



Marketing Plan

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Potential Market

Our potential customer base is anybody who drives a car and also owns a smartphone or tablet with cellular capabilities. This is an already huge demographic that is growing, and more importantly, remains quite unsaturated at present in terms of traffic avoidance applications. As of 2010, 210,114,939 Americans held drivers' licenses [5], accounting for 87% of the U.S. population over the age of 15 [1]. This is an extremely large market.

Meanwhile, smartphone sales have skyrocketed in the past few years. In the U.S. alone, about 95 million units were sold in 2011 [3]. In the end, by 2011, an estimated 35% of U.S. adults 18 and over own and use a smartphone [3], roughly 85 million people.

3G tablets, although not experiencing a boom in sales like their smartphone cousins, still add to our customer base, since programming for their operating systems would be minimal because the majority of the application would already be written during smartphone development. So far in 2011, about 1.3 million tablets with 3G capability were sold [2][6][8].

There is a considerable area of overlap between smartphone and tablet users. Fortunately, there is still a large untapped market for smartphones, and therefore for Traffic Wizard: only about 40% of mobile phone users in the U.S. use a smartphone [7], which means over 120 million people still to buy a smartphone contract, and therefore a Traffic Wizard subscription.

Regardless of smartphone or tablet sales, there are hundreds of millions of Americans who drive, many of which confront the problem of congestion. more so those in and around urban areas, where much of the technology sales are concentrated as well. Metropolitan areas, therefore, are our prime focus for customers of Traffic Wizard. The current and projected congestion levels near these areas ensure we can build a lasting subscriber base.



Product Package

Potential users will download an application from the app market of their respective smartphone/tablet operating system. Once installed and run, they can either sign in with an existing account or create a new one.

New users will be presented with several membership options. There will definitely be a limited free version with minimal, tasteful advertising which will serve as our user infrastructure—without the data from this group, estimated to be our largest user demographic, our system would lack the amount of data needed to successfully accomplish our overall mission. There would also be both periodic and permanent subscription options, currently estimated at \$4.99/year or \$14.99 for life, as determined from competitive research.

Once a user is in our system, the experience will be very intuitive and straightforward, so no training is involved beyond perhaps a simple introductory application wizard.

Traffic Wizard will not deliver cellular or GPS capabilities to a user's phone, nor are there any specific guarantees on how much time or fuel can be saved in any period of time as a result of the use of the product.



Return on Investment—Consumer

Unfortunately, the customer's return on their investment in Traffic Wizard can be affected by many circumstantial factors. All other things equal, a person that only makes two trips a day, say from home to work and back again, makes a total of 500 trips a year on a 50 week, 5-workday-a-week schedule. If this person lives around an urban area they experience, on average, an opportunity cost of over a thousand dollars each year resulting from their time spent (52 hours) and fuel spent (25 gallons) in traffic—this breaks down to about \$2, or 6.24 minutes and about 7 fluid ounces of gasoline. So, there are three ways to look at it:

- 1) the customer has the free edition, in which case the customer's return on investment is undefined,
- 2) the customer has a \$4.99/year subscription, in which case they'd only need to avoid about 16 minutes of traffic per year. Since we are dealing with averages, we can assume that if Traffic Wizard helped the user avoid just one instance of extraordinary congestion in a year, their investment would be returned,
- or 3) the customer has a \$14.99 lifetime subscription, which by the above data means in order to equal the amount of money they paid for Traffic Wizard, they would need to avoid 45 minutes of traffic for the rest of their life; again, avoiding one unusually heavy congestion incident could make up for the entire cost.

Since getting stuck in traffic is a virtual inevitability for all drivers, there are opportunities for the consumer to gain returns on their investment in Traffic Wizard every time they get behind the wheel.



Market Saturation

We will be using the Hampton Roads metropolitan area as a testing environment, so commuters in that area will be the initial focus group. The campuses at Norfolk State, Old Dominion, Christopher Newport and Hampton Universities, as well as Tidewater Community College, and especially their parking garages, would be excellent venues to reach commuters. Public parking garages and gas stations would be other convenient places for flyers containing QR codes for immediate smartphone downloads. Even moving truck rental depots could be used to attract area newcomers. Commercial and government vehicles are other options worth considering for an initial user base with which to test and seed our user base.

Once success is achieved in the Hampton Roads area, marketing campaigns will be run in other metropolitan areas to expand our services nationwide; quotas will be set for yearly cycles of expansion.



Return on Investment—Company

Our profit will be what is left over after paying resource and staffing costs per year, plus overhead costs. Obviously, expansion to new regions gives us access to more potential customers, but it also raises our operating cost. In addition, as we expand to lower and lower population areas, the amount of new possible customers will diminish, and therefore so will our profit margin. Ongoing strategic business and marketing research and campaigns will help us to achieve the optimum balance between customer exposure and operational cost.

Our yearly operational costs are the cost of workstations needed per region (W) times the amount of regions we currently serve (n), plus the amount of servers needed for each of those regions (S) times n. In addition, we have the regional staffing requirements (R) times number of regions and central staff (C).

$$\text{Profit} = \text{Revenue} - [n*(W+S+R)+ C]$$

Per the Staffing and Resource Plans, W+S+R = \$458,500 per year (specific resource and staffing requirements plus 40% overhead), and C = \$225,400, also including the 40% overhead, and presumably remains constant irrespective of expansion. So only the cost of workstations, servers, and regional staff can affect profit coming from new regions. After Hampton Roads, we will immediately scale upwards to the cities with the largest populations. Here are the current top five [9], along with accumulating totals as we would expand to two through six new areas:

Regions	New Region	Population	Regional Operational Cost	Total Population Exposure*
2	New York City	8,175,133	\$917,000	9431415
3	Los Angeles	3,792,621	\$1,375,500	13224036
4	Chicago	2,695,598	\$1,834,000	15919634
5	Houston	2,099,451	\$2,292,500	18019085
6	Philadelphia	1,526,006	\$2,751,000	19545091

*population of new area plus previous areas plus 1,256,282 for Hampton Roads [4]

Assuming all our customers purchased yearly subscriptions at \$5 each, the following table shows how many customers would need to be reached at each level of expansion to offset the costs of operation:

Regions	New Region	Yearly Regional Operational Cost	# of yearly customers needed	% of total population
2	New York City	\$917,000	183,400	1.94%
3	Los Angeles	\$1,375,500	275,000	2.07%
4	Chicago	\$1,834,000	366,800	2.30%
5	Houston	\$2,292,500	458,500	2.54%
6	Philadelphia	\$2,751,000	550,200	2.82%



As we expand to more areas, we need to acquire higher percentages of paying customers to offset the cost of operation. Realistically, many of these users will opt for our free version, which will drive advertising sales to boost our revenue. Additionally, data brokerage to government and private entities could bring in substantial sales, as the volume of data grows and quality of our data mining matures.

Acquiring nearly over 100,000 new customers, even in large metropolitan areas, is no small feat. But with clever advertising it is feasible to gain 8,000 customers a month through the above mentioned venues and social media like Facebook. Since subscriptions would be on a rolling basis, profits would take some time to trickle in, but if advertising is successful, profits could be seen by the end of the first year or possibly sooner.



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