



Department of Revenue

Working together to fund Washington's future



Have any of you been to the farmers market lately? How about the fair or a swap meet? Maybe you've had some bark delivered or just stopped by your local coffee stand.

If you have, you've most likely been "squared."

**Finding Washington's sales tax
rates using mobile apps**

Overview

- Mobile devices in business
- Customer's mobile needs
- Online Tax Rate Lookup tool
- Mobile statistics
- Design and development
- Next steps
- Questions



Mobile devices in business



Today, many small businesses use their mobile devices to instantly access the information they need to run their business. By using GPS, credit card readers, cameras and messaging, mobile apps provide a service that web pages could never dream of.

According to CNet.com and AllThingsDigital.com; smart phones and tablets account for more than 20% of all traffic on the web. The number of smart phones alone in use across the globe has surpassed the 1 BILLION mark and is expected to easily double within the next two years.

Mobile is a game changer



Mobile devices are game changers for small businesses. Over 94% of the small business owners who use mobile devices said their mobile devices make them more efficient and 75% said their mobile devices are "critical" to their jobs.

Industries that benefit

- Construction
- Retail
- Professional services
- Food services
- Manufacturing
- Landscaping
- Delivery services



The industries with the highest potential to benefit from mobility are:

- Construction
- Retail
- Professional services
- Food services
- Manufacturing
- Landscaping
- Delivery services

Over two thirds of mobile device users said that their company would lose competitive ground in today's market without mobile devices.

Customer's mobile needs



For many small businesses, mobile devices have replaced the use of cash registers, land-line phones and credit card readers and, for some, traditional desktop computers.

DOR continually focuses on customer needs. We look for ways to make it easier to conduct business and communicate with DOR. We focus on our website, our online applications and ways to adapt services to fit the needs of our customers.

Customer's mobile needs



In July of 2008, Washington changed from an origin-based system for local retail sales tax to a destination-based system. Which means that sales tax is collected based on the rate at the location where the buyer receives the merchandise and services.

So, imagine you are a business that sells and delivers bark. You may deliver bark to many different locations on any given day and each of these could have a different sales tax rate.

Now apply this same scenario to the construction industry or to people who sell products at farmers' markets, swap meets and fairs. These businesses have already incorporated the use of mobile devices such as phones or tablets into their daily business. These devices and apps can save them not only hours of work but also can greatly reduce the amount of billing and reporting errors.

Customer's mobile needs

The screenshot displays the Washington State Department of Revenue website. At the top, there is a navigation bar with links for 'CONTACT US | ABOUT US | QUESTIONS & ANSWERS | PRINTER FRIENDLY' and a search bar. Below this, a language selection bar offers options in Spanish, Russian, Korean, Tagalog, Vietnamese, and Chinese. The main content area is divided into several sections: a left sidebar with navigation links like 'Home', 'File & pay taxes', and 'Doing business'; a central 'I need to...' section with links for filing taxes, finding rates, and account management; a 'My account' section with login fields and a 'Log on' button; and several informational sections including 'Spirits taxes (I-1183)', 'Sales tax rates', 'Stay informed', and 'News & announcements'. A 'Learn about...' section on the right lists various topics like 'New business tax workshop' and 'E-file'.

Department of Revenue
Washington State

CONTACT US | ABOUT US | QUESTIONS & ANSWERS | PRINTER FRIENDLY

Español | Русский | 한글 | Tagalog | Tiếng Việt | 漢語

Search

Home

- > File & pay taxes
- > Doing business
- > Find taxes & rates
- > Workshops & education
- > Get a form or publication
- Find a law or rule

Email Updates (Listserv)

I need to . . .

- File my taxes online (E-file)
- Find a sales tax rate (GIS)
- Look up a business (BRD)
- Find my pre-assigned access code (PAC)
- Close my account
- Search for unclaimed property
- Get statistics and reports
- Report tax fraud (Suspectfraud.wa.gov)
- Get business licensing and renewal information (BLS)

My account [Register Now](#)

Logon ID

Forgot your logon ID?

Log on

Password

Forgot your password?

e-file
Electronic Filing

Spirits taxes (I-1183)

- General Information
- Consumers - Spirits Prices & Taxes (pdf)
- Spirits Tax Calculator (.xls)
- Q&A for Retailers (pdf)

Sales tax rates

- Tax rate lookup tool
- List of sales tax rates
 - > Alphabetically by city/county
 - > Cities grouped by county
 - > Excel file format
 - > QuickBooks file format
- Forms and quarterly downloads
- Some local tax rates changing Oct. 1, 2012
- Tax rate lookup app for iPhones

Stay informed

- Know your tax reporting obligations
- Taxpayer rights and responsibilities

News & announcements

- What's new on our website
- News releases
- Reseller permit
- Career opportunities
- Sales to nonresidents
- Second half of property tax payments are due Oct. 31 **New!**
- Warning! ACH Spam/Phishing email
- The taxability of paper bag fees
- Tax Facts
- Changes for roll-your-own (RYO) retailers

Learn about...

- New business tax workshop
- Taxi cabs & related businesses
- E-file
- What is subject to sales tax?
- Personal property tax
- Do I owe use tax?**
- Nonprofits
- Plan for and pay your taxes
- Reseller permits
- How to prepare for an audit
- Economic nexus
- Property tax
- Tax incentive programs
- Tax information for consumers

For many of these businesses, the process they used was very time consuming. Many would have to call back into the office and have someone find the tax rate using our website or go back later that evening, put in the information, and then send a bill in the mail.

Customer's mobile needs

The screenshot shows the Washington State Department of Revenue website. The header includes the department logo, navigation links (CONTACT US, ABOUT US, QUESTIONS & ANSWERS, PRINTER FRIENDLY), and a My Account link. Below the header is a breadcrumb trail: FIND TAXES & RATES > SALES AND USE TAX RATES > TAX RATE LOOKUP TOOL. The main content area is titled "Sales and use tax rates" and features a "Tax Rate Lookup Tool" section. This section includes instructions on how to use the search options and a note that ZIP is required for address searches. The form fields are: Street Address (6500 Linderson Way SW), City (Tumwater), Zip (98501), and Taxable amount (250.00). There are buttons for "Address Search", "Map Search", "Latitude/Longitude", "Search / Calculate", and "Reset". A link at the bottom suggests downloading a free app for iPhone.

