

# The Apple iPad in Government

OGITA Recommended iPad Options & Configurations for Government Agencies



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## **Background**

OGITA, as an organization, has always been involved in working with vendors and new technologies. When Apple announced that the iPad was being developed, several members of OGITA got involved with following the architecture and app developers' interest in supporting new tools. Once the iPad was made available to the public, several members purchased them and started testing their applications, accessories, tools, and mobile reliability.

A project team emerged and started collaborating together to test applications and see how they could work in the government and business world. Hundreds of apps were evaluated; developers were spoken to in order to evaluate the life cycle as well as the future improvements on apps that met the requirements of the team. Many accessories such as cases, keyboards, styluses, chargers, etc., were evaluated to determine the best of the best.

After eight months and many discussions as well tedious testing, the apps listed below were agreed on to be the best and thus recommended by OGITA to be used as part of a government mobile tool. But this document is an ever-working document with updates being made as new apps come out or as old apps are phased out for newer Apple operating Systems or hardware, such as the iPad 2.

The applications listed in this document are not the only apps that would work in a government environment but were the best apps from the hundreds tested by OGITA members as part of the study. The techniques are a starting point and every organization will need to modify the configurations and documents for training based on their individual needs.

This document contains the results of OGITA GIS for iPad task force. This task force has spent several months testing all the GIS apps from the major vendors that are listed later in this document and their findings are in the final chapter of this document. In May or June of 2011, the full project test results and all minor detail will be published. Watch the OGITA website for the full document during that time.

## Configuration Methods

There are two configuration methods. One locked down, and one open. There are several variations on these configurations and each agency will have to decide on their own options based on which configuration Upper Management will agree to and support.

- Non-Locked or Un-Managed: This technique allows the IT support staff to do the initial setup and application installation. After the installation the iPad is given to an end-user who then is allowed to download and install updates for installed applications, install new applications and modify the iPad's settings as needed. The iPad, by design, can easily be wiped clean, re sync to iTunes, and all applications be reinstalled with no additional purchase. This makes it a very easy device to support for users.

Typically IT support will use a City owned credit card and purchase all the initial applications. The best method is to use the technique described below in the section named "Gifting". It is best to actually use the end-user's iTunes ID to install the applications once iPad is delivered and not a generic City owned iTunes ID. This allows the end-user to get updates for those applications since updates go to the iTunes account that originally downloaded the application. Once the iPad has the initial applications purchased, the end-user will then use their own personal credit card or city issued credit card, depending on how their particular city has planned on future application purchases. It is better to require each end user to utilize their own personal credit card to ensure that municipal funds are not used to purchase anything personal for the iPad in the future. Based on the City's policy and procedures, purchases for City related applications can be reimbursed to the employee or the employee can use their own municipal issued credit card.

- Locked or Managed: This technique allows the IT support staff to do the initial setup and application installations. After the installation, the iPad is locked down by using tools in the Settings application of the iPad, in the Restrictions area of the General tab. Typically, IT support will use a City owned credit card to purchase all the initial applications. The best method is to use the technique described below in the section named "Gifting". Then if an application needs an update, the iPad will be brought back to IT staff, updated and then returned back to the end user. Installation of new applications by the user will not be allowed under the locked or managed configuration. The iPad will have to be brought to the IT staff to purchase and install new applications. Some applications will not function as a normal application if they require access or approval from a locked feature. Keep this in mind of you plan on going with a locked down version. Apple does not have an Enterprise Deployment product for iPad and iPhones. As they mature as a business technology, the option for a managed rollout may be added by Apple.
- Gifting: Using the Gifting method to purchase applications is by far the easiest and best way to keep track of purchases for accounting as well as ensuring a Credit Card number is not used on every iPad and possible left on the iPad when delivered to the end user. To use Gifting the IT Support will log on to their own iTunes account that has a City owned credit card tied to it or an even better technique is to create an iTunes account that is only used by IT to purchase

applications for other users and has a City owned credit card tied to it. This account is never used on any actual iPad or iPhone or synced with any device.

To gift an application to someone else, follow these steps:

1. Start iTunes on the IT computer.
2. Choose the iTunes Store option.
3. If you are not logged in using the IT support ID or the ID you wish to use, then click on Sign In that is in the upper right corner of the store and log in.
4. Then in the Search field above that enter the application you wish to gift, for instance let's use iAnnotate for this demo. You could click on the link that says App Store and just look for the app you need but there are thousands of apps and it is much faster to search for it.
5. You will then see a list of items that have the search word in them. It may list applications, songs, videos, or anything else it finds in the iTunes store. Scroll down until you find the correct one that lists your application and ensure it is for the iPad or the iPad/iPhone. If you see it listed as an iPad version and in a different list as an iPhone version, choose the iPad version, which is better for the iPad.
6. Under the app icon or next to it you will see a button labeled with the price and "Buy App". Even if it is free, it will say "Buy App". For our demo using iAnnotate it will say "\$9.99 Buy App". Next to that button will be a small button with down arrow (upside triangle). Click on that down arrow and an option list will appear.
7. Choose the option "Gift This App".
8. Next a screen will be displayed with options and who to gift to. This is the place you decide how you want to gift. If you are doing an initial install then choose the "Print gift myself" option. If you are buying an application after the iPad has been delivered to the end user and want to send the gift to the user, choose the "Send gift via email" option.
9. If you choose the "Print gift myself" option you will then have to fill out the Sender's Name, Recipient's Name, and Personal Message. If you chose the "send gift via email" you will also have to fill out the recipient's email address. This is where you can document the gifts and use the printed receipt for your accounting department. Normally the Sender's Name is the IT person using their credit card. The Recipient is the iPad end user's name, and in the Personal Message field put in the amount paying for the App.
10. You will then see a screen that says Buy Gift. You can still cancel here but if you click on Buy Gift, it will be purchased.
11. After purchase you will get the option to "Print Now" or to "Gift Again" . Use the "Print Now" option to print a receipt for accounting as well as installation. The receipt will have the "Redeem Code" needed to install on any iPad.

