Chocolate Festival, Rehoboth
	17	Holiday	St Patrick's Day
	29-30	Event	Delaware Home Show, Wilmington
April	5	Event	Wine and Dine, Newark
	Various	Sporting	Blue Rocks Baseball, Wilmington
	7-11	Theme	National Work Zone Awareness Week

Major Delaware Events - 2014			
Month	Date(s)	Type	Event
	22	Holiday	Earth Day
	24	Event	Delmarva Birding Weekend
	26	Sporting	Annual Ocean to Bay Bike Tour
	26	Festival	Bug and Bud Festival, Milford
	Month	Theme	Alcohol Drug and Awareness
	Month	Theme	Keep America Beautiful
May			
	2-4	Festival	Annual Dover Days, Dover
	4	Sporting	Winterthur Point-to-Point, Winterthur
	8-10	Festival	Wilmington Flower Market, Wilmington
	Various	Sporting	Blue Rocks Baseball, Wilmington
	13	Sporting	WBNA Preseason, Newark
	14-18	Festival	Mid-Atlantic Wine and Food, NCC
	16-18	Sporting	Grand Prix, Wilmington
	17-18	Retail	Rehoboth/Dewey Sidewalk Sale
	24	Festival	Maritime Festival, Lewes
	26	Holiday	Memorial Day
	30-31	Sporting	NASCAR Race Weekend, Dover
	Month	Theme	Clean Air
	Month	Theme	National Bike
	Various	Higher Ed	Graduation Weekends
June			
	1	Sporting	NASCAR Monster Mile, Dover
	3-7	Festival	Greek Festival, Wilmington
	8-15	Festival	St. Anthony's Festival, Wilmington
	19-22	Festival	Firefly Music Festival, Dover
	21	Sporting	DRRC Blue and Gold Game, Newark
	21	Festival	A New Night, Downtown Newark
	Various	Sporting	Blue Rocks Baseball, Wilmington
	Month	Theme	National Safety
	Month	Season	Beach
July			
	4	Celebrations	Independence Day
	TBD	Festival	Food and Brew Festival, Newark
	11-12	Festival	Annual Nanticoke Riverfest, Seaford

Major Delaware Events - 2014			
Month	Date(s)	Type	Event
	17-26	Fair	Delaware State Fair, Harrington
	Various	Sporting	Blue Rocks Baseball, Wilmington
	Month	Season	Beach
August	Various	Sporting	Blue Rocks Baseball, Wilmington
	9-10	Sporting	East Coast Skimboarding Championships, Dewey
	Month	Season	Beach
	Month	Season	Back to School (Buses back on the roads)
September	1	Holiday	Labor Day
	1-7	Theme	Childhood Injury Prevention Week
	5-6	Festival	Annual Riverwalk Freedom Festival, Milford
	6	Sporting	Annual Amish Country Bike Tour, Dover area
	6	Festival	Annual Bethany Beach Arts Festival
	6	Sporting	Football – UD vs. Del State, Newark
	13	Sporting	Delaware Park Owner’s Day, Stanton
	13	Festival	Hogs and Hops, Harrington
	Various	Sporting	University football games
	21	Sporting	Delaware Mud Run, Middletown
	26-28	Sporting	NASCAR Race Series, Dover
October	2	Theme	Name Your Car Day
	3	Holiday	Columbus Day
	Various	Event	Frightland, Middletown
	10-12	Festival	Apple Scapple Festival, Bridgeville
	Various	Sporting	University football games
	24-26	Event	World Championship Punkin’ Chunkin, Bridgeville
	25-26	Event	Sea Witch Halloween & Fiddlers Festival, Rehoboth
November	Various	Sporting	University football games
	6	Event	Delaware Return Day, Dover
	11	Holiday	Veteran’s Day
	27	Holiday	Thanksgiving Day

Major Delaware Events - 2014			
Month	Date(s)	Type	Event
December	24	Holiday	Christmas Day
	31	Holiday	New Years Eve
	Various	Event	Yuletide at Winterthur, Winterthur
	TBD	Event	Christmas in Odessa, Odessa
	Various	Event	Holidays at Hagley, Wilmington
	TBD	Event	Capital Holiday Celebration, Dover

Proposed Next Steps

DelDOT TMC has an impressive track record of developing real-time traveler system technology to allow customers to make informed decisions regarding travel routes and mode choice. However, it faces the challenge of effectively communicating the availability of this advanced technology and marketing the DelDOT App to target markets and non-Delawareans. DelDOT needs to generate brand awareness of the app, promote its “Timely, Accurate, Reliable” USP, communicate its value to the traveling public, and differentiate itself in an increasingly crowded and evolving marketplace.

Outcomes of this study and marketing plan may be incorporated into TMC’s strategic plan update and be used to guide future investments, leverage resources, and expand marketing/branding strategies to enhance use of real-time traveler information technology. Proposed next steps should be considered in consultation with directors and key personnel within DelDOT’s Transportation Solutions, Public Relations, and Finance divisions as well as the Delaware Transit Corporation (with respect to advancements associated with real-time information for DART First State transit services).

Move Forward with App Improvements

While DelDOT TMC plans to enhance its ITMS, improvements to the DelDOT App should be considered a top priority. DelDOT needs to prioritize upgrades to improve the functionality of the app to meet consumer demands and better compete in the marketplace. Improvements that provide two-way user interface and voice-guided navigation, more intuitive menu options, and enhanced app support are critical needs.

Identify and Prioritize Marketing Needs

Target Markets – Instead promoting the app to the broad public, DelDOT needs to direct marketing efforts/resources to identified target markets: large-scale event planners, employers and businesses, organized community-based groups, institutes of higher education, commercial drivers, transit, commuters/area motorists, and tourists and vacationers.

App Rebranding and Re-launch – DelDOT should consider a rebranding and re-launch of its app when new features, capabilities, graphics are added or improvements are made to the app. Again, a new name and icon should be considered as part of the rebranding strategy. The app re-launch can serve as a kick-off to a new marketing campaign to heighten awareness of the app to both Delawareans and target audiences. “Mediaphiles,” enthusiasts,

and partners, who already use and like the existing app, could help generate buzz and spread the word about an app re-launch.

New Website – Building and launching a new website can help people search for and find the DelDOT App. By identifying keywords associated with real-time traveler information systems and using search engine optimization (SEO) techniques, DelDOT can ensure that people can successfully search for the app via its name, category, or function.

CRM Application – DelDOT needs to secure a customer relationship management (CRM) application, like HootSuite, to track and measure marketing campaigns over multiple networks. A CRM application can be used to engage users and to build community prior to a re-launch initiative.

Social Media Strategy – DelDOT needs to devote resources to genuinely engage DelDOT app users via social media to reach target markets, encourage connections among users, and build relationships and create a community of users.

Collaborations and Partnerships – The Target Audience Matrix (**Appendix F**) should be reviewed to identify where collaborations and partnerships may be formed or strengthened to maximize free and low-cost exposure to target markets. Strategies include conducting joint marketing ventures, teaming on social media strategies, developing traditional or digital marketing tools, and engaging target markets. Event sponsorship, networking, and endorsements are mutually beneficial to build brand awareness and shape attitudes.

Identify and Prioritize Staffing Support/Resource Needs

Social Media Specialist(s)– Consider hiring interns, additional staff, or repurposing existing DelDOT TMC operations staff to oversee social media, real-time traffic, and in-person outreach at statewide events and venues. Additional staff support would enable DelDOT TMC to

- Use social media to send real-time traffic and incident alerts
- Update traffic advisories based upon user feedback via the improved reporting feature
- Provide around the clock, or near around the clock, staff coverage to underscore the app as “Timely, Accurate, & Reliable”
- Ensure all content is fresh (less than 24 hours old) and interactive

Digital Marketing Support and App Rebranding – DelDOT should determine whether its Public Relations division has sufficient capabilities to conduct an in-house rebranding

campaign or whether an agency should be contracted that specializes in branding, promotions, and marketing.

DelDOT should consider hiring an agency that specializes in app digital media/marketing services to expand the marketing and branding presence of its app. INRIX uses Lavalobe, a new-media marketing agency that focuses on web development, design, motion graphics, animation, online and mobile advertising (www.lavalobe.com).

Target Market Outreach – DelDOT should consider contracting with the University of Delaware Institute for Public Administration to develop and conduct a public outreach strategy. Obtaining input through an advisory panel, focus groups, and person-to-person outreach with key target markets is suggested to develop specific strategies for a possible app re-launch.

Enhanced Customer Preference Research

- **Ongoing Marketing Research** – To stay abreast of the evolving field of social media and mobile device apps, IPA proposes to assemble and meet biannually with a DelDOT App Advisory Panel to obtain input on branding and marketing strategies.
- **Ongoing Student Marketing Research** – Because few “young, techie” focus-group members believe that they will continue to use the DelDOT App, IPA proposes to form several college-age student focus groups to develop specific marketing, conversion, and retention strategies for this target market.
 - Strategies will focus on ways to engage students to become interested in using the app, methods to connect via social media, and techniques to connect to Delaware college-age students via Web-enabled mobile devices. For example, the University of Delaware has developed a UD Mobile Web with student-oriented features such as IT (tech-related news) and shuttle (UD real-time bus schedule), see: www.udel.edu/mobile/. It may be possible to form a partnership with UD to expand outreach to students in the future, via the UD Mobile Web, to include real-time traffic and DART First State transit information.

In-Person Marketing and Research

- **Tabling at University Events** – While DelDOT TMC currently conducts outreach at special events and venues, IPA proposes manning University events (e.g., Alumni Weekend, Commencement, football games, Coast Day) with staff and students.

- **Visual and Interactive Displays** – IPA proposes the preparation of a new tri-fold display and use of several tablet computers, installed with the DelDOT App, at University events to demonstrate and showcase the app, allow participants to “test drive” the app, and record results and provide feedback.

Video Targeted to Younger Users

- Short, catchy videos featuring young actors (UD students) can be produced to explain practical use of the app and appeal to the younger demographic.

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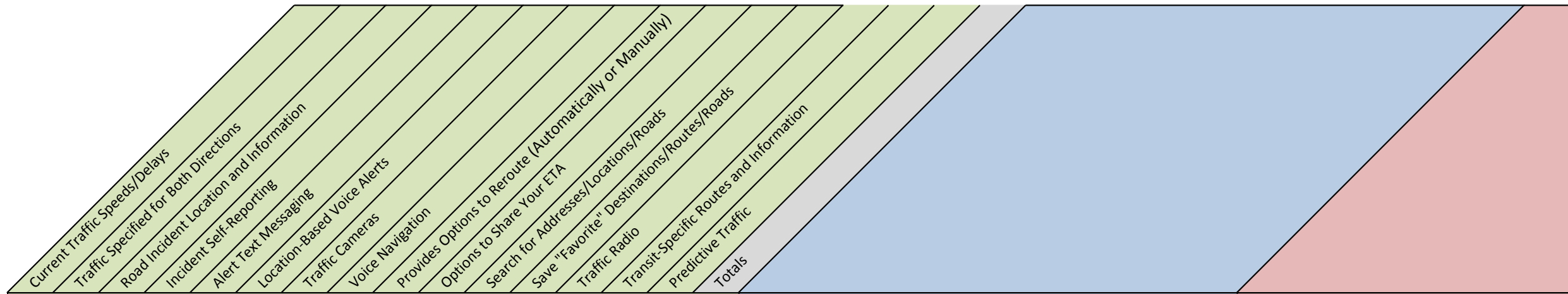
Appendix A: Overview of Features in Each App in Analysis

The following two matrices summarize the comparative analysis of traffic-related applications (apps). Of the twelve apps analyzed, six were developed by private companies and six were developed by or for state departments of transportation (DOTs).

The comparative research matrix details the features, ease of use/interface, and target market for each app.

The marketing strategies matrix section displays information about the marketing strategy of each app. The strategies were analyzed and compared based on three categories: engaging the user, creating an online presence, and employing social media.

Source material includes online user comments and reviews, app descriptions, traffic-app websites, state DOTs websites, news coverage, and using the apps themselves.



Private																		
	Features															Ease of Use/Interface	Target Market	
Beat the Traffic	X	X	X		X	X						X				6	Slow to load while panning; ads clutter screen in free version; simple map	Commuters, vacationers, and general travelers
Google Maps	X	X	X					X	X		X			X		7	High quality graphics load quickly; option for satellite view	Commuters, vacationers, and general travelers; first focus is navigation, then avoiding traffic
INRIX	X		X	X	X		X			X	X	X			X	9	Very sleek interface with little interaction required to access features	Commuters, vacationers, and general travelers; focus is avoiding traffic
Scout	X	X	X	X			*	X	X	X	X	X				10	Images display quickly and sharply; easily select alternate routes; customizable dashboard of information	Commuters, vacationers, and general travelers
Sigalert	X	X	X											X		4	Seems simple at first, but there are bugs that prevent information and images from loading; advertisements take up screen space	Commuters, vacationers, and general travelers
Waze	X		X	X				X	X	X	X	X				8	Lots of shortcuts and voice prompts to minimize in-drive use; colorful; animated	Commuters, vacationers, and general travelers who are social media users; first focus is avoiding traffic, then navigation
State DOTs																		
511NY Mobile App	X		X		X		X					X		X		6	Requires a lot of touches before you can access the traffic conditions; the app will not save your settings so each time you want to open a map you have to re-click all the things you would like displayed	To be used before travel by drivers in New York
Louisiana DOT's "Way to Geaux"			X			X								X		3	This app utilizes hands-free audio alerts; unable to view traffic map because it only displays incidents within a certain radius of the driver	To be used during travel by drivers in Louisiana
Minnesota 511	X	X	X				X				X					5	Jumpy display that takes a long time to load; travel speed colors are too faint to be visible and cannot be viewed unless zoomed in	To be used before travel by drivers in Minnesota; drivers affected by winter road conditions
MoDot's Traveler Information Map App	X		X				X				X	X				5	Slow to load while zooming; requires lots of touches; otherwise, intuitive and easy to use	To be used before travel by Missouri drivers; drivers affected by winter road conditions
VDOT 511	X	X	X			X	X		X			X	X			8	Travel times are easy to understand and voice alerts allow driver to keep eyes on the road	To be used before or during travel by Virginia drivers; vacationers
DeIDOT	X	X	X				X							X		5	No voice features; small icons require user to drill down for more information	To be used before travel by drivers in Delaware
Totals	11	7	12	3	3	2	8	3	4	3	6	8	3	2	1			

"X" indicates that the feature is free
 "***" indicates that the feature is available after purchasing the premium version of the app

	Attractive/Explicit Logo	Explicit Name	Compelling App Description	Submit To App Store	App-Specific Website*	Featured on App Review Sites	Positive User Reviews**	Facebook	Twitter	YouTube	Blog about the App	Totals
	Engage the User			Create an Online Presence			Employ Social Media				Totals	
Private												
Beat the Traffic	X	X	X	X	X	X	(inactive)	(inactive)	X			7
Google Maps	X	X	X	X	X	X		X	X	X	X	10
INRIX	X		X	X	X	X		X	X	X	X	9
Scout			X	X	X	X	X	X	X	X	X	9
Sigalert	X	X	X	X	X	X		X	X			8
Waze			X	X	X	X	X	X	X	X	X	9
State DOTs												
511NY Mobile App	X	X		X				X	X			5
Louisiana DOT's "Way to Geaux"			X	X	X							3
Minnesota 511	X	X		X								3
MoDot's Traveler Information Map App				X	X							2
Virginia's VDOT 511	X	X	X	X	X	X	X	X	X			9
DeIDOT				X			X	X	X	X		5
Totals	7	6	8	12	9	7	4	8	8	6	4	

* An "X" for this category indicates that there is a website exclusively devoted to the traffic app. A link to the app store or a banner advertisement on a DOT website does not qualify as an "app-specific website."