Department of Revenue
Washington State

CONTACT US | ABOUT US | QUESTIONS & ANSWERS | PRINTER FRIENDLY

My Account -

Español | Русский | 한글 | Tagalog | Tiếng Việt | 漢語

Home

> File & pay taxes

> Doing business

▼ Find taxes & rates

Sales and use tax rates

Tax incentives

Business & occupation tax

Retail sales tax

Use tax

Property tax

Other taxes

Income tax

> Workshops & education

> Get a form or publication

Find a law or rule

FIND TAXES & RATES > SALES AND USE TAX RATES > TAX RATE LOOKUP TOOL

Sales and use tax rates

Tax Rate Lookup Tool

Use the search options below to find sales tax rates for any location within Washington State. This tool (with the exception of the map search) is also accessible by handheld devices. Simply type taxrates.dor.wa.gov.

For address searches, the ZIP is required but the **+4** is optional.

Address Search | Map Search | Latitude/Longitude

Street Address:

City: Zip: -

Taxable amount: (Optional: To calculate sales and use tax only)

[Reset](#)

[Download the free Tax Rate Lookup app to your iPhone.](#)

As we looked at the data from our website and online applications, one area we felt could really help our mobile customers was our Tax Rate Lookup tool (GIS).

Online Tax Rate Lookup Tool

> Get a form or publication
Find a law or rule

Search / Calculate [Reset](#)

Results found: 6500 Linderson Way SW Tumwater 98501
Taxable amount: 250.00

Period:

[Print These Results](#) [Download the free Tax Rate Lookup app to your iPhone.](#)

Sales & Use	Motor Vehicle Sales/Rentals	Lodging
Retail Sales/Use Tax		
Effective dates	10/01/12 - 10/31/12	
Location code (view map)	3406	
City	Tumwater	
County	THURSTON	
<hr/>		
State Sales and Use Tax	.065	
Local City/County Sales and Use Tax	.022	
Total tax rate	.087	
<hr/>		
Taxable amount	\$250.00	
Tax due	\$21.75	
Total due	\$271.75	
<hr/>		
Confirmation code	77BB4E2A9C	
<i>Keep this code to confirm the tax rate given for the displayed effective dates.</i>		

City..... Tumwater

When the information is put in, the search returns a lot of information.

Online Tax Rate Lookup Tool

The screenshot shows the Department of Revenue Washington State website. The top navigation bar includes links for CONTACT US, ABOUT US, QUESTIONS & ANSWERS, and PRINTER FRIENDLY, along with a My Account link. Below this is a language selection bar with options for Español, Русский, 한글, Tagalog, Tiếng Việt, and 漢語. The left sidebar contains a menu with categories like Home, File & pay taxes, Doing business, Find taxes & rates (with sub-items like Sales and use tax rates, Tax incentives, etc.), Workshops & education, Get a form or publication, and Find a law or rule. The main content area is titled 'Sales and use tax rates' and features a 'Tax Rate Lookup Tool' section. This section provides instructions on how to use the search options and includes a map search interface with a toolbar and a map showing a portion of Washington State with a red box indicating a search area. The toolbar includes icons for zooming, panning, and information, along with dropdown menus for Map, Contents, and Help.

You can also search using the map search tab and by latitude and longitude.

We have over 1.6 million customers using this tool every year or about 6,200 a day.

Online Tax Rate Lookup Tool

Department of Revenue
Washington State

CONTACT US | ABOUT US | QUESTIONS & ANSWERS | PRINTER FRIENDLY

My Account -

Español | Русский | 한글 | Tagalog | Tiếng Việt | 漢語

Home

> File & pay taxes

> Doing business

▼ Find taxes & rates

Sales and use tax rates

Tax incentives

Business & occupation tax

Retail sales tax

Use tax

Property tax

Other taxes

Income tax

> Workshops & education

> Get a form or publication

Find a law or rule

FIND TAXES & RATES > SALES AND USE TAX RATES > TAX RATE LOOKUP TOOL

Sales and use tax rates

Tax Rate Lookup Tool

Use the search options below to find sales tax rates for any location within Washington State. This tool (with the exception of the map search) is also accessible by handheld devices. Simply type taxrates.dor.wa.gov.

For address searches, the ZIP is required but the **+4** is optional.

Address Search | Map Search | Latitude/Longitude

Latitude(eg 47.985): decimal degrees (45.0° ~ 49.005°).

Longitude(eg -122.596): decimal degrees (-125.0° ~ -116.0°).

Taxable amount: (Optional: To calculate sales and use tax only)

Search

Reset

Results found: 6500 Linderson Way SW Tumwater 98501
Taxable amount: 250.00

[Download the free](#)

But let's go back to the longitude/latitude tab again. How often do you think that tab gets used from desktop computer searches?

