Public Information System, e-Government

Transportation Information System for Massachusetts Consumers, Visitors and Business Partners, e-Government.

Secretary Daniel A. Grabauskas

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The Problem

The requirement for e-Government, interactive government, and information sharing has driven many organizations to recognize the value of Information Systems and Web Sites as a means of communicating information to consumers, business, and other governmental entities that shape the day-to-day business operations within a Transportation Department. Unfortunately, there is no centralized place to obtain up-to-date and accurate information related to transportation and recreational information within the Commonwealth. Gaining access to information through the many different web sites and other information mediums creates overwhelming problems for consumers, businesses, and other governmental entities engaged in learning about transportation within the Commonwealth. This hunting and pecking for information makes it extremely difficult to assimilate this information into a workable information tool for families or businesses. The answer to the question “where do I go to obtain all of the transportation information needed,” is at best, unclear, leading to an incomplete picture of the Commonwealth’s transportation system.

From an e-Government, consumer point of view, information comes in many forms through many mediums. There are a number of commercial and private choices in obtaining information, including: web sites, news stations, newspapers, magazines, and radio. In addition, there are a number of transportation oriented web sites that focus on a small piece of the total transportation needs of the Commonwealth’s residents, visitors, and businesses. Presently, for the consumer seeking transportation information, there are unacceptable and incomplete answers to the following questions. How do I plan a trip utilizing different modes of transportation? Is there one place I can go to find information related to our roadways, buses, trains, airports, and boats? Where do I turn to find out about recreational information specific to transportation? When I obtain this information, how can I best use it when making decisions for my family?
For businesses that are accustomed to interactive government, obtaining transportation information on how to do business with the Commonwealth is not readily available. There are many unanswered questions. How does a business obtain transportation information? How do they utilize this information to meet their business needs? How do they use this information to streamline communications and ultimately save time and/or reduce cost? Where do contractors obtain the latest information on policy, procedures, specifications and opportunities to bid on transportation projects. In dealing with the fragmented transportation information network of the Commonwealth, there are at least 6 different ways to obtain transportation information today.
Frequently we hear the following questions:

- How do I understand and use information associated with your highways and where is the central repository for this information?

- Where do I go to be able to understand the transportation infrastructure of the Commonwealth?

- How can I use this information to assist me in making transportation decisions that impact my family?

- Where do I go for all modes of transportation information and be assured that the information is accurate and timely?

- Where can I obtain public information on planning and construction jobs in a community?

- Where does the Commonwealth spend its transportation dollars and on what types of projects?

The exciting part of being in the forefront of the technology curve is we can create an environment by which we have a presentation layer to deliver crisp, accurate and timely information over a common medium. The challenge is to package this information in a one-stop shopping medium equally available to consumers, businesses, and other governmental entities to use in addressing their specialized information need.
The Executive Office of Transportation & Construction (EOTC) under the leadership and vision of Secretary Daniel A. Grabauskas issued the following challenge:

**Develop a virtual Transportation Web Portal whereby all residents of Massachusetts and visitors from outside of the Commonwealth will have one place to go for any and all Transportation oriented information.**

In designing a virtual transportation system we chose the Internet as a medium as it offers a widely acceptable channel for transportation agencies to distribute information to current and potential customers, employees, contractors, vendors and other stakeholders. Transportation agencies can keep schedules, maps, fare information, up-to-date and instantly available. During non-business hours, information on the Internet extends the traditional limitations of the business working hours to a virtual 24-hour, 7-day per week operation, allowing customers to visit sites and retrieve information at their own convenience. With a majority of residents having Internet access, transportation sites can reach a broad spectrum of people who otherwise may not take advantage of public transportation in Massachusetts. Transportation web sites have grown as sophisticated tools for trip planning and many other uses such as creating a virtual transportation department within the Commonwealth of Massachusetts. Our web site was developed to portray an integrated transportation image on the various Commonwealth’s Transportation Agencies.

We commenced a software development effort to create a new Web Portal and a Public Information System. The focus for EOTC was to present a web portal for all modes of transportation no matter where the ownership for that mode of transportation resided. This allowed for a one-stop-shopping approach for consumers who need information without going to many different web sites. The Public Information System is accessible from any web browser utilizing a personal computer. The web site address is [http://www.mass.gov/eotc/](http://www.mass.gov/eotc/) and will be available for access in the near future.