** An "X" for this category indicates the app has earned an average of 4-out-of-5 stars or higher across review sites and app stores where more than 10 people have voted (as of 2/19).

The following applications were evaluated:

- **Private Applications**

- 1) INRIX
- 2) Waze
- 3) Beat the Traffic
- 4) Scout
- 5) Google Maps
- 6) Sigalert

- **State DOTs:**

- 1) 511NY Mobile App (New York State)
- 2) MoDot's Traveler Information Map App (Missouri)
- 3) 511mn (Minnesota)
- 4) Way to Geaux (Louisiana)
- 5) VDOT511 (Virginia)
- 6) DelDOT Real-Time Traveler Information App (Delaware)

Each app was evaluated using the following four components:

- 1) Features
- 2) Ease of use/Interface
- 3) Target Market
- 4) Manner in which it is marketed/advertised

Source material includes online user comments and reviews, app descriptions, traffic-app websites, state DOT websites, news coverage, and using the apps themselves.

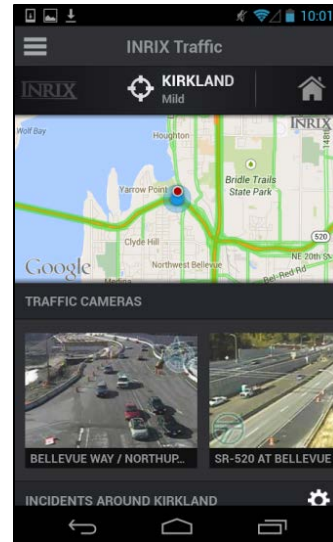
Private Companies



INRIX

Free Features

- Traffic Map: See current traffic conditions, incidents, construction, events, police and road closures
- Receive live traffic alerts about traffic delays based on your location and preferences
- Fastest Routes: See and compare the fastest routes to your top destinations
- Report incidents
- Alert friends or family of your arrival time or share accidents via Facebook, Twitter, email and SMS with one click
- Receive departure notifications for when to leave for an on-time arrival
- Traffic Cameras: See even more detail with traffic cameras along your route
- Cloud Sync: Save your places and routes and view them on multiple devices
- Utilizes historical traffic patterns to forecast future traffic congestion
- Specifies traffic by which side of the road it is on



Premium Version Features

- Save and track routes for an unlimited number of places
- See fuel prices reported via anonymous credit card transactions updated daily

Drawbacks

- Cannot see road conditions other than traffic when selecting a route
- Search feature does not always return results

Ease of use/Interface

- Very sleek; everything can be viewed on one page; two-click incident reporting

Target Market

- Nation-wide commuters and vacationers; money-conscious individuals

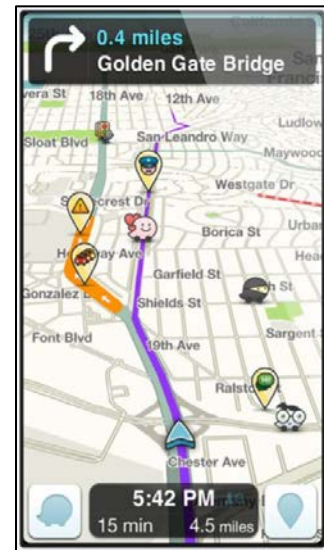
Marketing/Advertisement

- This is a “traffic avoider” app rather than a navigation app
- YouTube tutorials, frequent Facebook posts; blog about nationwide traffic patterns; emphasis on making commuting more efficient to save time and money



Free Features

- Live-routing based on community generated, real-time traffic and road information
- Community-contributed road alerts including accidents, hazards, police, and other road closures
- Saves frequent destinations and preferred routes
- Displays fuel prices for gas stations along the route
- Complete voice-guided navigation
- Sleep mode saves battery for parts of the trip when you don't want to use Waze
- Automatic re-routing as conditions on the road change
- Search for addresses in the app using Bing, other Internet sources or the phone's contacts
- Voice command search is an option
- Connect to Facebook to see other friends also driving to your destination and learn when they will arrive
- Access Facebook events to add as destinations

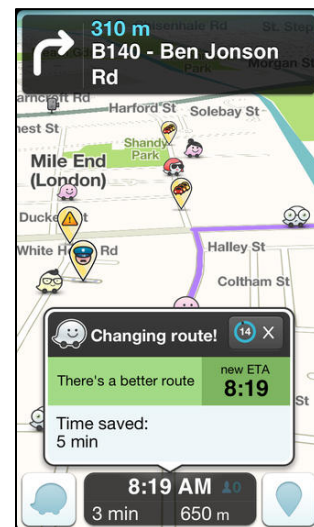


Drawbacks

- How well local roads are covered will depend on the amount of Waze users in the area
- Voice prompts could be more explicit; lacks some routing efficiency
- Strictly an online app, so it will not work in areas without a wireless data connection
- Voice prompts not loud enough
- Does not specify traffic by which side of the road it is on

Ease of Use/Interface

- Simple interface; users can report road alerts by touching the screen or using the voice command function
- Waze can walk the driver through a series of voice-prompted steps to add a report; users can activate voice command with two shortcuts: waving their hand twice near the screen or touching the screen with three fingers; colorful and animated images/icons; plenty of options to personalize your display; "Nighttime" setting darkens the display for ease of use when driving at night



Target Market

- Nation-wide commuters and travelers who are social media users

Marketing/Advertisement

- Primarily a "traffic avoider" app; really emphasized the crowdsourcing and social navigation aspects; Focus on becoming a part of and helping to grow this community; YouTube tutorials



Beat the Traffic, Developed by Triangle Software LLC

Free Features

- Receive text or email alerts when something happens on your route. Specify what days/times you would like to receive alerts
- Live traffic cameras in 34 cities
- Displays travel times, delays, and incidents along your saved routes
- Explicitly states how much of a delay to expect along your route
- Specifies traffic by which side of the road it is on

Drawbacks

- Ads appear at the top of the screen on the free version
- Incident reporting requires you to input multiple pieces of information such as the side of the road, how many lanes an accident is blocking, and what the resulting traffic is like
- Lacks turn by turn directions, so it must be used in conjunction with an app that does
- App crashes if you zoom in too far
- Map is only viewable from birds-eye view, not street level view
- Complaints on Facebook describe people deleting the app and still receiving text alerts

Ease of use/Interface

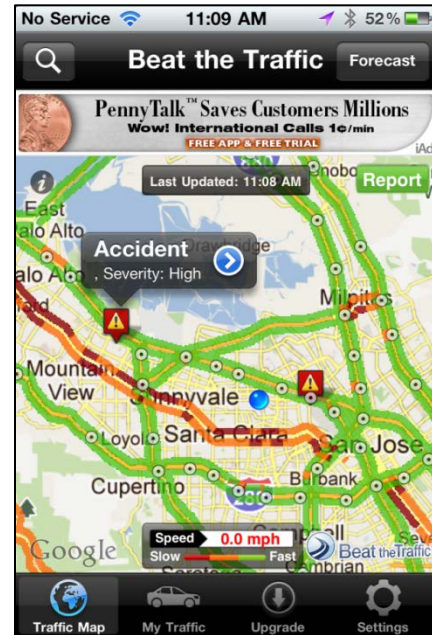
- Simple interface that resembles the default maps application in Apple iOS; settings can be changed to instead display a satellite map view; very slow to load as you pan across the map

Target Market

- Nation-wide commuters and travelers

Marketing/Advertisement

- YouTube Channel





Free Features

- Voice turn-by-turn navigation and search platform
- User-reported traffic incidents
- Street level traffic: takes conditions on side streets into account
- 3D building and landmarks are integrated into the display
- Traffic summary for your route: see real-time traffic conditions along each segment of your route with one tap to route around a troublesome spot.
- As they become available, Scout will proactively display faster alternate route options at the bottom of the navigation screen and a driver can choose to ignore or select the new route
- ETA sharing
- Sync your calendar events to navigate to their location
- Search for destinations like gas or McDonalds along your route
 - Links with Yelp to provide ratings and phone numbers for restaurants
 - Mark “favorite” locations
 - Click “Nearby discovery” for things to do and see near your location

Premium Version Features

- Regardless of the availability of wireless coverage along your path, you can still use Scout with the three regional maps (Western, Central and Eastern) downloadable for offline access.
- Speed trap and red-light camera info

Ease of use/Interface

- Vector-based so that images display quickly and sharply; Apple iOS-style street view or satellite view; “My dashboard” is customizable; settings are a bit difficult to locate

Target Market

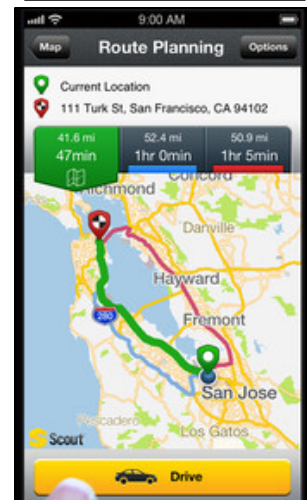
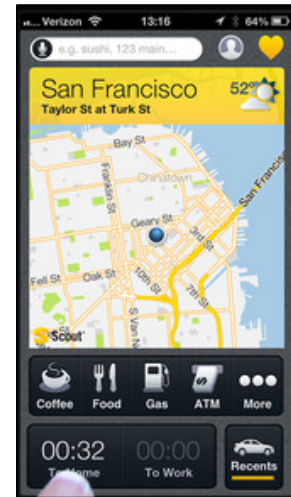
- “daily personal navigator designed for people on the go...Whether you’re running errands around town, exploring the city or just looking for the smartest way to power through your daily commute”
- nation-wide

Marketing/Advertisement

- Was initially a navigation app that now uses data, including crowdsourcing, to include traffic information. Now it’s an all-in-one app that lets you navigate and avoid traffic.

App Update: December 17, 2013

- A total hands-free voice commands experience! Once Scout is launched, activate voice commands to search and navigate by saying “Hey Scout”
- Log in with Facebook to sync favorites and recent locations.



View and avoid traffic along your route with one tap





Google Maps

Free Features

- View current traffic conditions as well as reports of problems on the road
 - Google bought Waze in June and is now incorporating Waze-reported information
- Tutorials and instructions are featured in settings
- Search for locations; explore nearby locations and services
- Rerouting options appear when there is traffic ahead
- Compare multiple modes of transportation
- Sign in with Google to access contacts and get directions to their addresses
- While on the road, Google Maps will also alert you if a better route becomes available and reroute you to your destination faster
- Specifies traffic by which side of the road it is on
- Transit and bicycle options

Drawbacks

- Road incidents do not appear on the map until after you've selected a route

Ease of use/Interface

- High quality graphics; switch easily from satellite to map view; zoomed images load very quickly

Target Market

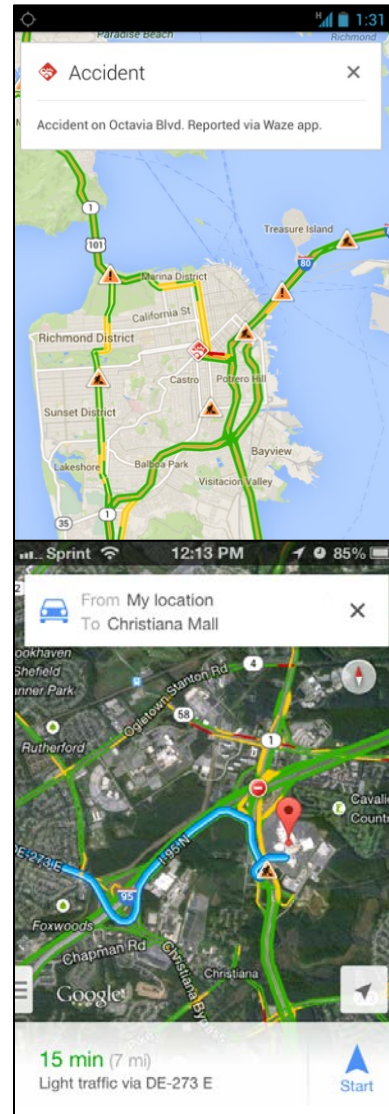
- Nation-wide commuters and travelers; primarily a navigation app, not a "traffic avoider"

Marketing/Advertisement

- As of July 2013, emphasizing the ability to "explore your world" via local restaurants, bars, etc; "The whole world in your hands"; YouTube videos

App Update: December 11, 2013

- Sign in to see your flight, hotel, and restaurant reservations from Gmail





Free Features

- Map shows traffic conditions, “trouble spots” and incidents
- Create a My Sigalert account online to save and access personalized routes
- View traffic cameras
- View real-time road speeds
- View traffic condition details sorted by freeway

Drawbacks

- Advertisements on the bottom of the screen
- Inability to zoom in to see traffic conditions for roads smaller than major highways
- The map view shows symbols for “trouble spots” and incidents but users must then scroll through a list of every nearby freeways to learn the details

Ease of use/Interface

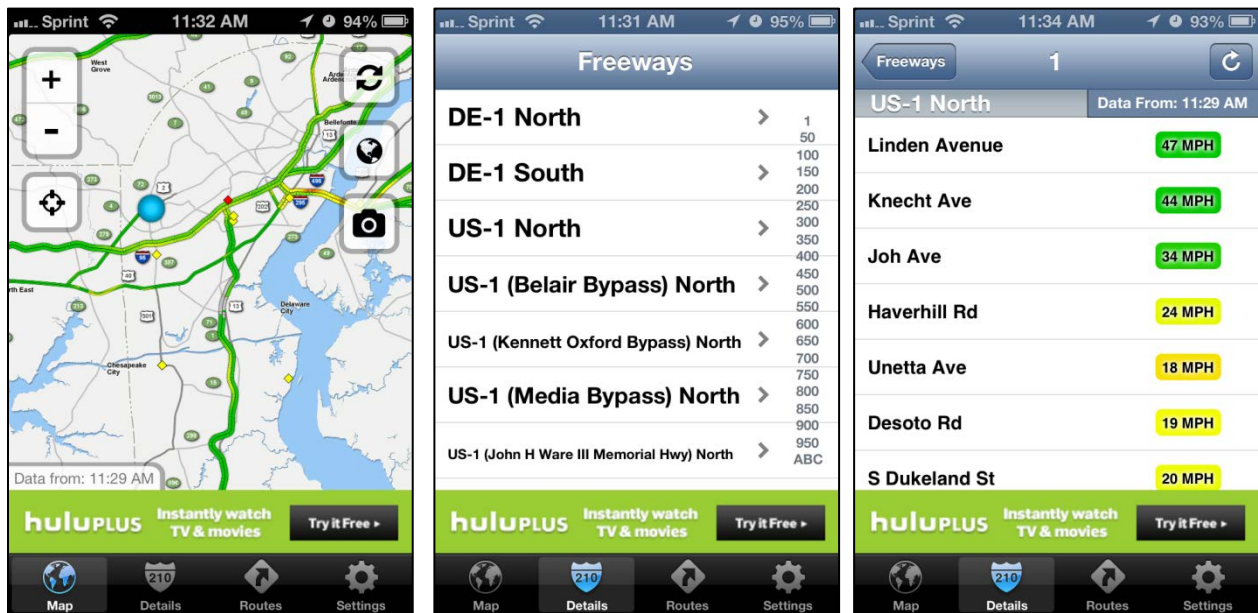
- Seems simple at first, but there are bugs that prevent information and images from loading; The graphics could be improved.