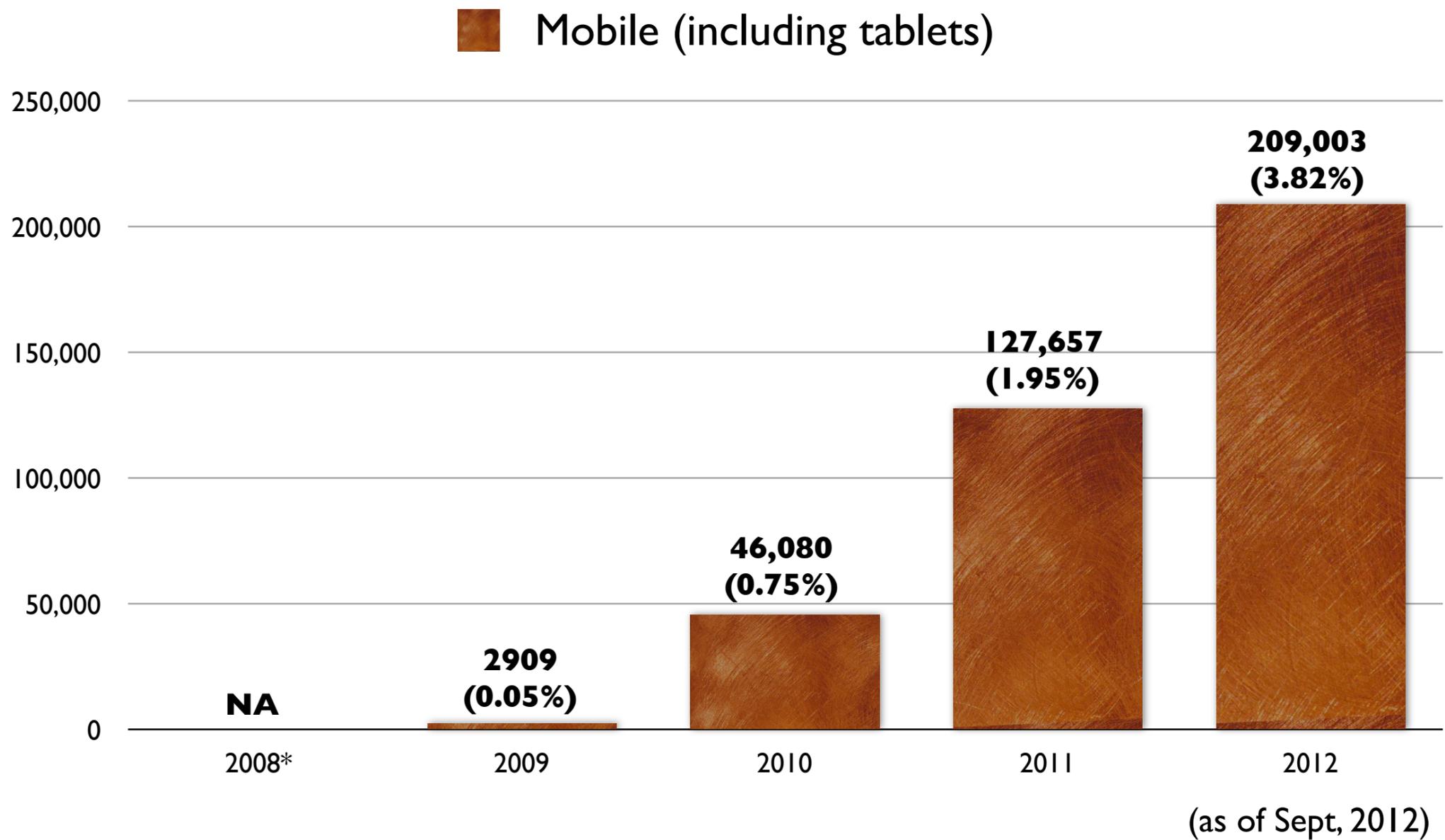
A search by longitude/latitude is actually the most accurate way to search, within meters of where you are standing but who is actually using it on our website.....NO ONE.

Devices with built-in GPS



Today, many of our customers are carrying devices with built in GPS. Using their phones or tablets, they can pinpoint their exact location making it easy, fast and accurate to determine their sales tax rate.

Mobile visits to dor.wa.gov



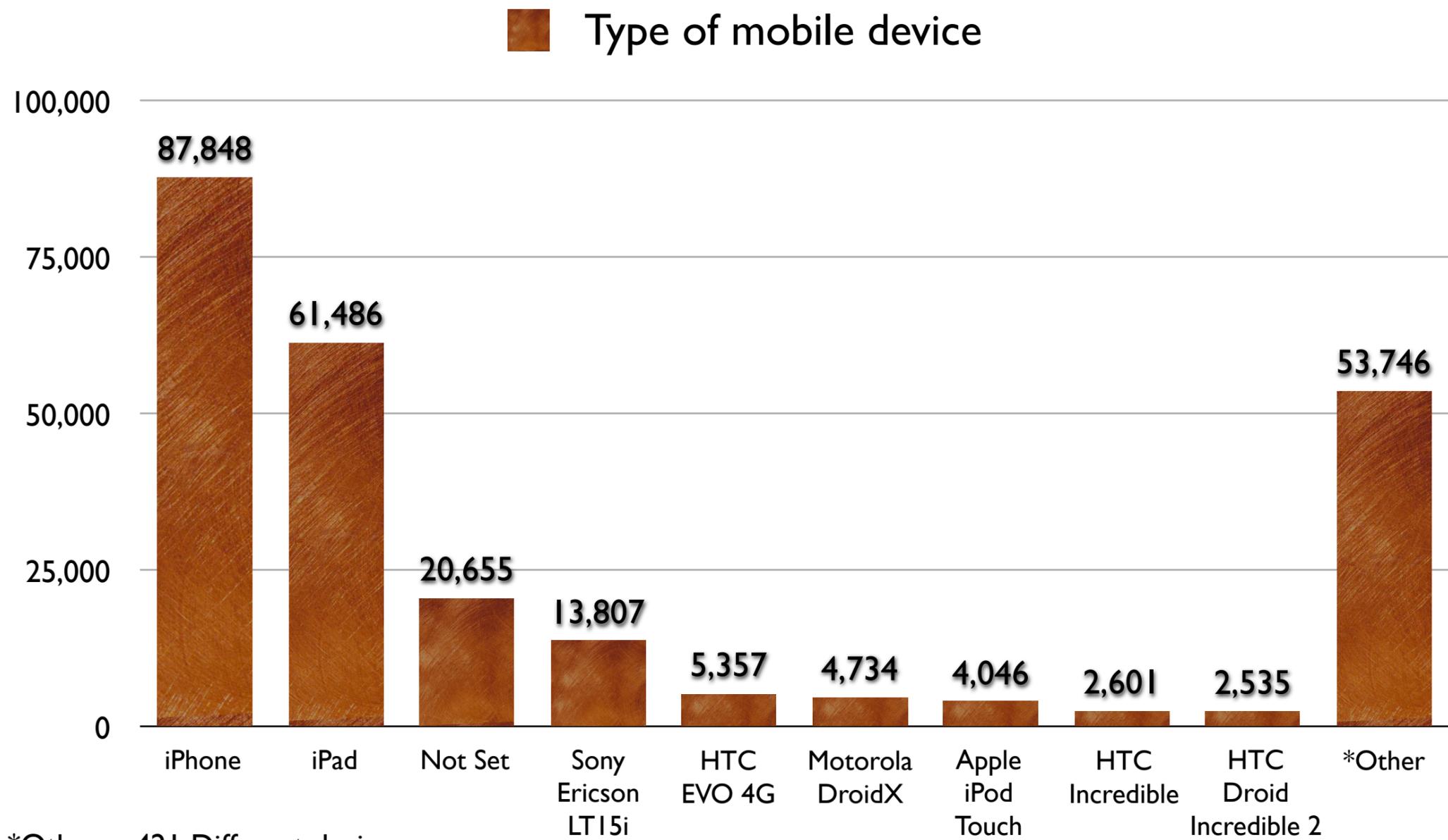
*No mobile data available

Based on Google Analytics, we've had about 256,000 mobile visitors over the last year. The percentage of mobile visitors is not huge, only around 4%, but when you look back a few years it has more than doubled each year.