In designing the web portal we looked at what transportation information was needed to satisfy the consumer wishing to travel within the state as well as companies and other governmental entities that have a need to interact with the Commonwealth. This included an in-depth review of where the information was stored and how the information was made available. We designed the look and feel to have a common theme and a common way to obtain information and use it for future visits. We expect visitors to bookmark this site as the information portal for all Massachusetts agencies associated with transportation.
The first page accessed is the home page for EOTC. The layout is simple:

**Consumer Information** is located towards the top of the screen, accessed by icon driven drop down menus.

**Conducting Business with the Commonwealth** to the left of the screen under the Secretary's picture.

**Consumer Information** (located towards the top of the screen)

The icons above display: Car, Bus, Train, Boat, Hiking & Biking, Airports, General Information, Emergency Information, and Bond Bill Information.
Conducting Business with the Commonwealth (on the left side of the screen)

Massachusetts Highway Department (MHD) part of EOTC
Massachusetts Aeronautical Commission (MAC) part of EOTC
Massachusetts Bay Transportation Authority (MBTA)
Massachusetts Turnpike Authority (MTA)
Massachusetts Port Authority (MassPort)
As an example of the Web site, we chose to display the **Car** menu for consumers.

![Web site screenshot]

- **Get Direction**  
  Smart Route Travelers Consumer Site

- **View Highways**  
  Highway Maps, Massachusetts Highway System

- **View Traffic Conditions**  
  Known road conditions

- **View Traffic Cameras**  
  Highway live traffic cameras feeds

- **More**  
  Additional information

**More Page**

- **Directions**
- **Commuters**
- **Licenses**
- **Advisories**
Consumer oriented design concepts allowed us to focus on the visitor to the Commonwealth as well as its residents needs to have the services available to make daily decisions regarding their transportation needs. We chose a wire frame of simple but useful information to give the visitor an ease of use and feel when looking for the piece of information needed at a specific time. The following headings were chosen based on the reasons that bring people to a web site and what information they wish to obtain.

- **Directions**
- **Commuters**
- **Licenses**
- **Advisories**
The top headings also give way to sub categories, including information for decisions such as: What are the current road conditions? What are the highway names numbers and exits? How do I renew a license? Are there any discounts available if I commute on a toll road? What is the weather for this afternoon? Are there any traffic alerts I should be aware of?
Consumers, businesses, and other governmental entities are interested in knowing how the Massachusetts Highway Department uses taxpayers’ funds to manage our roadways and construction projects. In addition, business partners of the Commonwealth require access to information on how to conduct business with MassHighway. This will soon be available on the EOTC website at http://www.mass.gov/eotc/ or you can also go directly to Massachusetts Highway website at http://www.state.ma.us/mhd/home.htm.

Massachusetts Highway – Information Web Page

Advertisements  What jobs are being advertised for bidding purposes
Bids          What jobs are out for bid
Awards        What jobs have been awarded
Projects      What projects are in planning and in construction
Careers       Employment opportunities
About         Who is Mass Highway
As an example, selecting projects allows the user to search pre-construction projects selected by Mass Highway that are in the **Design** phase, but have not been put out for advertisement at this time. Design documents, permits, and all the information needed to complete the pre-construction package prior to advertisement are collected during this planning stage. Another view option is to look at projects that have been awarded and are currently in the **Construction** phase.
Selections of projects by the **Design** phase or **Construction** phase can be further sorted by Town/City, Massachusetts Highway District, State Representative, State Senator, or US Congressional District. The options allow for the listing of all projects associated with your selection. Details are provided on what the project is, where it is in the process, and how much money has been allocated and spent to date.
All project information is available to the general public. Anyone accessing this website will be able to select multiple projects in multiple cities/towns, Masshighway District, Senatorial District, State Representative District or US Congressional District.
Summary

The Executive Office of Transportation & Construction has developed a virtual web portal that provides one place to go for consumers, businesses, and other governmental entities to obtain meaningful and timely transportation information. This change enhances consumers’ confidence in the accountability of our state government. It allows immediate access to a full range of transportation information, which in the past was unobtainable. This information includes our construction models, project information, and financial information. It will provide information on various modes of transportation between cars, buses, trains, boats and airports. With this information, the consumer will be better equipped to purchase tickets, renew a license, and gather details on bike paths, hiking and camping trails. In addition, as the Commonwealth moves toward a more full implementation of Intelligent Traffic Systems (ITS) technology, we will be able to take advantage of the “technology intelligent highway” to give consumers and visitors additional real-time information regarding road and traffic conditions throughout the Commonwealth. For businesses and other governmental entities, this web portal will be the foundation for future e-business applications such as on-line trucking permits, two way on-line project & construction bidding, and project status information.

This website will be maintained and updated by our Information Systems Department (IS) and modifications will me made to reflect the ever changing need for additional transportation information.

Finally, the Massachusetts consumer will have access to vital information on the modes of transportation, and the business performance of the Commonwealth’s Transportation Organizations. Public Information and e-Government is vital to the partnership between State Government and consumers. We are proud to be part of the new changes being made and will continue to add additional information as we meet the needs for additional public information.