Target Market

- Nation-wide commuters and travelers

Marketing/Advertisement

- The app seems to promote its accompanying website, which is infinitely easier to use



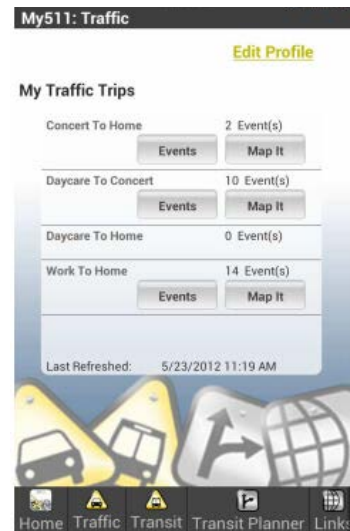
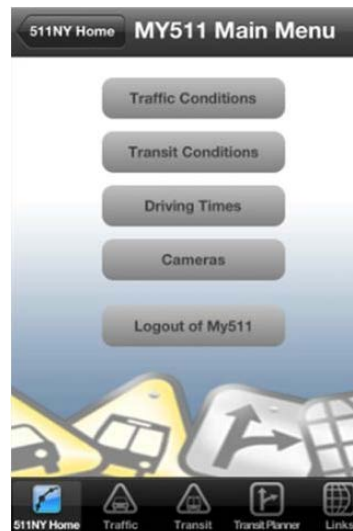
State Departments of Transportation



511NY, New York State DOT

Free Features

- Can search by region or near your current location for traffic incidents/closures, construction, cameras, and weather; once you click a symbol representing these items, the information is detailed
- Traffic camera views
- Choose your region to receive customized alerts
- Sign up for My511NY to personalize the service and save up to six traffic trips and transit trips
- Transit trip planner



Drawbacks

- Cannot search by address or by route, so you have to manually zoom and locate your area
- Once you select a region, you can only view traffic in that region; you can continue to pan over other parts of the state but no traffic info will be displayed
- Certain regions don't have traffic speeds except for parts of a single road

Ease of use/Interface

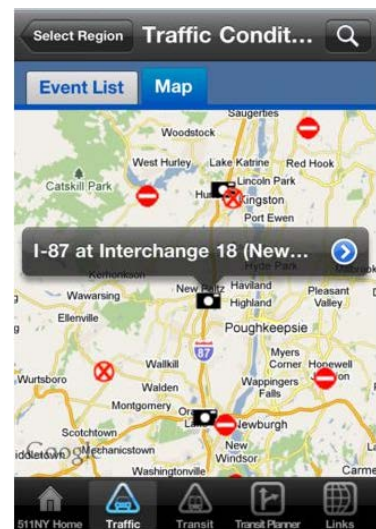
- Requires a lot of touches before you can access the traffic conditions; the app will not save your settings so each time you want to open a map you have to re-click all the things you would like displayed (e.g., traffic, construction); app crashes often

Target Market

- Not developed for drivers; rather, for people planning a trip in New York. Since there is no navigation feature, this was made for New Yorkers who are already familiar with different routes

Marketing/Advertisement

- "What should you know before you go?" is one phrase that stuck out on the website; Governor held a press conference announcing the app which also received local CBS news coverage





MoDOT Traveler Information Map App (Missouri)

Free Features

- Receive information on road conditions, work zones, flooding, and incidents; tap the symbols for each condition to receive more information on the delay
- When the map loads, users see the entire state at a glance and can choose to refine the map by zooming in manually or by selecting the button for a more specific region of Missouri
- Work zones affecting traffic are loaded as a default but users can tap buttons to also view traffic conditions, traffic cameras, and a weather radar
- Traffic congestion for some additional roads is shown as you zoom in
- In addition to displaying symbols on the map, there is a list of “routes” (categorized by interstates, U.S. highways, MO highways, and rural highways) that allows users to read about road closure and expected delays
 - Users can select favorite routes to add to their “My Routes” section for quick updates
- Offers a customer service number as an additional source of information about road conditions

Drawbacks

- The delay symbols cannot be hidden if you only wanted to view the traffic conditions

Ease of use/Interface

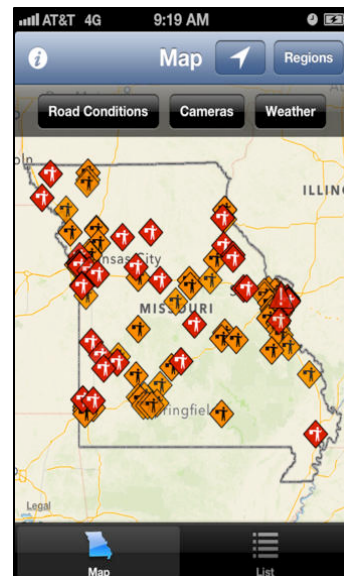
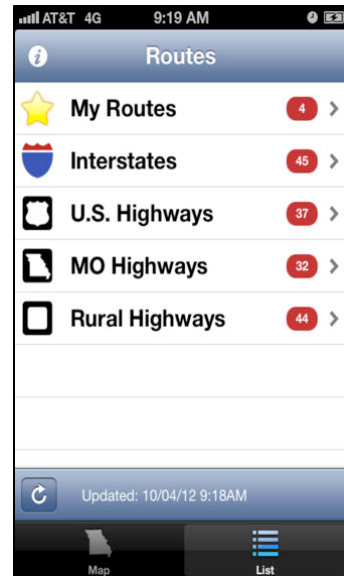
- Having the option to view the list of delays sorted by road is a nice option to reduce the amount of time a person would take to zoom in and search the map for symbols along their path. Overall, the usage is very intuitive. The app does not try to do too much. Traffic can easily be turned on or off. Information loads quickly and icons are not too small but not too obtrusive.

Target Market

- Missouri travelers, but to be used before they drive. MoDOT said it doesn't want drivers to use it while behind the wheel.

Marketing/Advertisement

- Featured near the top of the MoDOT website with links that explain the app's features; partnered with an interactive online traveler information map





Free Features

- Three distinct map views: road reports, traffic speeds, or traffic cameras
- Road reports features symbols for road incidents, delays, and closures
- Traffic speeds map utilizes Google's traffic data
- Search for road conditions by place (town) or by roadway, or view a list of major roads in the state and click on one to view related road conditions
- The app claims to have a winter driving feature but it does not appear in the free version

Drawbacks

- There is no legend for what the symbols mean

Ease of use/Interface

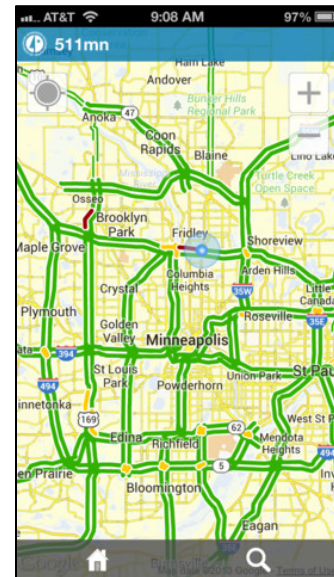
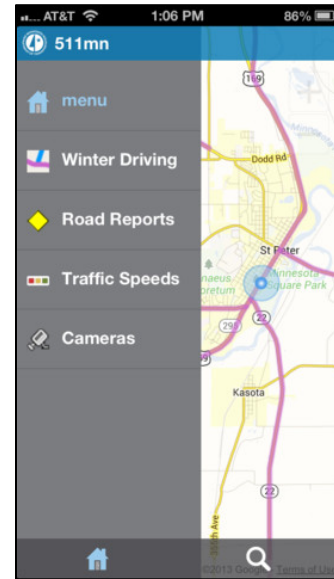
- The app is very jumpy and information takes a long time to load after clicking on a road report symbol. When clicking on a road from the list, the app takes you back to the main map and highlights the road; however, the highlight is so faint that it is barely visible, making it hard to tell which road you should be looking at.
- Upon opening the app, users must click to agree to not use the application while driving

Target Market

- Pre-trip drivers on Minnesota

Marketing/Advertisement

- Local online news coverage





Way to Geaux, Louisiana DOTD

Free Features

- Listen to your phone play Louisiana DOTD travel advisories near you. As you travel, it will automatically keep you updated with advisories that are nearby.
- Alerts pause when you are on the phone, and pick up where they left off when you finish
- Once you press play, the app is hands-free and eyes-free.
- You can save several settings such as the advisory replay interval, the range (in miles) for hearing advisories, and hearing advisories only in front of you, or in all directions.
- Audio player controls for Play, Pause, Stop, Skip, and Replay All
- Anonymous speed reporting: permits the app to transmit information to the server regarding your current speed without other identifying information. This data will be used to provide better travel information services.
- There is an additional advisory, which uses little triangle symbols on a map to indicate the location of travel advisories within the range selected under settings.

Drawbacks

- An online FAQ states that users cannot view travel advisories on the map while driving.

Ease of use/Interface

- The map only shows advisories within range of your car's GPS, so pre-trip planning is difficult from a remote location. None advisories appeared on the screen during this test. Unable to gauge the responsiveness of the interface or the usefulness of the information provided about each advisory.

Target Market

- The main feature is not the traffic map, but rather the audio alerts, so this app is meant to be used by people on the road in Louisiana. Visitors to the state or those unfamiliar with the area will not gain much benefit because they will be unable to use the alerts to reroute themselves.

Marketing/Advertisement

- DOT Press release; Local online news coverage



Free Features

- Traffic information includes current traffic speeds on interstate and primary routes, the latest incident and construction information, and bridge status.
- Road weather information shows the severity of road conditions and road closures caused by weather.
- The information is provided to the user through voice alerts and is also shown in real-time on maps along with the location of the user.
- As the user moves through the highway network, the app keeps track of the location of the user on the map, and also notifies the user of problems ahead through voice alerts. The user can select how far ahead these alerts are given (5, 10 or 15 miles).
- The maps also indicate the location of message signs and cameras allowing the user to see what messages are being displayed and watch video from the roadside cameras.
- The VDOT 511 mobile application provides current travel times for many pre-defined routes throughout the state. The user can select "favorites" from the comprehensive list of routes. These favorites are then grouped together for ease of access. Travel times for both directions are given per route.
- "Reach The Beach" feature helps beach-goers by providing the latest travel times for routes to Virginia Beach and the Outer Banks. As the user approaches a key point where a route decision can be made, the app tells the user what the current travel times are from that point to the chosen destination. When leaving the beach, the user can choose from one of four "Home" destinations of Richmond, Fredericksburg, Hampton Roads, and Skippers.
- VDOT maintains eight Traffic Twitter feeds. All are readily accessible through the 511 mobile application's main menu.

Drawbacks

- Users cannot drill down for any more information about road conditions.
- There is a basic map and a passenger map but the differences are not clear.

Ease of use/Interface

- Travel times are easy to understand; no other state app that I've looked at provides route options the way this "Reach the Beach" feature does

Target Market

- Virginia drivers; vacationers; tourists

Marketing/Advertisement

- Press release and news articles



Features

- The news section allows users to read traffic alerts from the Department of Transportation, along with other press releases
- View a calendar of scheduled workshops (users must first allow the app to have access to their phone calendar)
- The social media section provides links to the department-run Twitter, Facebook, YouTube, Flickr, and Wordpress sites, the majority of which are used to report incidents on the road
- On the statewide traffic map, users can select which “map layers” they would like to view. These layers include traffic, advisories, traffic cameras, restrictions, weather, RLE cameras and others
- Each layer is represented by a different symbol that appears on the applicable road. To learn more, the user must tap the symbol
- Certain layers offer information that is very Delaware-specific such as DMV locations and whether the Woodland Ferry is open
- When the “traffic” layer is applied, the map uses colored dots to indicate the spectrum of traffic congestion along a road. Touching one of these tiny dots brings up a new screen with detailed information for that segment of the road/intersection for each applicable cardinal direction
- Certain data is useful, such as the average speed and whether there is a delay; however, most of the data is not, such as the volume of vehicles and occupancy of the road
- A “legend” tab defines the traffic colors and a handful of advisory symbols

Drawbacks

- Certain layers do not appear to have enough information; for instance, “speed limits” are only available for one segment of route 495 and no other road
- The travel times are difficult to understand because of the way the numbers are presented
- Aside from choosing map layers, the only setting that the user can change is indicating whether he/she would like the traffic map to automatically refresh every five minutes, every ten minutes, or never

Ease of use/Interface

- Since you cannot save routes or frequently-visited areas of the state, and since the map quickly becomes clogged with many tiny symbols, you must manually zoom in to see the specific roads you need.