What will it be next year....8%, 10% or how about the following year.....16%, 20% or possibly more?

If you look at the projected US statistics for mobile devices by 2015, the numbers are staggering.

Mobile visits to dor.wa.gov

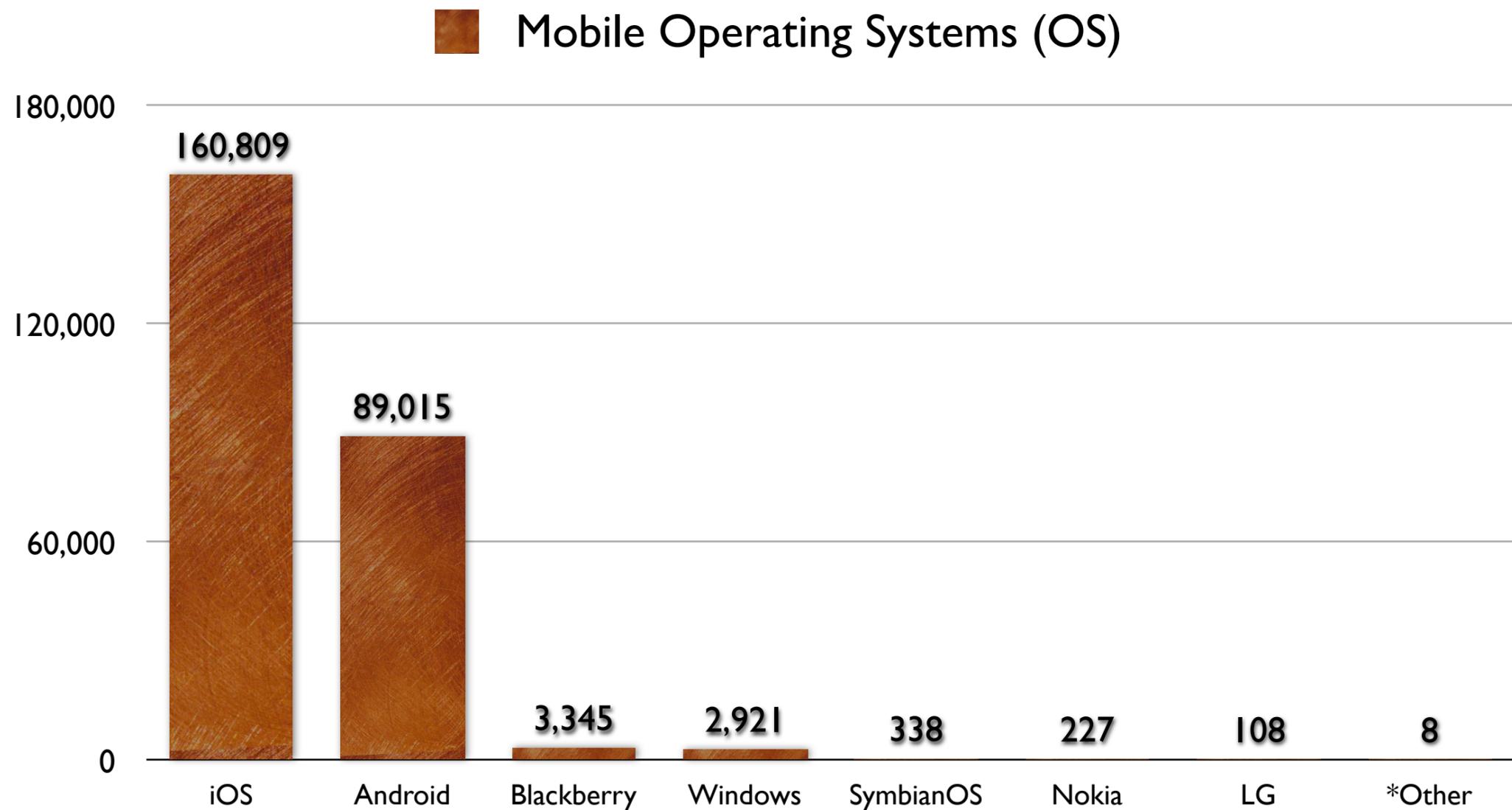


*Other = 421 Different devices
256,815 = Total mobile visits

Now, lets look at what type of devices our customers are using.

As you can see, our customers are using a lot of Apple iOS devices. But there are 430 different mobile devices coming to our site.

Mobile visits to dor.wa.gov



*Other = 9 Different operating systems
256,815 = Total mobile visits

This chart shows that there are 16 different mobile operating systems.

This gives us a pretty good picture of our mobile customers, their devices, and which operating systems those devices use.

Birth of a mobile app



Project Charter

Executive approval

- Executive Sponsor (TPS)
- CIO approve project charter (IS)
- Project sponsor (TPS)
- Project manager (TPS)
- Project coordinator, technical lead, developer (IS)
- Subject matter experts (TPS)
- Business Analyst (IS)
- Test lead (IS)
- Marketing (TPS)

Project Charter

Mobile Application

- Background
 - Make it easier for businesses to determine the correct sales tax rate
- Goal
 - Develop a mobile version of the Tax Rate Lookup online application that can automatically locate sales tax rates and the location code using GPS
- Objective
 - Develop an application for iOS and Android smart phones and tablets

Clear goals and objectives.

Design and development



Mobile app for iOS first and then Android.