Target Market

- The way the app is currently designed, it is best fit to be used prior to travelling. It is not designed to inform the user of developing traffic and road conditions during a commute. The detailed alerts and traffic info would be better read at the breakfast table or in the driveway, not on the road.

Marketing/Advertisement

- Links to download from DelDOT website, table-ing at state fair and other events, flyers

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Appendix B: Qualtrics Survey Instrument

Focus group members were asked to take the following survey prior to participating in the focus group. The survey was designed to capture users' awareness and disposition toward the app in relation to private-sector alternatives. Only after completing the survey, were respondents asked to download the DelDOT App.

Q0

Dear Focus Group Member:
The Institute for Public Administration (IPA) at the University of Delaware is conducting research on real-time traffic apps. A real-time traffic information app provides smartphone/mobile-device users with information on real-time (current) traffic conditions.

As part of this project, IPA is conducting a short survey of prospective users and/or target audiences that represent the traveling public. Your input is critical to help IPA assess marketing needs and strategies to enhance awareness, use, and performance of a real-time traffic app.



The survey should take less than 10 minutes of your time. Please be assured that all responses will remain confidential. Any information you share will be reported in the aggregate only and will contain no references to individuals.

If you would like more information about this survey or this research project, please contact William DeCoursey, Policy Scientist at decourse@udel.edu or 302-831-4925.

Please select "yes" (below) if you have read and understand this informed-consent statement and agree to take the survey. If you elect not to participate in the survey, select "no."

Yes (Will proceed to survey)
 No (Survey will end)


Q1

Are you at least 18 years of age?

Yes
 No


Q2



Have you ever used a real-time traffic information app that provides current information on traffic conditions?

Yes
 No

Q3

 ▾








Rank what features you would look for in a real-time traffic information app (where 1 is the highest and 10 is the lowest rank)

Easy to use	1
Easy to download on mobile device	2
Voice-guided navigation	3
Accurate	4
Free features	5
Map shows real-time (current) traffic conditions	6
Hands-free use	7
Ability to keep eyes on the road	8
Provides options to re-route (automatically or manually) based on traffic conditions	9
Provides user ability to report a traffic-related incident	10

Q4

 ▾

Do you recognize logos for the following real-time traffic apps? (Check all that apply)

	Yes	No
	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>


Q5

 ▼

Which of these real-time traffic information apps have you used? (Check all that apply)

	Yes	No
	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>


Q6

 ▼








Which of these real-time traffic information apps have you used? (Check all that apply)

	Yes
INRIX	<input type="radio"/>
Waze	<input type="radio"/>
Beat the Traffic	<input type="radio"/>
Scout	<input type="radio"/>
Google Maps	<input type="radio"/>
Sigalert	<input type="radio"/>
DelDOT	<input type="radio"/>

Q7










Of the following apps that you have used, which features did you like? (Check all that apply)

	 INRIX	 Waze	 Beat the Traffic	 Scout	 Google Maps	 Signalert	 DelDOT
Never used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Free	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Live traffic alerts via mobile device	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Live alerts via traffic radio station	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Map shows view of current traffic conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Views streaming traffic cameras	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provides weather information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provides average speeds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Compares fastest routes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provides red light camera locations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provides user with ability to report traffic incidents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shares estimated-time-of-arrival via social media or text message	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Saves destination and route information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provides voice-guided navigation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provides options to re-route (automatically or manually) based on traffic conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Displays travel times	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specifies traffic conditions for each side of road	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Offers multiple "layers" of map information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provides community-contributed road alerts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provides text/e-mail road alerts to user	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Compares multiple modes of transportation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Searches for addresses/locations/roads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>


Q8



Of the following apps, what features did you dislike?

	 INRIX	 Waze	 Beat the Traffic	 Scout	 Google Maps	 Sigalert	 DelDOT
Never used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poor/lack of search feature	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does not work without data connection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does not specify traffic conditions for each side of road	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of voice-guided navigation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Road incidents do not appear until a route is selected	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Advertisements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inability to zoom in	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Map legend difficult to see/understand	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Too many steps before accessing real-time traffic map	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
App crashes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does not provide route-specific travel advisories	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Requires motorist to view map while driving	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provides information that is unrelated to real-time traffic conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inability for user to report traffic incidents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poor map quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Too many map layers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inadequate volume/tone of voice navigation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q9



Have you ever used the DeIDOT Real-Time Traffic Information App?


- Yes
- No

Q10





If you plan to attend the upcoming focus group session with IPA, please:

Download the FREE DeIDOT  real-time traffic information app on your smartphone/mobile device at either:

- iTunes App Store: <https://itunes.apple.com/us/app/delidot/id574002490?ls=1&mt=8>
- Google Play: <https://play.google.com/store/apps/details?id=qov.deldot#?t=W251bGwsMSwyLDlxMiwZ292LmRlbGRvdCJd>

Before the focus group session, please use the DeIDOT real-time traffic information to explore:

- What you like about the app
- What you dislike about the app
- How usability of the app may be enhanced
- Ways the app may be marketed to various target audiences

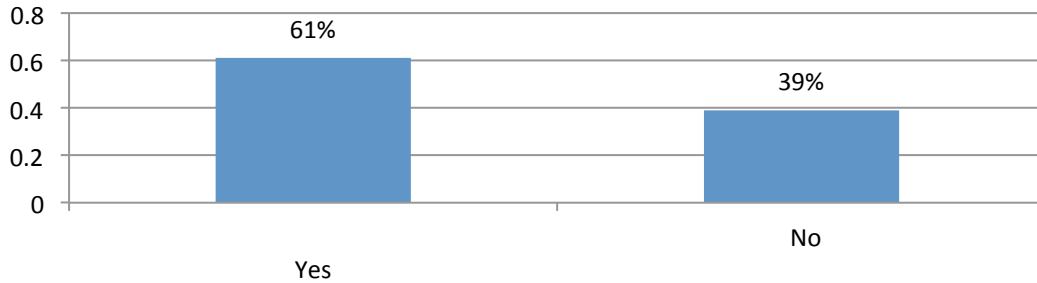
Thank you for taking this survey!

Appendix C: Outcome of Surveys

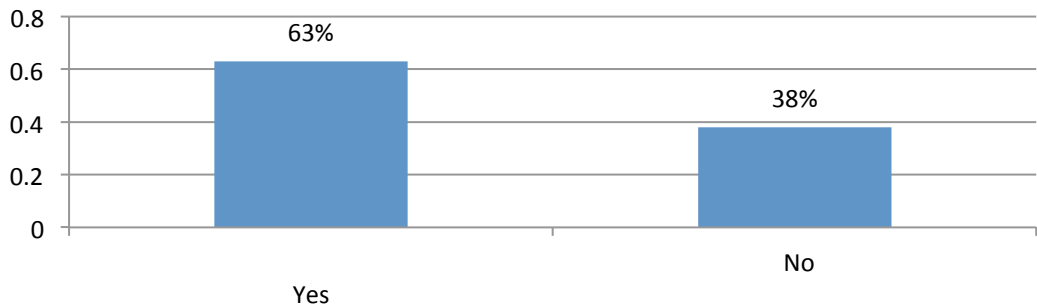
Question 2

Have you ever used a real-time traffic information app that provides current information on traffic conditions?

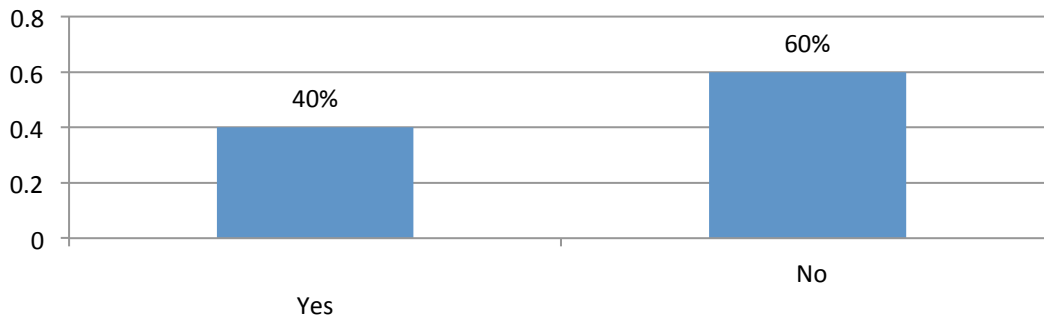
**Percent of Survey Group 1
who have used a real-time traffic information app that provides
current information on traffic conditions**



**Percent of Survey Group 2
who have used a real-time traffic information app that
provides current information on traffic conditions**



**Percent of Survey Group 3
who have used a real-time traffic information app that provides
current information on traffic conditions**



Question 3

Rank what features you would look for in a real-time traffic information app.

Response from Survey Group 1

The students placed a premium on accuracy, ease of use, and the display of current, real-time information, ranking them in that order. Fifteen of 18 students ranked “accurate” as a top three concern, as did 14 for “ease of use” and 11 for “current, real-time information.”

Being easy to download on a mobile device, the ability to keep eyes on the road, having free features, and voice-guided navigation ranked fourth through seventh, respectively. They were less concerned with options to automatically or manually re-route, hands-free use, and the ability to self-report incidents.

Response from Survey Group 2

This group also favored accuracy, ease of use, and the display of current, real-time information, ranking them in that order. A total of 24 out of 28 ranked “accurate” as a top three concern, as did 18 for “ease of use” and 11 for “current, real-time information.”

Voice-guided navigation, the ability to keep eyes on the road, easy to download on a mobile device and hands free use ranked fourth through seventh, respectively. The group ranked the ability to reroute, hands-free use, and the ability to self-report an incident last, in that order.

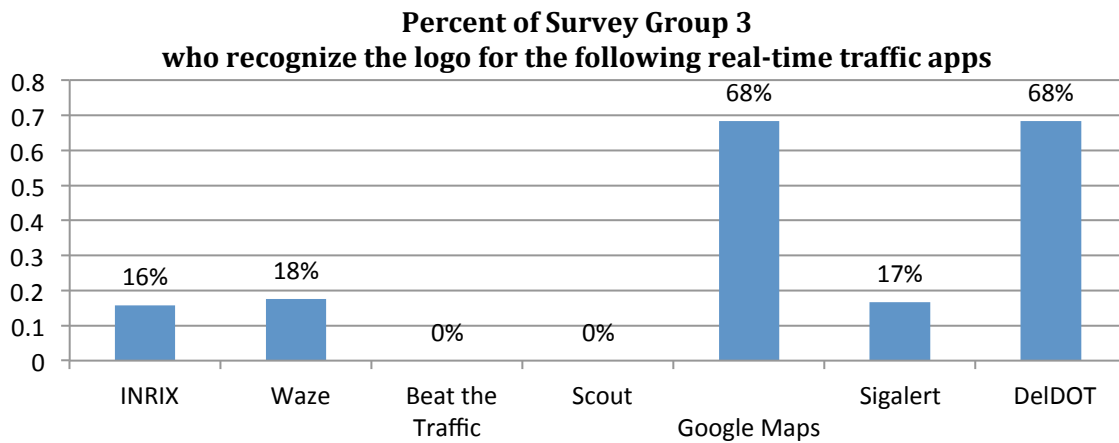
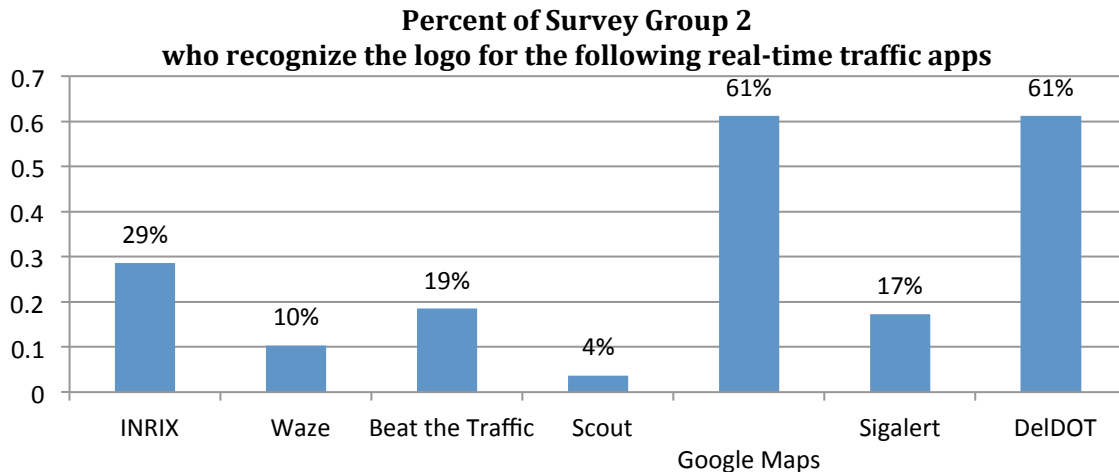
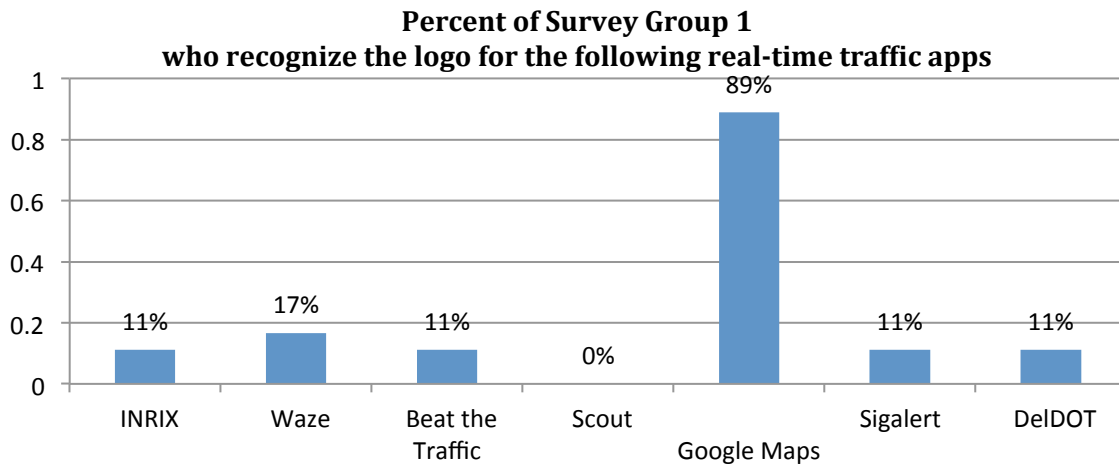
Response from Survey Group 3

This group indicated ease of use was most important, followed by accuracy and the display of current, real-time information. Sixteen of 17 respondents ranked “ease of use” as a top three concern, as did nine for “accuracy” and eight for “current, real-time.”