Design and development

Results found: 6500 Linderson Way SW Tumwater 98501
Taxable amount: 250.00

Period: [Print These Results](#)

Sales & Use	Motor Vehicle Sales/Rentals	Lodging
Retail Sales/Use Tax		
Effective dates	10/01/12 - 10/31/12	
Location code (view map)	3406	
City	Tumwater	
County	THURSTON	
<hr/>		
State Sales and Use Tax	.065	
Local City/County Sales and Use Tax	.022	
Total tax rate	.087	
<hr/>		
Taxable amount	\$250.00	
Tax due	\$21.75	
Total due	\$271.75	
<hr/>		
Confirmation code	E2E6D28596	
<i>Keep this code to confirm the tax rate given for the displayed effective dates.</i>		
<hr/>		
City	Tumwater	
County	THURSTON	
Location Code	3406	
Regional Transit Authority (RTA)	No	

Determining requirement Specifications:

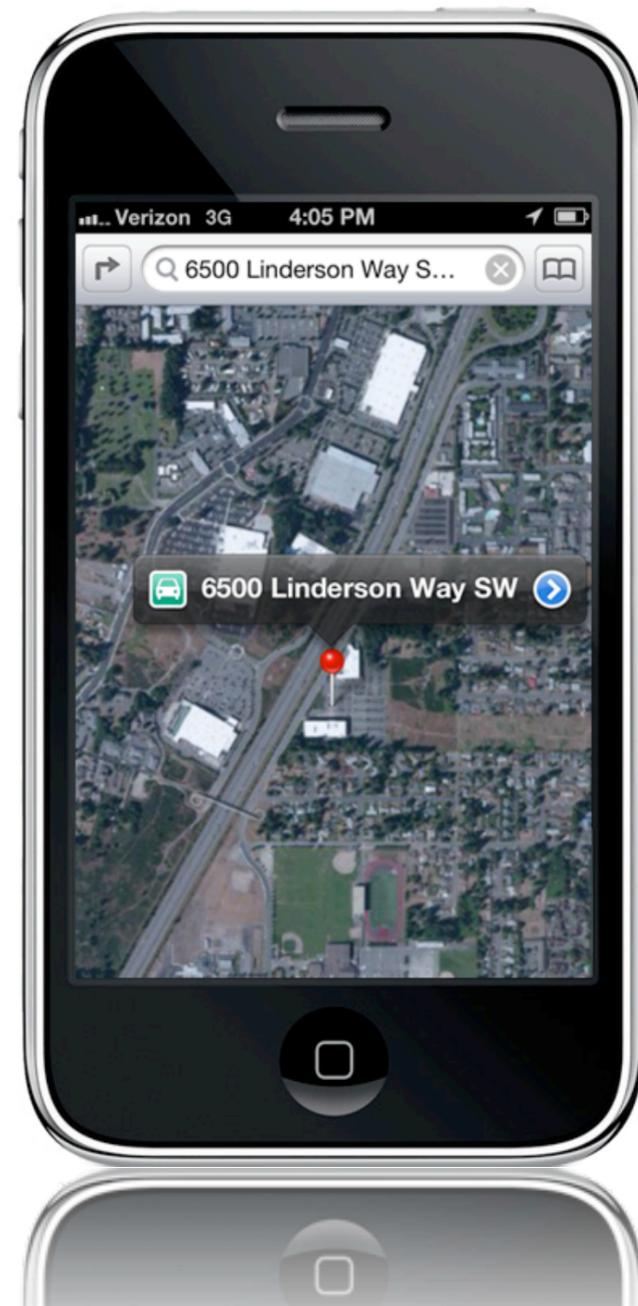
The website is designed to return a lot of information that is not necessary for a mobile user.

We used Jakob Nielsen's usability study to make sure we were not wasting the users' time. Mobile users are in a hurry and get angry if you waste their time. Phones have a much smaller screen so the information needs to be easily understood and read on a small screen.

How the app would be used

Search options

- GPS
- Address
- Zip + 4



We want them to use the GPS option and we guide them to use it in the way we intended.

Once the user initiates the search, what information does our mobile user actually need?

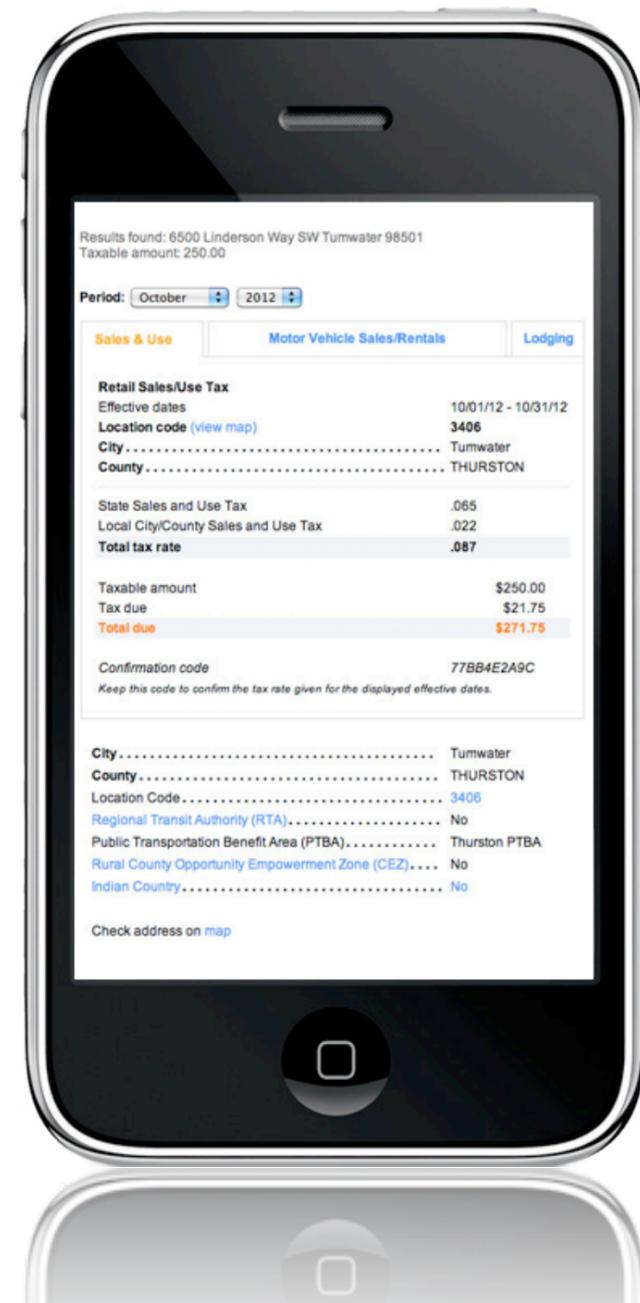
Search results

Primary information

- Sales tax rate
- Confirmation code
- Address

Secondary information

- Location code
- Effective dates



Narrowing this down to only the necessary information was not as easy as it sounds.