Ease of download, free features, the ability to automatically or manually reroute, and ability to keep eyes on the road ranked fourth through seventh, respectively. The group was less concerned with voice-guided navigation, hands-free use, and the self-reporting of incidents.

Question 4

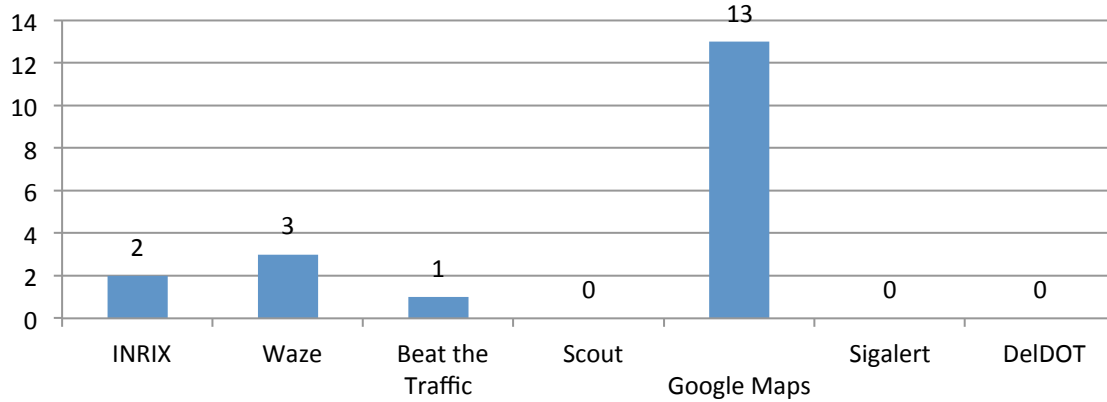
Do you recognize logos for the following real-time traffic apps?



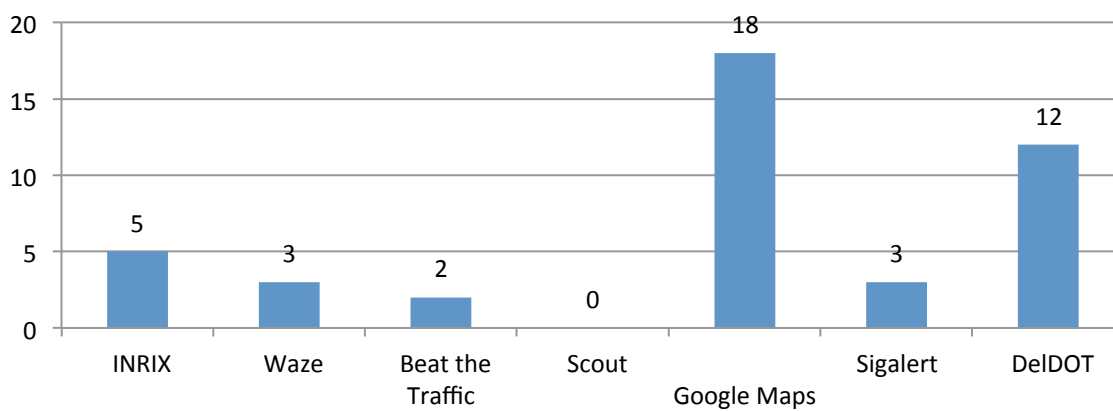
Question 5

Which of these real-time traffic information apps have you used? (App Logo)

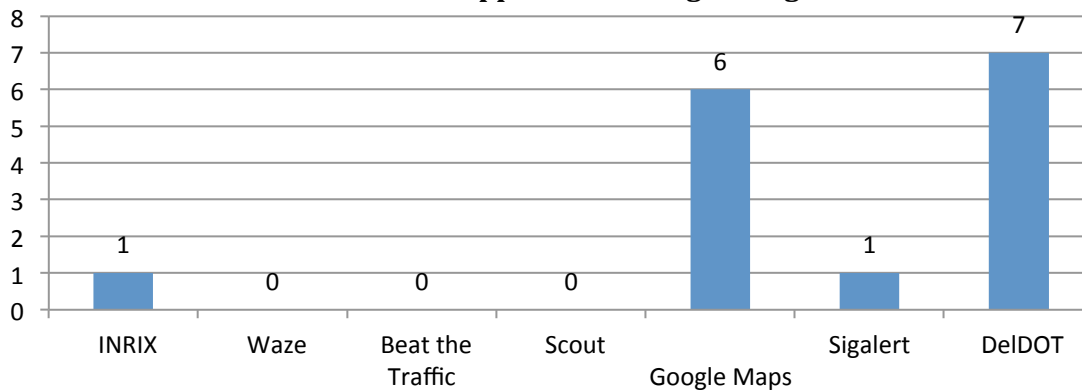
Number of Survey Group 1 who have used the following real-time traffic information apps based on logo recognition



Number of Survey Group 2 who have used the following real-time traffic information apps based on logo recognition



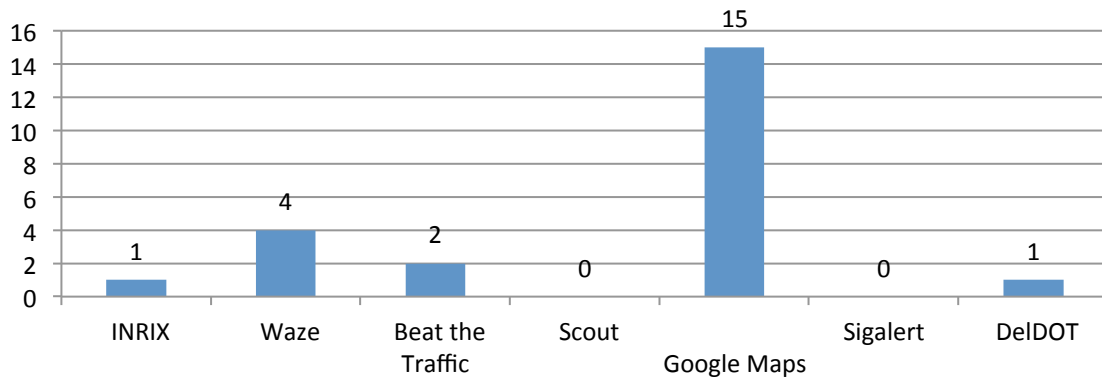
Number of Survey Group 3 who have used the following real-time traffic information apps based on logo recognition



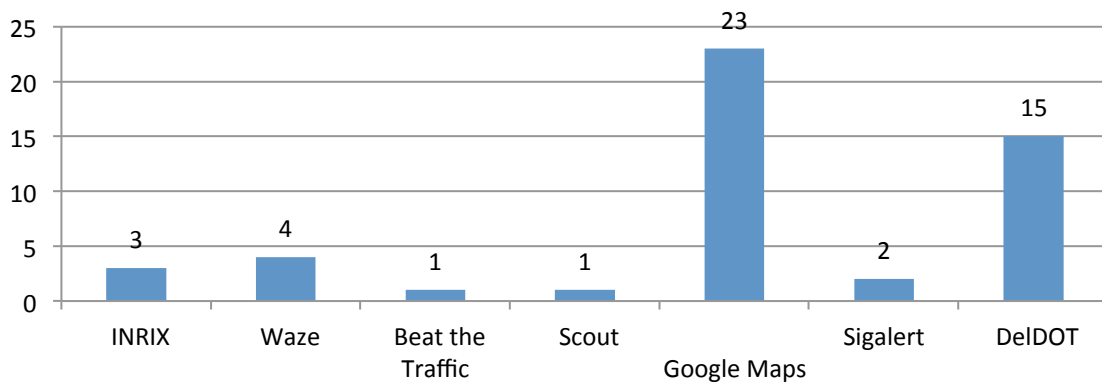
Question 6

Which of these real-time traffic information apps have you used? (App Name)

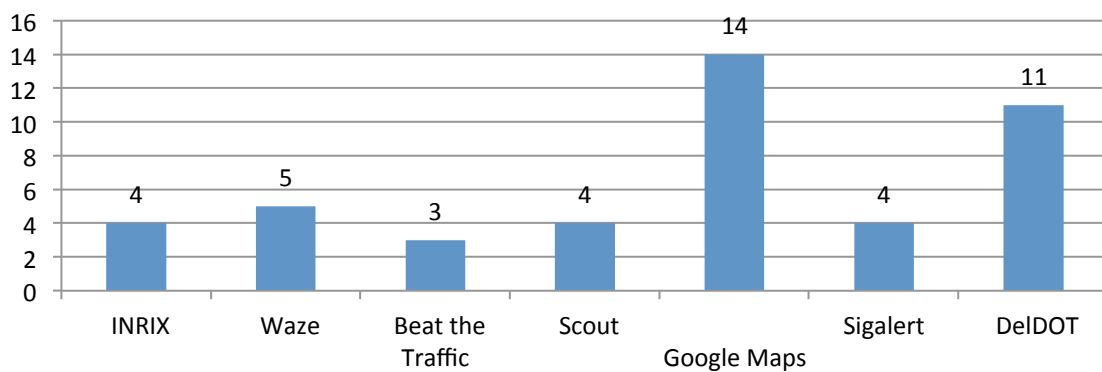
Number of Survey Group 1 who have used the following real-time traffic information apps based on name recognition



Number of Survey Group 2 who have used the following real-time traffic information apps based on name recognition



Number of Survey Group 3 who have used the following real-time traffic information apps based on name recognition



Questions 7 & 8

Of the following apps that you have used, which features did you like?

Of the following apps, what features did you dislike?

Response from Survey Group 1

Of 18 respondents, no more than two indicated they had ever used any app other than Google, unfortunately rendering input on the other apps statistically irrelevant. Google users most enjoyed that it is free, provides voice-guided navigation, displays travel times, searches for locations, and shows real-time conditions.

The only statistically significant responses to disliked features were four respondents that indicated Google Maps crashes.

Response from Survey Group 2

Out of 28 respondents, 25 indicated they had used Google Maps. They most appreciated that it was free, displayed travel times, provided voice-guided navigation, and displayed real-time traffic information.

Seventeen of 28 indicated they had used the DelDOT App. Users most enjoyed that the app was free, followed by the traffic radio, traffic camera, and traffic map features. The lack of voice-guided navigation was the only disliked feature of note.

More than three quarters of respondents indicated they had never used the other apps on the survey and no more than four liked or disliked any features.

Response from Survey Group 3

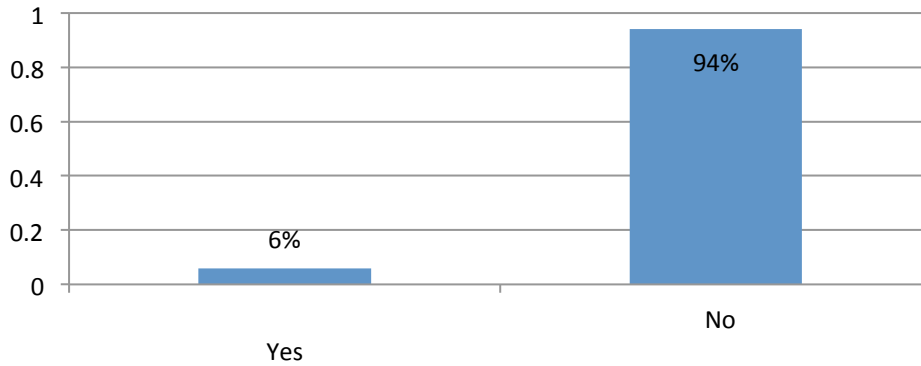
Of 20 respondents, only Google Maps and the DelDOT App had more than four people indicate they had ever used them. Google Maps users most liked that the app was free, could search for addresses and locations, and showed current traffic conditions.

DelDOT App users most enjoyed that it was free. No other feature garnered more than three votes (traffic cameras and weather info). There were no statistically relevant responses to disliked features for any of the apps in question.

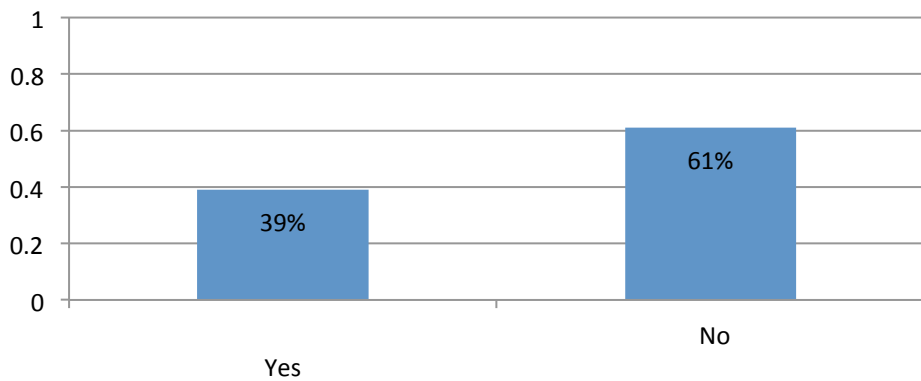
Question 9

Have you ever used the DelDOT Real-Time Traveler Information App?

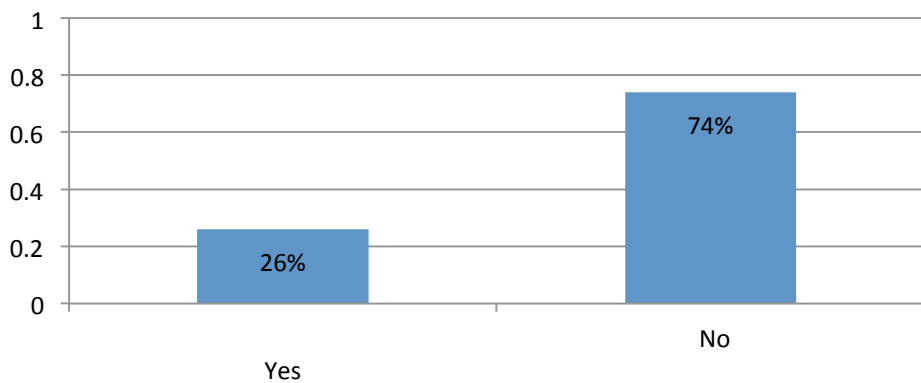
Percentage of Survey Group 1 who have used the DelDOT Real-Time Traffic Information App?



Percentage of Survey Group 2 who have used the DelDOT Real-Time Traffic Information App?



Percentage of Survey Group 3 who have used the DelDOT Real-Time Traffic Information App?



Appendix D: Focus Group PowerPoint Presentations

Versions of the following PowerPoint Presentation were presented to:

- Focus Group 1, Dr. Morrison's LEAD 404 Class, University of Delaware, Dec. 3, 2013
- Focus Group 2, WILMAPCO PAC Meeting, Feb. 24, 2014
- Focus Group 3, Dover/Kent County MPO PAC Meeting, Feb. 25, 2014

Branding and Marketing of Real-Time Traffic Apps

Versions of this PowerPoint were presented to:

Focus Group 1, Dr. Morrison's LEAD 404 Class,
University of Delaware, Dec. 3, 2013

Focus Group 2, WLMAPCO PAC Meeting, Feb. 24, 2014

Focus Group 3, Dover/Kent County MPO PAC Meeting,
Feb. 25, 2014

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Our Project

- Institute for Public Administration (IPA)
- DeIDOT Traffic Management Center (TMC)
 - “Timely, accurate, reliable”
- Objective
 - Assess the branding, marketing, and public awareness of DeIDOT TMC’s real-time traveler information system

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Top Survey Responses

	Focus Group 1	Focus Group 2	Focus Group
Rank features you would look for in a real-time traffic app	1. Ability to keep eyes on road 2. Accurate 3. Easy to download	1. Easy to use 2. Accurate 3. Real time	1. Easy to use 2. Accurate 3. Real time
What apps have you used?	Google Maps	<ul style="list-style-type: none"> • Google Maps • DeIDOT • Inrix/Waze 	<ul style="list-style-type: none"> • Google Maps • DeIDOT • Various
What app features do you like?	<ul style="list-style-type: none"> • Free • Searches for addresses/locations/roads • Voice-guided navigation 	<ul style="list-style-type: none"> • Free • Current traffic conditions • Displays travel times 	<ul style="list-style-type: none"> • Free • Current traffic conditions • Searches for addresses

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What is the DeIDOT App?

DEIDOT APP
Provides commuters and travelers with real time information for Delaware roadways



Free app available to both Android and iPhone/iPad users

Provides:

- Live traffic conditions/cameras
- Info on travel delays, accidents, advisories
- Virtual travel times
- Red light enforcement locations
- Weather
- DeIDOT News
- Workshop information
- Social media connections

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Show of Hands

1. How many of you own a smart phone?
2. How many downloaded Android version?
3. How many downloaded Apple version?
4. Any trouble downloading either version?
5. Anyone use QR code to download?
6. How many used the app once downloaded?



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Input on Branding of App



7. How many of you were aware of this app before the survey?
8. How does the name of the app (DeIDOT) reflect the “branding” of the real-time traffic information app?
9. How does the logo reflect the “branding” of the real-time traffic information app?
 - Like it?
 - Recommendations?

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Input on App's Main Menu



- Did you use all the features?
- Like the menu of app features?
- Recommendations?

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Input on "News" Feature



- Like it?
- Recommendations?

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Input on "Workshops" Feature



- Like it?
- Recommendations?

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Input on Traffic Radio Feature



- Like it?
- Recommendations?

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Input on Social Media Feature



- Like it?
- Recommendations?
- Which would you use?

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Input on Traffic Map Layers

- Did you use it?
- If so, how?
 - Pre-trip use?
 - Use as a passenger?
- Like it?
- Recommendations?

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Input on Traffic Condition Features



- Like it?
- Recommendations?

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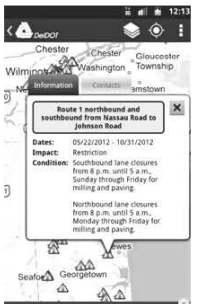
Input on Red Light Enforcement Feature



- Like it?
- Recommendations?

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Input on Lane Restrictions/Road Closure Feature



- Like it?
- Recommendations?

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Input on Live Traffic Camera Feature



- Like it?
- Recommendations?

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Usability of App

1. Was it easy and intuitive to use the app? Why or why not?
2. Does the DeIDOT app provide features that users will want?
3. What features of other apps would you like on DeIDOT app?
4. Will you continue to use the app?
5. Are you more likely to use an app or a GPS system?

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Marketing and Branding of the App?

1. Should this app be tailored for use by different target audiences? Examples?
2. How can DeIDOT better market the app to different audiences?
3. Does DeIDOT need to change the logo of the app to enhance its branding?

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Appendix E: Focus Group Summaries

Focus Group Session: Dr. Morrison's LEAD 404 Class, University of Delaware

Time/Date/Location

- 2:30 p.m., Tuesday, December 3, 2013, 002 McKinley Lab, University of Delaware (UD)

IPA Project Team

- BJ DeCoursey, Marcia Scott, Sarah Pragg, Neil Kirschling, Rebecca Inman Perry

Participants

- Number of survey respondents: 18
- Number of focus group participants: 21

Summary of Proceedings

Many group participants feel that the app is geared only toward Delaware residents and questioned the applicability and accessibility for out-of-state travelers and students. When it was understood that the DelDOT App is limited to use in Delaware, the group agreed that many would not use the app when other apps offer a broader service across multiple states. Of the 21 participants, only two people said that they would continue to use the app. However, 16 people said they would use the real-time DelDOT App if it incorporated features of Google Maps (e.g., voice navigation, navigational services, map "search" function, and real-time traffic alerts). Increasing downloads through mobile app marketing strategies (e.g., strengthening keyword services in app stores and improving the appearance/description of the app) was suggested.

Downloading and Initial Impressions

- Of the 16 people who downloaded the app, 4 downloaded the Android version and 12 downloaded the Apple version of the DelDOT App.
- No one had trouble downloading either the Android or Apple version of the app.
- No one used the QR Code to download the app. The majority of the group did not know what a QR code was or how it was used. It seemed to be "old school" technology. Many of them commented that it seemed like an extra step in accessing the app.

Input on Branding of App

- None of the participants were aware of the DelDOT real-time traveler app before the completion of the survey.
- Only 4 of the 20 participants were aware that "DelDOT" symbolized a traffic and/or transportation department.
- Only 3 of the 20 participants liked the "DelDOT" branding of the app; 12 of the 20 did not like the branding.
- Group members noted that the symbol resembled that of the recycling logo, and they were unaware that it was an illustration of the roads.
- Students from the state of Delaware were more familiar with DelDOT and its role as a state transportation agency than the out-of-state students.
- Group members noted that the branding does not emphasize "real-time traffic updates" as a main feature of the app. Instead, it was perceived to be an app providing general news from DelDOT.
- Group members recommended using branding that communicates the purpose of the app and they highlighted Google Maps as a "Best Practice."
 - Use imagery that conveys map symbols and roads.
 - Use color and texture to make the app inviting and professional.
 - Use words that indicate the app's purpose.
 - Remember that the app is competing against other apps in the app store. The top rated or most downloaded app is perceived to be the best and most reliable app.

- Use words that are searchable in the app store. One participant commented that she would search for this type of app by searching for “traffic” instead of “DelDOT.”

Input on App’s Main Menu

- One participant commented that he liked the app’s main menu and found it easy to navigate.
- Participants were in general agreement that the main interface was simple and self-explanatory for smartphone users.

News Feature

- Ten of the participants liked the concept of news feature of the DelDOT app; however no one stated that they had actually used this feature.
- One participant stated that the news section definitely works for engagement and the updates were helpful.

Workshops Feature

- Only 1 participant liked the workshop feature.
- One participant was familiar with DelDOT workshops because her professor works for the department. The participant felt that it emphasized the desire for public involvement and participation.
- Other group members did not understand the purpose of the events section until it was fully explained.

Traffic Radio Feature

- Twelve of the participants liked the traffic radio and found it helpful for app users.

Social Media Feature

- Eleven of the participants liked the social media feature of the app.
- The majority of participants did not initially realize that the social media pages were being used to provide traffic updates.
- One participant thought that the social media function was intended for travelers to post their own traffic experiences, and insisted that she would not use the app while driving.
- Seventeen of the participants agreed that of all the social media platforms available, Twitter would be the one they would most likely use if they wanted to traffic updates.

Input On Traffic Maps Layers

- Seven participants viewed the real-time traffic map, but only 2 people viewed the map prior to driving. The remaining 5 students did not use the app in correlation with a planned trip. No one used the app while travelling as a vehicle passenger.
- One participant liked the layers feature, stating that it was easy to select the features they wished to see to prevent overcrowding of the screen.
- The participants generally liked the traffic maps layer feature because of the user preference capabilities.
- One student did not like having to rely on referencing the legend to understand the symbols and felt that using a legend to recognize each feature made it more confusing. Several other students did not understand how the layers feature worked for the app.

Input On Traffic Condition Features

- The group generally liked the traffic condition feature of the app and said that it was a good reference.

Input on Red Light Enforcement Feature

- Sixteen participants liked the red light enforcement feature.

Input on Lane Restrictions/Road Closure Feature

- Fourteen participants liked the lane restrictions/road closure feature.

- One participant noted that they would use the road closure feature as a “heads-up” before their trip departure.

Input on Live Traffic Camera Feature

- The group generally liked the live traffic camera feature.
- One participant liked being able to “see” the traffic on the live traffic camera so they could assess the traffic situation themselves.

Usability of the App

- The group generally felt the real-time traveler app was “self-explanatory” and “easy to understand.”
- The participants felt that the features currently in the app should remain in their state, and that the app does not have to be split into multiple apps.
- A total of 14 participants requested a “search” function so they could locate a road in Delaware.
- Nineteen of the 20 participants requested that the app provide navigational services on the real-time data map. Many of the students did not realize there was no available navigational feature when they downloaded the app.
- Several participants stated they would not use the app if navigational services were not incorporated into the app’s future features.
- Of the 20 participants, only 2 participants stated they would continue to use the app. However, 16 participants said they would use the real-time traffic map in collaboration with Google Maps.

Marketing and Branding of the App

- Eight participants thought that the app should be targeted to commuters.
- Seven participants thought that the app should be targeted to motorists in general.
- None of the participants thought the app should be primarily targeted towards truckers.
- The students were generally doubtful about non-technical savvy individuals being the target audience.
- The participants typically find out about apps from the app store. One student searched for “traffic” in order to find Waze. One student stated they look for apps that have the greatest number of download.
- Students commented that app stores could be used to improve marketing and branding of the app (e.g., keyword searches, improved appearance of logo, brand, description of app).

Miscellaneous Comments, Feedback, and Suggestions

- One participant recommended that the DelDOT real-time data should be developed into an extension for Internet browsers like Safari, Firefox, or Google Chrome. In doing so, the real-time data could be integrated with Google Maps to plan a trip with limited traffic or closures.
- One participant noted that since he lived in Pennsylvania, it would not be worth using the app for the brief portion of his commute in Delaware.
- No one had used the app in a car, either as the driver or the passenger.
- Some comments made the IPA research team wonder whether there may have been a novelty bias behind the focus group results. Many of the students had never used a traffic-related app except for Google Maps. Comments about combining Google Maps with the DelDOT App showed that students didn’t realize that Google Maps does have information regarding traffic. It appears that students compare using the DelDOT App to *not using an app at all*, rather than comparing the DelDOT App to other traffic-related apps.

Focus Group Session: Northern Focus Group hosted by WILMAPCO PAC

Time/Date/Location

- 8:00 p.m., February 24, 2014, WILMAPCO, Newark, Del.

IPA Project Team

- BJ DeCoursey, Marcia Scott, Bernie Dworsky, Geoff Heath, Neil Kirschling

List of Attendees (Names and Affiliations)

- Eighteen people participated in the focus group: 16 WILMAPCO PAC members and *2 non-members

Name	Affiliation	Name	Affiliation
Patricia Folk	Cecil County	Darlene A. Cole	EDTAC
Jeff Peters	Pike Creek VCL	Rafael Castro	LACC
Antonio Valenzuela	City of Wilmington	David Carter	Southern NCC Alliance
Randi Novakoff	WILMAPCO	Michael Smith*	GNEDP
Mark Parker	The Committee of 100	Jennifer Oberle-Howard*	Delaware Park
Joe Mitchell	Cecil County	Bill Dunn	Civic League for NCC
Charles Shaw	AARP Delaware	Fran Swift	GHADA
Dick Janney	Southern NCC	Tom Rosatko	DRPA
Vic Singer	Civic League for NCC	Wesley Avera	CTRVL Civic

Summary of Proceedings

Some focus group members had not tested the App beforehand, but were able to during the course of the meeting. Their exploration of the app and its features, in effect, guided the discussion. Many questioned the usefulness of the app if it is to be used only pre-trip, does not offer voice-guided navigation, does not allow users to configure alerts related to preferred driving routes, does not provide “push notifications” to alert users to incidents, does not provide re-routing options in the event of an emergency. Most feel that the app is geared towards Delaware residents and commuters who are familiar with the DelDOT logo and brand and that it does not have broad appeal to out-of-state travelers, tourists, or visitors passing through Delaware.

Downloading and Initial Impressions

- Thirteen out of the 18 participants own a smartphone.
- Of the 13 people who owned a smartphone, 2 downloaded the Android version and 7 downloaded the Apple version of the app.
- No one had trouble downloading either Android or Apple version of the app.
- No one used the QR Code to download the app. The majority of the group did not know what a QR code was or how it was used. Many of them commented that it was easier to go to the App Store and use the search feature than use the QR Code capability.
- Of the 13 people who owned a smartphone, 10 said they used the app once downloaded.

Input on Branding of App

- 5 of the 18 participants were aware of the real-time traveler app before the completion of the survey.
- Group members acknowledged that their recognition of the logo is higher than the general public. Tourists and visitors of the state may not recognize the DelDOT logo.
 - A group member recommended an orange cone as the branding of the app.

- One individual commented that the DelDOT brand/logo gives the impression that the app is Delaware oriented (e.g., residents/commuters) and does not have broad appeal for those traveling through the state on a trip
- Group members seemed to believe that the branding/logo of the app is fine for in-state residents. The DelDOT real-time traffic is geared towards Delaware residents. However, additional branding efforts are needed if the app is to have better recognition among the general public and individuals traveling through the state.

Input on App's Main Menu

- Group members were aware of all the features provided in the application. Of the app's main features, members noted that they liked the traffic camera feature; however, it quickly drains the phone battery.
- Several group members agreed that DelDOT should add a search feature at the top of the app main menu. This would aide individuals who are searching for specific features who may not want to "click" through the app to access specific features/information.
- One participant suggested a separate section/icon for bicycle maps. This feature would assist commuters in locating easily accessible roads/routes for bikes. He also suggested a page for DART First State to provide real-time information on bus schedules and potential service alerts with bus routes/vehicles.