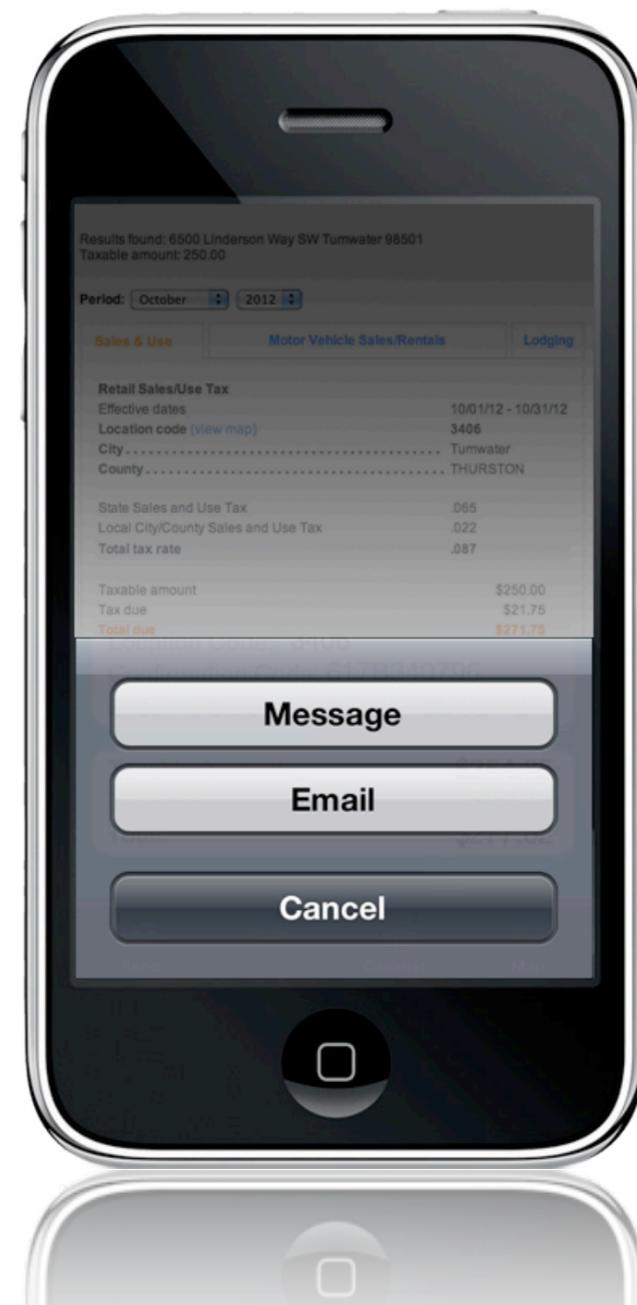
How they use the information

Primary use

- Save
- Send
- Title

Secondary use

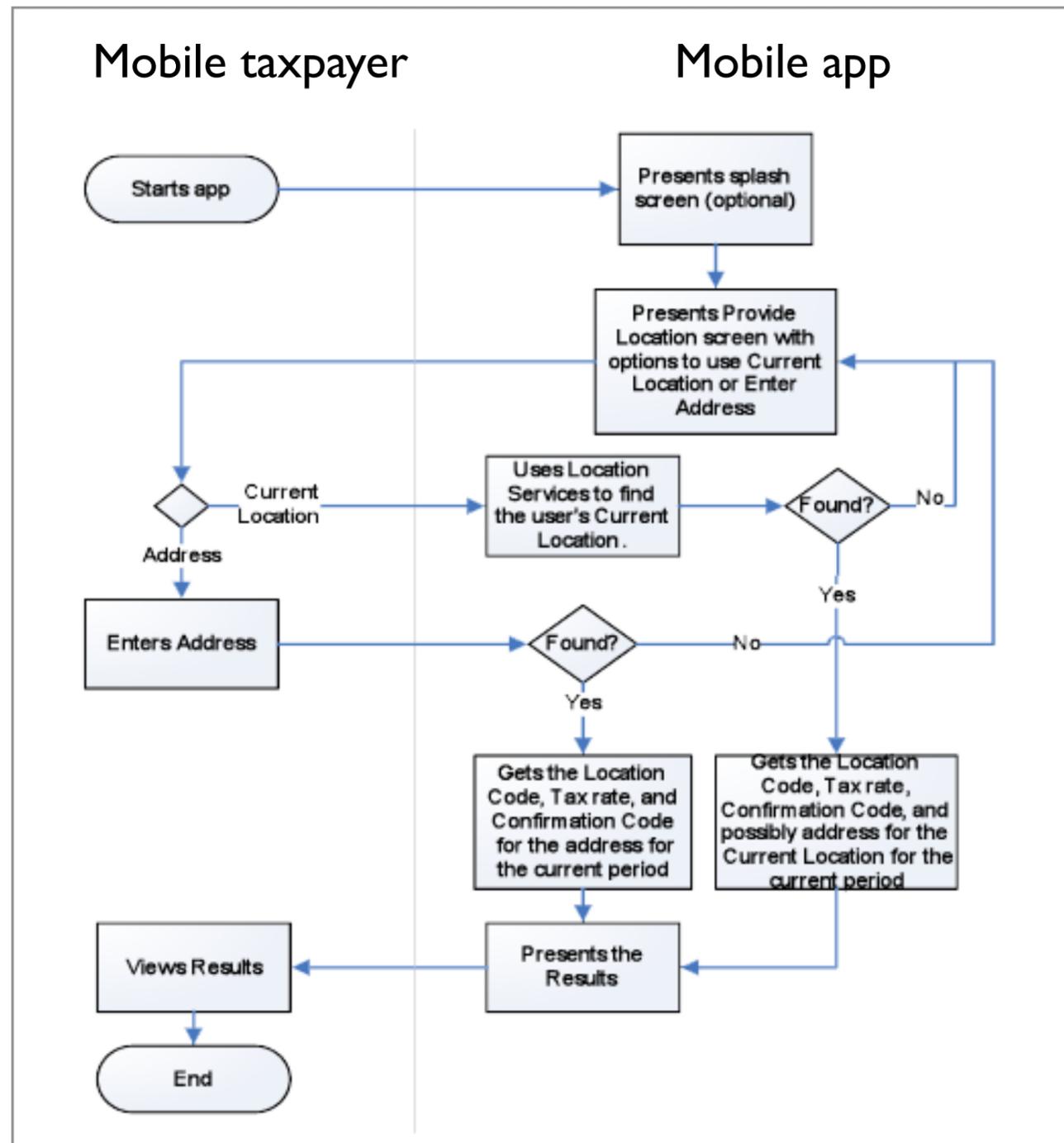
- Map
- Calculate



How would they use this information?

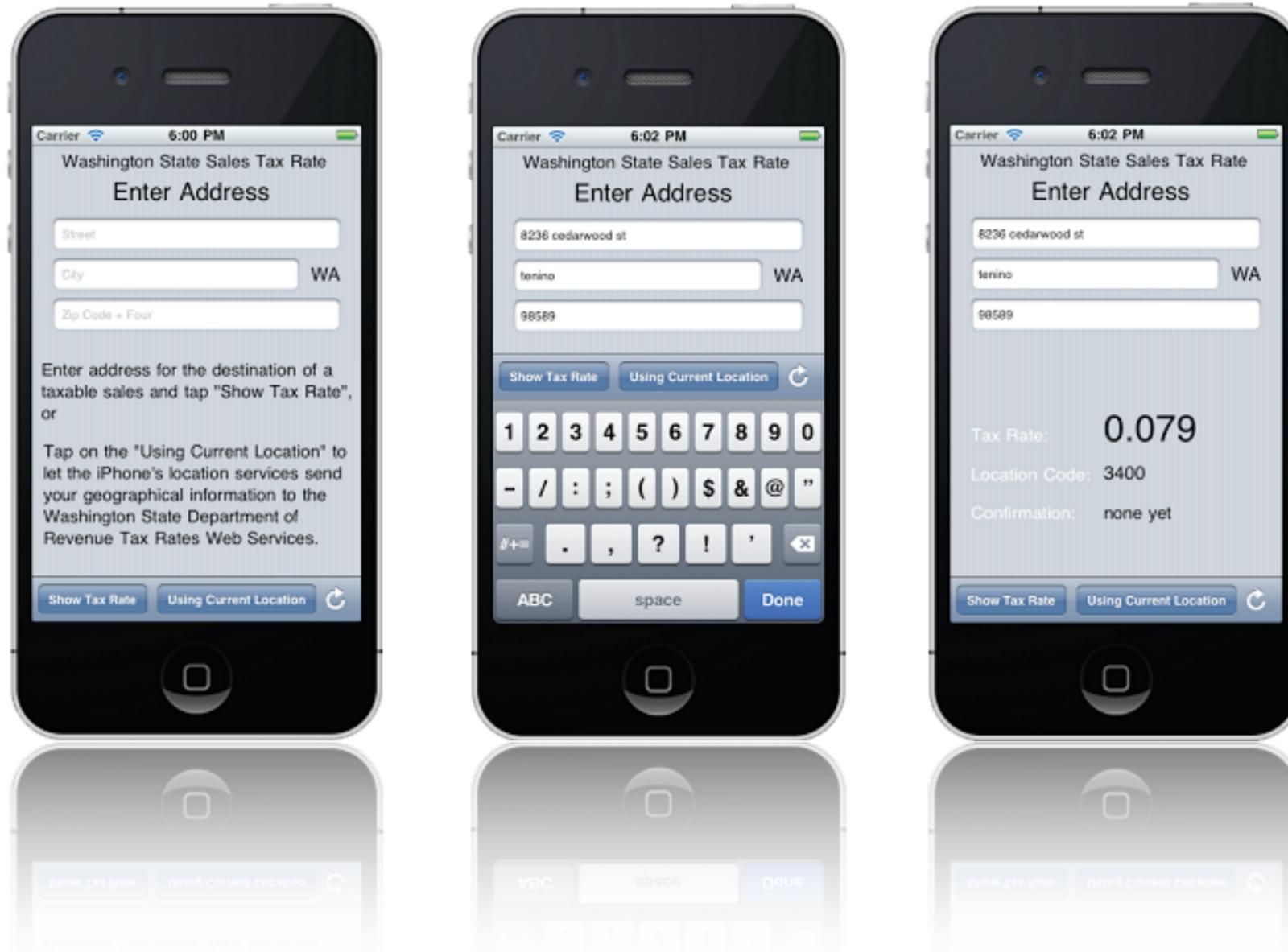
Mobile users wanted to get the information fast, do something with it and move on.

Design and development



The requirements document helped us develop our process flow diagram.

Design and development



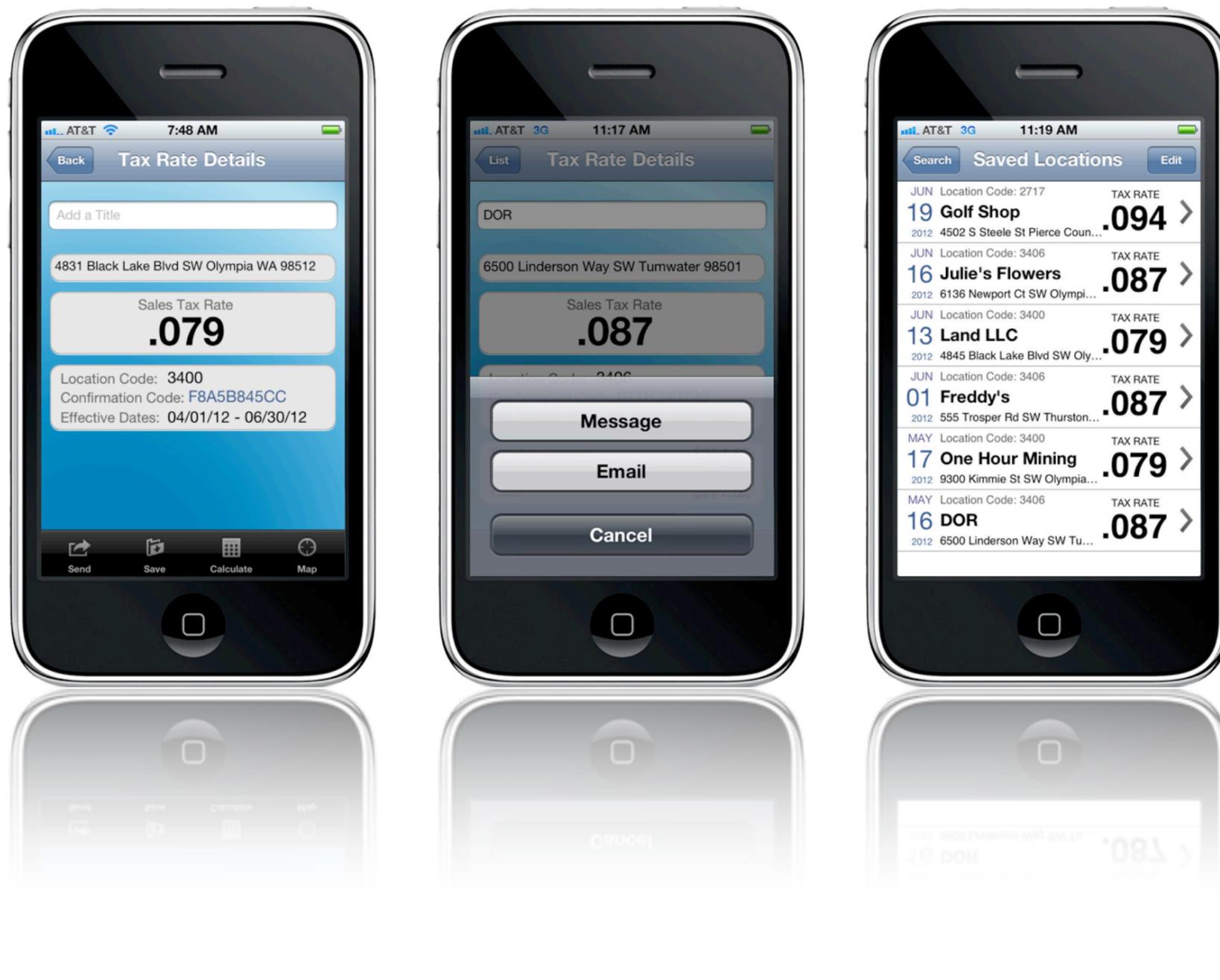
Develop a prototype.