News Feature

- Several members liked the Events and News features because it emphasized the desire for public involvement and participation.
- Other group members disliked the feature because they have to scroll through the information to find what they needed.
- It was suggested that news-related items for New Castle, Kent, and Sussex Counties be separate so users won't need to scroll to obtain information.

Workshop Feature

- Participants appeared to be generally confused about the workshop feature.
- Several members were concerned with granting permission for the app to access their Google Calendars. They do not want DelDOT's application to automatically drop in all of the events included in the app to their calendar if they clicked "yes."

Traffic Radio Feature

- The group generally hasn't used the traffic radio feature. They thought of the feature as "redundant." They would rather use the radio installed in their cars.
- One participant believes that "there is nothing the radio can do that the app cannot," reinforcing the group's consensus that the radio feature is not a necessary feature.

Social Media Feature

- The group generally liked the social media component.
- One participant recommended the use of social media for collaboration efforts and bringing together the efforts of DelDOT and other agencies during a large-scale emergency (e.g., hurricane, snowstorm, traffic incident).
- The participants agreed that Twitter was the best social media feature for the real-time portion of the app. In terms of feedback, the group generally believed that Facebook or blog posts would be the suitable option.
- One participant noted that they rely on WPVI's traffic feed on Twitter as the best social media option.
- Another participant uses The News Journal app for up-to-date information on breaking news.

Input on Traffic Maps Layers

- Of the 9 people who downloaded the app, 6 used the traffic maps feature. Four people used the app for pre-trip use, 1 used the app as a passenger, and 1 used the app en-route (while driving).
- Of the individuals who used the traffic map feature, many agreed that it was useful for pre-trip use to check traffic, road conditions, and other delays.
- Several individuals stated that the construction feature is labeled “restrictions” and is confusing for users.
- One participant suggested that a nice feature of the app would be to alert users to upcoming roadway accidents/incidents. The app could recognize the pending delay and alert the user, via push-messages or another alert format. The participants felt that this would be a necessary component to be considered “real-time” and hopes that the app could then suggest alternative routes for the user.
- One participant recommended working with the Delaware Economic Development Office (DEDO) and tourism interest groups to improve the app’s functionality and real-time features.

Input on Traffic Condition Feature

- The group generally liked the traffic condition component of the real-time traffic map, but felt that there was too much information for the average traveler.
- The consensus was that much of the information was not necessary.

Input on Red Light Enforcement Feature

- The group generally liked the red light enforcement feature and felt that they would use it in the future.

Input on Lane Restrictions/Road Closure Feature

- The group members generally liked the lane restrictions and road closure feature of the app.
- They recommended that DelDOT should keep this feature updated and in a real-time format.
- Comments:
 - “Difficult to use”
 - Takes two “clicks” to access the lane restrictions feature, stating that it is not easy to use if driving.

Usability of the App

- Several participants felt that they app was easy and intuitive to use and that DelDOT should keep it in the current format. One participant stated, “If you have a smartphone, then generally individuals can figure out how to use the app.”
- The members agreed that DelDOT’s app provides the features that users would want to use it for traffic-related incidents.
- Eight of the 18 participants stated that they would continue to use DelDOT’s app.
- Several participants requested additional features to the app, including:
 - Links for tourism and travel.
 - Voice-guided navigation.
 - Real-time alert system subscription through the use of push notifications or text messages.
 - “Tell us how you feel” section, a place for requests and concerns that should be addressed by DelDOT, e.g., potholes or stop light outages.
- If the app is real-time, then many of the participants are likely to use an app or a GPS system.
- One participant stated that they would continue using the GPS that has voice navigation and recognizes location until DelDOT’s app can provide the same features.
- Another stated a preference for use of Google Maps, which has user-friendly features and covers more than one state.

Marketing and Branding of the App

- Participants felt that the app itself should not be tailored for different target audiences, but the marketing techniques should be separate to reach out to potential users. Additionally, a participant suggested analyzing the progress of each feature included in the app to see what can be deleted or added for future success.
- Participants felt that DelDOT can better market the app to different audiences using several techniques, including:
 - Message boards.
 - Links to county websites and cross-linking with other relevant stakeholders and joint partnerships.
 - Link to school websites for new student drivers and parents concerned about their safety and road conditions.
- Several participants agreed that the app's branding and name should stay as "DelDOT;" however, others felt that DelDOT should emphasize the real-time feature in the branding to highlight the provided features.
- One participant suggested that DelDOT should narrow its audience, rather than being broad and "everything to everyone."

Miscellaneous Comments, Feedback, and Suggestions

- Consider reaching audiences out-of-state and not familiar with Delaware, either through QR codes or search optimization techniques for the Android and iPhone apps.
- Marketing strategies should target following audiences/possible partners:
 - Ecotourism interest groups.
 - DEDO Tourism Office and other regional tourism agencies.
 - State, county, and local chambers of commerce.
 - I-95 and other Delaware welcome centers and rest stops.
 - Convention centers/visitor centers.
 - Philadelphia, NCC, and other regional airports.
 - Major venues (e.g., NASCAR, casinos, festivals, sporting events).

Focus Group Session: Southern Focus Group – Dover/Kent County MPO PAC

Time/Date/Location

- 6 p.m., Tuesday, February 25, 2014; Kent County Administrative Complex

IPA Project Team

- BJ DeCoursey, Marcia Scott, Neil Kirschling

List of Attendees (Names and Affiliations)

- Fifteen total focus group participants: 12 Dover/Kent County MPO PAC members and *3 non-members.

Name	Affiliation	Name	Affiliation
James P. Webster	PAC (City of Dover Appointee)	Phyllis Brooks Collins	PAC (State/Governor's Appointee)
Dwight Meyer	PAC (Kent County Appointee)	*Liz Purcell	Delaware Tourism Office
Carleton C. Cannon	PAC (City of Dover Appointee)	*Linda Parkowski	Delaware Tourism Office
*Lorraine Dion	Kent County Tourism Office	Mike Gumrot	PAC (State Appointee)
Jeremy Tucker	PAC (County Appointee)	Rich Vetter	MPO
Jayce Lesniewsi	PAC (County Appointee)	Kate Layton	MPO
Earle Dempsey	PAC	Jim Galvin	MPO
		Catherine Samardza	MPO

Summary of Proceedings

While only 6 participants had downloaded and actually used the app, those that used the app provided constructive feedback on their experience using the app. There was a general consensus that the DelDOT logo/brand doesn't accurately reflect the content of the real-time traffic app and the logo is not recognizable by non-Delawareans. Many believe that there are too many menu choices and admit that they would only use the traffic map feature. With respect to the traffic map feature—the majority felt that there were too many layers and some layers were geared towards DelDOT personnel rather than motorists. While the app is generally easy to use, suggestions for improvements were made. These included: 1) improvements to “real-time” aspects of traffic- and weather-related incidents, 2) narrowing the broad focus of the app by limiting menu features, and 3) having it function as a GPS, allowing the option to enter a route of travel, having it recognize frequently traveled routes, “push notification” incident alerts, and a voice-guided navigation system would enhance usability.

Downloading and Initial Impressions

- Ten out of the 15 participants own a smartphone.
- Of the 10 people who owned a smartphone, 2 downloaded the Android version and 8 downloaded the Apple version of the app.
- No one had trouble downloading the Android or Apple version.
- No one used the QR Code to download the app.
- Of the 10 people who owned a smartphone, 6 said they used the app once downloaded.

Input on Branding of App

- Four of the 15 participants were aware of the app before the completion of the survey.

- The consensus of the group members was that the name of the app does not accurately reflect the branding of the real-time traffic information.
 - A group member remarked that DelDOT is branded as an agency. People do not think of it as a traffic app. Many people agreed with this comment.
 - One individual commented that the name DelDOT has a limited appeal to only Delawareans, not visitors to the state.
- The group members believed that the logo is generally recognizable to Delawareans.
 - One member stated that it is unclear what types of consumers the app is targeting based on the name and logo.
- Another commented that unless you know the intended audience, it is impossible to assess whether the branding is effective.

Input on App's Main Menu

- While most people like the main menu, most admitted that they would only use the traffic map portion.

News Feature

- Members thought that the name of the feature did not match the concept. One individual recommended naming the feature "Traffic Advisories" rather than "News."
- A handful of members expressed frustration that old posts were not deleted.
- One individual suggested including a feature to sort news by county, since most drivers are only looking for travel advisories in a specific area of the state.

Workshop Feature

- None of the group members believed that this feature should be included in the app. They did not expect to find information on workshops in a traffic app and found it irrelevant.

Traffic Radio Feature

- One participant raised the concern that there are connection problems if you attempt to use this feature without Wi-Fi.
- Many members of the group noted that it is easier to access this information through their car radio rather than open up the app. One person observed that this feature would really only help out-of-staters who did not already know the Delaware traffic radio station.

Social Media Feature

- The social media features were largely deemed unnecessary. Many group members did not think it made sense to go through the DelDOT App to access information they could just view through the Facebook and Twitter apps themselves.
 - One participant recommended that the app's social media feature list the name of its Facebook page and Twitter handle so that users could get DelDOT information in the other apps that they use more often.
- A few group members voiced complaints about the accuracy of the social media pages. They cited instances when they checked the DelDOT Twitter page for information about accidents that other people had posted about on social media, but DelDOT never updated its page to give information about the incidents.
- One participant suggested push notifications as a way to alert drivers of traffic or road incidents as they approached.
- Generally, participants did believe that social media is good for two-way communication on large state events like NASCAR race weekends or the Firefly Music Festival.
 - An individual thought that there should be alerts about large events in the state such as NASCAR and Firefly so that drivers who aren't attending the event know to expect traffic.

Input on Traffic Maps Layers

- The general feedback on the traffic map layers was negative. Users found it “messy,” “confusing,” and “not as clear or easy to use as other traffic apps.” One stated that there are “more layers than we have roads.”
- They believed that there were too many options for layers and that it was difficult to manually zoom to see specific areas of the map.
- One group member noted that the layer for facilities only shows where DelDOT buildings are, which is not useful to users; instead, the layer should show the location of rest stops and visitors bureaus.

Input on Traffic Condition Feature

- A participant claimed that this information is not updated in real time. This person has used the app often and has experienced situations where the app displays information that differs drastically from what is on the road.
- One individual voiced concern about having to click on the colored dot to get information. This was considered to be too many steps especially if people use the app while driving.
- The group generally preferred to have the roads shaded all the way in rather than just dots.

Input on Red Light Enforcement Feature

- Many participants did not understand how this information is useful.
 - They believed that drivers should stop at a red light regardless of whether or not there is an enforcement camera.
 - Others thought that people do not need the app to tell them cameras locations. If someone drives a certain route consistently, they will be aware of cameras.

Input on Live Traffic Camera Feature

- Group members gave feedback that this feature takes a long time to load and quickly drains the phone’s battery life.

Usability of the App

- One person said that the app was easy to use because he had previously used the website.
- Several members prefer to use a GPS because it is larger and has voiced directions.
- A participant said that for older users, the icons might be too small to see and click.
- One group member reiterated that once the user audience is better defined, the hierarchy of the app can be better developed and it can become more intuitive.

Marketing and Branding of the App

- The group expressed uncertainty about the benefits of using this app and who the app was supposed to be targeting. Some even wondered if there is a market at all for this sort of app in Delaware.
- One participant asked, “Is this a traffic app or an everything-we-have-in-the-state app?” Another noted that the app “can’t be everything.”
- A member suggested that DelDOT “Determine the purpose of the app; find a niche, then target various audiences.”

Miscellaneous Comments, Feedback, and Suggestions

- Safety was a major concern since the app may be used while driving but is not driver-friendly.
- Some commented that if consumers cannot use the app while driving, they aren’t able to fully utilize the “real-time” aspect.
- The group members recommended a few features that they believe would improve the app:
 - Push notifications for traffic and closures on certain roads or routes.
 - Voice commands: Those concerned about safety and the law do not want to have to touch things on their phone to get information.
 - Better weather information: for instance, when it snows, real-time information about how drivable the roads are.

- Toll information: location and cost.
 - Ability to save frequently traveled roads/routes.
- A participant stated that none of the features are essential to drivers and the one feature that would be helpful, the ability to suggest alternative routes around traffic, is not included in the DelDOT App. Many members of the group agreed that the ability to reroute around traffic is the most desired feature of a traffic app.

Appendix F: Target Audience Matrix

This Target Audience Matrix should be reviewed to identify where collaborations and partnerships may be formed or strengthened to maximize free and low-cost exposure to target markets. Strategies include conducting joint marketing ventures, teaming on social media strategies, developing traditional or digital marketing tools, and engaging target markets. Event sponsorship, networking, and endorsements are mutually beneficial to build brand awareness and shape attitudes.

LARGE-SCALE EVENT PLANNERS/MANAGERS

PARTNERSHIPS	JOINT VENTURES & VENUES	TRADITIONAL MARKETING	DIGITAL MARKETING	CONTENT AND DEPLOYMENT
Delaware Sporting Commission	Non-profit and professional sporting events	<ul style="list-style-type: none"> • Ads in print media such as visitor's guides, welcome brochures, sports and events planning guides • Print ads in event programs • Print ads and earned media (interest articles) in magazines like Delaware Today, Southern Living, Coastal Living • Sponsor events for recognition in promotional flyers and programs • Personal meetings with event planners, editors, bloggers • Press releases • Ads on stadium signage and digital billboards • Giveaways and promo items • Sponsorship of contents and games • Press kits for sporting and special event venues & planners • Radio commercials 	<ul style="list-style-type: none"> • Event website, Facebook, Twitter • Articles in e-newsletters • E-blasts to event planners and travel agents • E-contests/sweepstakes • Website display banner ads • Media-rich content posts with videos and photos • Mobile banner ads • Relevant/timely blog posts • Search-engine optimization—event-oriented keywords • Social media campaigns • Email marketing • Press resources on DelDOT website 	<ul style="list-style-type: none"> • Work with partners to develop collaborative marketing programs • Develop web content that can be shared on partner websites • Content updates based on weekly, monthly, and annual special events • Blogs, social posts, press releases, and web content • Event marketing/tabling • Social media management (e.g., HootSuite) to schedule and track multiple social media platforms • Earned media—testimonials for getting to an event on time • Travel and traffic alerts via event Twitter handle, hashtags, Facebook • Draft targeted messages to event attendees and motorists • Targeted messages during weather- and traffic-related incidents and emergencies • Targeted messages for emergency evacuations and homeland security incidents
State/Local Chambers of Commerce	Festivals, conferences, meetings			
Wilmington Blue Rocks	Blue Rocks baseball games			
Dover Downs & Casino/Dover International Speedway	NASCAR events, conferences, shows			
Delaware Park & Casino, Harrington Raceway, Winterthur Point-to-Point	Horse racing events			
University athletic departments	University-sponsored sporting events			
Delaware sports leagues	Adult sporting venues			
Delaware State Parks	State park and recreation activities/events			
Local & non-profit parks and recreation	Parades, health & fitness programs, youth leagues			
Seasonal special events/venues	Frightland, Mud Run, Punkin' Chunkin, Wilmington Flower Market, Brandywine Arts Festival, Return Day			
Travel agents	Travel shows			
Wilmington Riverfront	Conventions; charitable walks, runs, events			
Race organizers	Wilmington Grand Prix, Marathons, Biathlons, Triathlons, Bike to Bay, Amish Bike Tour			
DEDO—Office of Tourism	Annual festivals and events			
Cultural, Entertainment, Museums, Galleries, and Performing Arts Venues	Firefly Festival, Live at the Queen Wilmington, DuPont Theater, The Grand, Schwartz Center, local & children's theaters, exhibits, concerts			
Local Visitors' Bureaus	Annual festivals and events			
Golf courses and resorts	Golf tournaments			
Delaware Agritourism Association	Farmers' markets, farm tours			
Delaware Special Olympics	Polar Bear Plunge, Buddy Walk, Olympics			
EcoDelaware.com	Earth Day Celebration, ecotourism			
DE Interscholastic Athletic Association	School-sponsored sporting events			

VACATIONERS AND TOURISTS

PARTNERSHIPS	JOINT VENTURES & VENUES	TRADITIONAL MARKETING	DIGITAL MARKETING	CONTENT AND DEPLOYMENT
DEDO—Office of Tourism	Events promoted by DEDO	<ul style="list-style-type: none"> • Ads in print media such as visitor's guides, welcome brochures, sports and events planning guides, Tanger Outlet booklets • Print ads in event programs • Print ads and earned media (interest articles) in magazines like Delaware Today, Southern Living, Coastal Living, beach magazines, Outdoor Delaware, and realtor publications • Sponsor events for recognition in promotional flyers and programs • Personal meetings with tourism directors, event planners, Main Street Managers, restaurant owners, lodging folks • Press kits and press releases • 3-D Ads on buildings or shops • Giveaways and promo items • Sponsorship of contents and games • Radio commercials 	<ul style="list-style-type: none"> • Articles in e-newsletters • Press kits for hotels, resorts, chambers of commerce • Banners on websites of realtors associated with resort rentals • Event website, Facebook, Twitter, Instagram • E-blasts to tourism directors and travel agents • E-contests/sweepstakes • Website banner ads on state agency websites associated with tourism (DEDO and DNREC) • Media-rich content posts with videos and photos • Mobile banner ads • Relevant/timely blog posts • Search-engine optimization—event-oriented keywords • Social media campaigns • Email marketing • Digital kiosk at I-95 welcome center, toll plazas, Wilmington train station, Wilmington airport 	<ul style="list-style-type: none"> • Work with partners to develop collaborative marketing programs • Develop web content that can be shared on partner websites • Content updates based on weekly, monthly, and annual special events • Blogs, social posts, press releases, and web content • Event marketing/tabling • Social media management (e.g., HootSuite) to schedule and track multiple social media platforms • Earned media—testimonials for getting to an event on time • Travel and traffic alerts via event and "DEBeachBound" themed Twitter handles, hashtags, Facebook, • Draft targeted messages to event attendees and motorists • Website links on "directions" pages • Targeted messages during weather- and traffic-related incidents and emergencies • Targeted messages for emergency evacuations and homeland security incidents
DEDO—Downtown Delaware	Events sponsored by DEDO & Downtown Delaware communities & affiliates (e.g., seasonal festivals, celebrations)			
Main Street Communities	Events sponsored Main Street communities & affiliates (e.g., seasonal festivals, celebrations)			
Tanger Outlets	Seasonal sales and promotional events			
Delaware Restaurant Association	MidAtlantic Wine and Food Festival, restaurant week			
Delaware Hotel & Lodging Association	Annual Stars of Industry Awards Dinner			
Delaware Association of REALTORS®	Annual convention			
Home Builders Association of Delaware	Delaware Home Show			
Major/Regional Shopping Malls/Centers	Seasonal sales and promotional events			
Delaware State Parks	Outdoor adventure series			
State/Local Chambers of Commerce	Annual special events, festivals, celebrations			
Local Visitors' Bureaus	Annual special events, festivals, celebrations			
Wilmington Riverfront	Conventions; Charitable walks, runs, events			
Tourist attractions	Boardwalks, amusement parks			
Beach resort communities	Fireworks, concert series, celebrations			
Museums/Galleries	Gallery exhibits, art shows, events			
Media outlets	Relevant news coverage			
Delaware Welcome Center(s)	Travel plaza, toll plaza, train station, airport			

EMPLOYERS AND BUSINESSES

PARTNERSHIPS	JOINT VENTURES & VENUES	TRADITIONAL MARKETING	DIGITAL MARKETING	CONTENT AND DEPLOYMENT
State/Local Chambers of Commerce	<ul style="list-style-type: none"> • Trade shows • Conventions • Charitable and philanthropic events • New employee orientations • Training events/institutes • Home and garden shows • Speakers' bureaus 	<ul style="list-style-type: none"> • Ads in trade magazines • Brochures/pamphlets for new employee packets • Radio commercials 	<ul style="list-style-type: none"> • Digital kiosk at I-95 welcome center, toll plazas, Wilmington train station, Wilmington airport • Mobile banner ads • Relevant/timely blog posts • Search-engine optimization—event-oriented keywords • Social media campaigns • Email marketing • Banner ads • Online Sponsorships • 	<ul style="list-style-type: none"> • Work with partners to develop collaborative marketing programs • Develop web content that can be shared on partner websites • Content updates based on weekly, monthly, and annual special events • Blogs, social posts, press releases, and web content • Event marketing/tabling • Social media management (e.g., HootSuite) to schedule and track multiple social media platforms • Earned media—testimonials for getting to an event on time • Travel and traffic alerts via event Twitter handle, hashtags, Facebook • Draft targeted messages to event attendees and motorists • Website links on "directions" pages • Targeted messages during weather- and traffic-related incidents and emergencies • Targeted messages for emergency evacuations and homeland security incidents
Delaware Association of REALTORS®				
Human Resource Departments				
Delaware Small Business and Technology Development Center				
25 Largest Employers in Delaware				
Delaware Business Organizations				
Unions				
Delaware Manufacturing Association				
The Partnership (DSCC affiliate)				
Delaware Retail Council				
Home Builders Association of Delaware				
Hospitals and medical facilities				
Delaware Small Business Alliance				

COMMUTERS AND AREA MOTORISTS

PARTNERSHIPS	JOINT VENTURES & VENUES	TRADITIONAL MARKETING	DIGITAL MARKETING	CONTENT AND DEPLOYMENT
Delaware School Districts	<ul style="list-style-type: none"> • School-sponsored sporting, open house, parents' nights events • Car shows • Wilmington train station, Wilmington airport • DMV locations 	<ul style="list-style-type: none"> • Highway Billboards • Brochures/pamphlets at welcome/rest centers, driving schools, CDL training programs, shopping centers, toll plaza • Sponsorship of traffic reports with Delaware/Delmarva radio and TV • Kiosks at DMV locations • Delaware AAA publications • Information in DMV manuals • Sponsorship of driving school cars or ads on cars • Sponsorship of and/or ads at car shows and rallies • Displays at toll booths • Press kits for AAA, driving schools, malls and shopping center, employers, and media outlets • Radio commercials 	<ul style="list-style-type: none"> • Digital kiosk at I-95 welcome center, toll plazas, Wilmington train station, Wilmington airport • Tutorials and guided tour videos • Social media campaigns 	<ul style="list-style-type: none"> • Earned media—testimonials for getting to an work/school on time • Develop web content that can be shared on partner websites • Content updates based on weekly, monthly, and annual special events • Blogs, social posts, press releases, and web content • Event marketing/tabling • Social media management (e.g., HootSuite) to schedule and track multiple social media platforms • Travel and traffic alerts via Delaware-oriented Twitter handles, hashtags, Facebook, • Website links on "directions" pages • Targeted messages during weather- and traffic-related incidents and emergencies • Targeted messages for emergency evacuations and homeland security incidents • Work with partners to develop collaborative marketing programs
Delaware DMV				
AAA Mid-Atlantic				
Car and Truck Enthusiast Groups				
Private driving schools				
CDL training/licensing schools				
Delaware Association of REALTORS®				
Delaware Home Builders Association				
25 Largest Employers in Delaware				
Delaware Business Organizations				
Major/Regional Shopping Malls/Centers				
Media outlets				
Delaware Welcome Center(s)				

INSTITUTES OF HIGHER EDUCATION

PARTNERSHIPS	JOINT VENTURES & VENUES	TRADITIONAL MARKETING	DIGITAL MARKETING	CONTENT AND DEPLOYMENT
<ul style="list-style-type: none"> University of Delaware Delaware State University Wilmington College Delaware Technical Community College Wesley College Goldey-Beacom College Widener University School of Law, Wilmington Campus Delaware College of Art & Design 	<ul style="list-style-type: none"> • Alumni events and homecoming • Parents' and families' weekends • Admissions' office events • Student visit days • New student orientations/move-in days • Sporting events • New employee orientations • Graduation/convocation ceremonies 	<ul style="list-style-type: none"> • Giveaways and promo items • Sponsor events for recognition in promotional flyers and programs • Personal meetings with sport info directors, alumni officials, admissions staff • Press kits and releases to sport info directors, event planners, university PR staff, and student newspapers • Ads on stadium signage and digital billboards • Print ads in event programs, alumni magazines • Sponsorship of games and contests for students • Radio commercials on university stations 	<ul style="list-style-type: none"> • E-contests/sweepstakes • Website display banner ads on state agency websites associated with tourism (DEDO and DNREC) • Media-rich content posts with videos and photos • Mobile banner ads • Relevant/timely blog posts • Search-engine optimization— event-oriented keywords • Social media campaigns • Email marketing • Tutorials and guided tour videos • Digital kiosk at I-95 welcome center, toll plazas, Wilmington train station, Wilmington airport 	<ul style="list-style-type: none"> • Develop web content that can be shared on partner websites • Content updates based on weekly, monthly, and annual special events • Blogs, social posts, press releases, and web content • Event marketing/tabling • Social media management (e.g., HootSuite) to schedule and track multiple social media platforms • Earned media—testimonials for getting to an event on time • Travel and traffic alerts via event and fan-based Twitter handles, hashtags, Facebook, • Targeted messages to university students, alumni, parents

TRANSIT				
PARTNERSHIPS	JOINT VENTURES & VENUES	TRADITIONAL MARKETING	DIGITAL MARKETING	CONTENT AND DEPLOYMENT
DART First State	<ul style="list-style-type: none"> Direct marketing campaign to transit riders 	<ul style="list-style-type: none"> Highway billboards Display ads in transit areas Display ads in transit vehicle Bus/vehicle wraps with display ad Sponsorship of traffic reports with Delaware/Delmarva radio and TV Kiosks at transit stations Press kits and releases 	<ul style="list-style-type: none"> Digital kiosk at I-95 welcome center, toll plazas, Wilmington train station, Wilmington airport 	<ul style="list-style-type: none"> Transit operators will be endorsers rather than users, since most agencies/companies have their own internal traffic management systems Targeted messages during weather- and traffic-related incidents and emergencies Targeted messages for emergency evacuations and homeland security incidents
SEPTA Regional Rail				
Amtrak				
Intercity Buses (Megabus, Greyhound Express)				
Delaware Express and Limo Companies				
Motorcoach and tour bus operators				
Transit stations, centers, & hubs				

COMMERCIAL DRIVERS				
PARTNERSHIPS	JOINT VENTURES & VENUES	TRADITIONAL MARKETING	DIGITAL MARKETING	CONTENT AND DEPLOYMENT
Delaware DMV	<ul style="list-style-type: none"> Direct marketing campaign to commercial drivers at trade show, conventions, rest stops, weigh stations, and truck stops 	<ul style="list-style-type: none"> Brochures/pamphlets at welcome/rest centers, CDL training programs, weigh stations, truck stops, toll plazas Sponsorship of traffic reports with Delaware/Delmarva radio and TV Trucking and logistics trade publications Highway billboards Displays at toll booths Radio commercials 	<ul style="list-style-type: none"> Media-rich content posts with videos and photos Mobile banner ads Relevant/timely blog posts Tutorials and guided tour videos 	<ul style="list-style-type: none"> Earned media—testimonials for on time/just-in-time deliveries Develop web content that can be shared on partner websites Targeted messages during weather- and traffic-related incidents and emergencies Targeted messages for emergency evacuations and homeland security incidents Work with partners to develop collaborative marketing programs
CDL Licensers				
Truck Stop Owners				
Delaware Welcome Center(s)				
Weigh Station Managers				
Unions				
Logistics Companies/Organizations				

COMMUNITY-BASED GROUPS AND ORGANIZATIONS

PARTNERSHIPS	JOINT VENTURES & VENUES	TRADITIONAL MARKETING	DIGITAL MARKETING	CONTENT AND DEPLOYMENT
Home Owners Associations	<ul style="list-style-type: none"> • Community fairs, festivals, celebrations, neighborhood and school events, yard sales • Farmers' markets • Sporting and social events • Faith-based meetings, congregations, reunions, and celebrations • Libraries, senior centers, retirement communities • Local parks and recreation events • Recreation leagues and sporting events • Swim meets 	<ul style="list-style-type: none"> • Giveaways and promo items • Sponsorship of community events • Press kits and releases 	<ul style="list-style-type: none"> • Website display banner ads • Media-rich content posts with videos and photos • Mobile banner ads • Relevant/timely blog posts • Search-engine optimization—community-oriented keywords • Social media campaigns • Tutorials and guided tour videos 	<ul style="list-style-type: none"> • Targeted messages during weather- and traffic-related incidents and emergencies • Targeted messages for emergency evacuations and homeland security incidents • Work with partners to develop collaborative marketing programs
Civic Associations				
Junior League				
YMCA's				
Faith-Based Organizations				
Service Organizations				
Delaware AARP				
MPOs				
Recreation centers				