The prototype was not intuitive or user friendly.

How would the user move between screens?

Adhere to the design and branding guidelines of the agency. It needed to look like a DOR product.

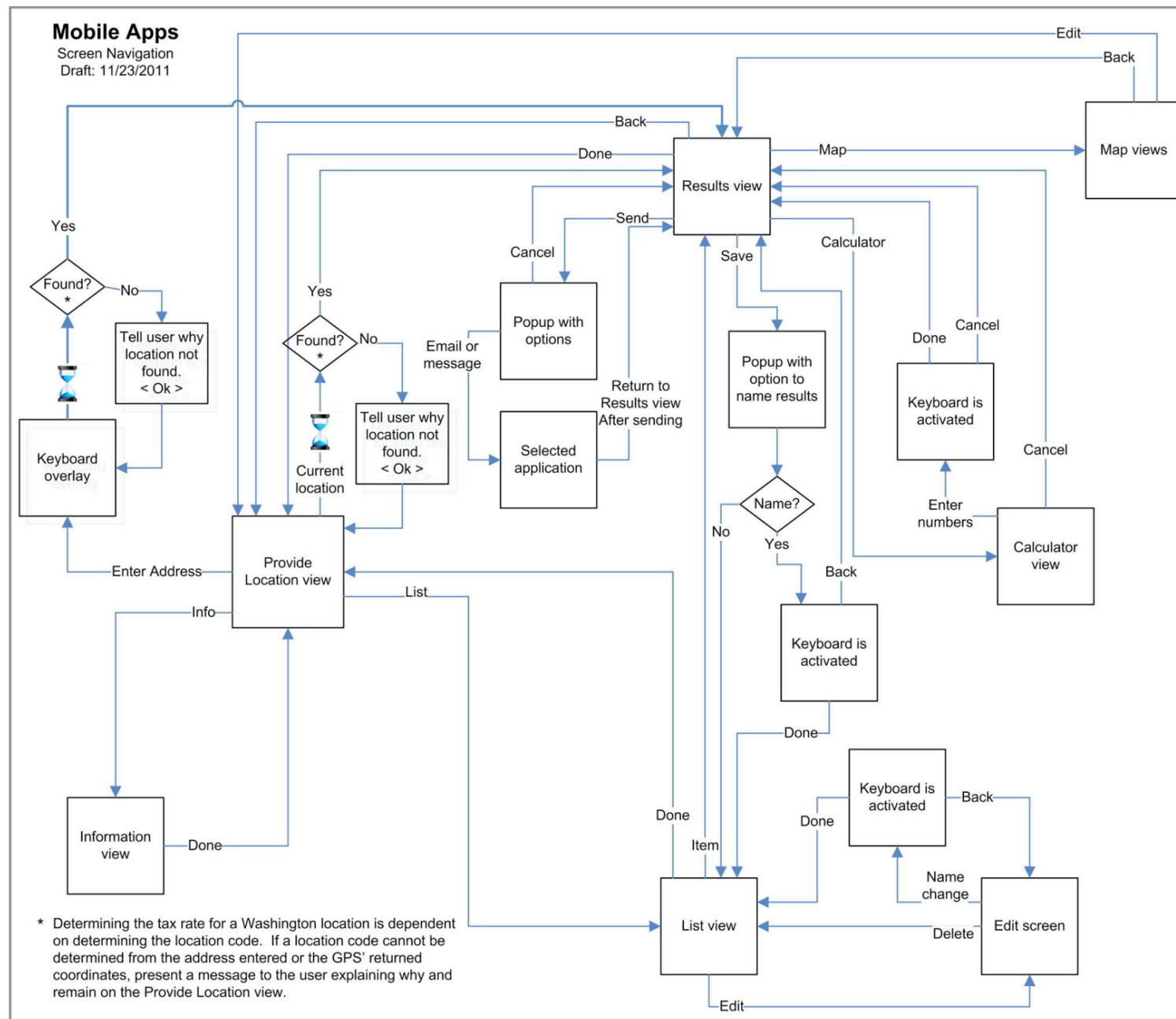
Design and development



We gave the prototype to usability experts. They did a great job applying usability guidelines to each screen and making the information easy to read and understand. This process went through several reviews and each time it was refined and made easier to understand and use.

One of the hardest parts was the navigation and how the user would move between screens. Making the app intuitive for the user is extremely important. This is a lot easier said than done and is really much different than a website. This led us to create a navigation flow diagram.

Design and development



This helps “guide” the user to use the app as we intended. You don’t want to force your user to do things but gently *guide* them into a direction or a way of doing things. This allows us to “prompt” the user in the direction we want them to go. Doing things like adding a title, or making sure to use the mobile devices’ GPS function, helps the user get a more accurate rate.

Demo



Next steps

- Android app
- HTML 5
- Incorporate feedback
- Marketing
- Evaluate mobile data

Questions?

<http://dor.wa.gov/taxratemobile>

<https://itunes.apple.com/us/app/wa-sales-tax/id534590445?mt=8>