12. After Printing you can “Gift Again” to purchase the same app again and give to another user. Or you can choose “Done” and start all over on the next app.
13. To install the app, look at the printed receipt and it will have a “Redeem Code” on it. Go to the iPad and start the app “App Store”. Choose the “Featured” icon at the bottom of the App Store.
14. Then scroll down to the bottom of the “Featured” Screen and choose “Redeem”.
15. Enter the Redeem Code from the receipt. Once you do the app will be installed on that iPad and the Code will not work on another iPad.
16. If you purchased multiple apps, the iPad will ask you to enter the next code and install another app. Otherwise quit and you are done.

## Equipment Configurations

There are several different options available on the size of memory storage and the type of wireless access, as well as a wide range of useful accessories. There are also now two types of iPads, the iPad 1 and the iPad 2. The main differences between the two is that the iPad 2 has a front and rear camera, faster processor, full 1080P HD output, thinner, and a flatter back. The iPad 1 is now cheaper if you can find it in a model and size you wish. Many still purchase the iPad 1 to save money as most applications do not require the above new features to work in government.

### iPad Wireless Options

The iPad is currently sold in two different wireless configurations, WiFi with cellular 3G and WiFi only.

- **WiFi Only:** The WiFi only version requires you to connect to any 802.11(b, g or n) wireless WiFi network in order to send and receive email, browse the Internet, update your calendar, update your Dropbox files, get GIS maps, or other network required types of data exchange. The WiFi network can be one inside a municipal owned building, the user's home, a restaurant, library, or other public hotspot. The WiFi network can also be provided from a cellular hotspot device like a MiFi or cellular smart phone. The MiFi is credit card size device from almost any cellular provider that will connect to a Cellular tower. Once connected to the cellular tower, the MiFi will broadcast a WiFi signal so that the iPad can connect to it and thus on to the Internet for email and other Internet required data. Up to five users can use the MiFi at one time so it becomes not just usable by the iPad but also by an iPhone, laptop, or any other Wi-Fi enabled device, at the same time. Several modern cell phones now come with a hotspot options that allows them to become a mobile WiFi hotspot using the cellular phone network.
- The WiFi/3G version has a cellular wireless card built into them. At this time Verizon and AT&T are the only two cellular providers that have integrated wireless cards built into the iPad. If your iPad has one of these integrated cards, you do not need a WiFi network or MiFi cellular hotspot to access the Internet or exchange data, access email and other applications. Both Verizon and AT&T charge a monthly fee for this connection, which is generally \$25-\$35 per 2 GB of data (plans vary by region and vendor). Most of these connections are on a month-to-month term with no long term contract required and are directly payable to AT&T or Verizon. Both providers generally send out warning notices when you get close to exceeding your 2 GB of data usage per month. If you go over your 2GB limit, you are generally charged another 2 GB data fee. If you go over that 2GB, you are charged another 2 GB data fee and so on. Keep in mind that 2GB is a lot of data but each user's data usage should be monitored the first couple of months to determine which data plan is best for that individual user. Both providers have additional higher volume data plans available if the 2GB plan does not provide sufficient data capacity.

Some agencies will use the MiFi card and others will use AT&T or Verizon, both will be used only when a free or corporate WiFi connection is not available. Most WiFi hotspot connections are generally faster than a MiFi or 3G connection.

## iPad Storage Options

The iPad comes in three different storage amounts 16GB, 32GB, or 64GB. Typically the 16GB should work for most situations. Apple uses a very good compression routine thus most applications don't require much storage space. Most storage space is consumed by documents, emails, GIS data, music, video, etc. Each agency will have to decide on which version best fits their storage requirements.

Currently, storage on the iPad cannot be upgraded and additional storage like a SD Cards, USB drives or external hard drives are not supported (except for photos), so the selection of storage should be a serious consideration. You might use 16GB for Council and 32 for potential GIS users. A Google Earth GIS solution does not require much storage space but other solutions store GIS related files on the iPad and may consume considerable storage. Email generally does not require a lot of storage unless you synchronize email with an exchange type server that allows the retention or a large number or emails or allows the sending of large attachments.

### ■ Current Pricing:

- 16 GB iPad (WiFi only) is \$499.
- 32 GB iPad (WiFi only) is \$599.
- 64 GB iPad (WiFi only) is \$699.

If you want to add the AT&T or Verizon 3G built-in wireless option, it will generally cost an additional \$130 plus the monthly data fee. If you order from the Apple website you can get free engraving on the back of the iPad. You can purchase iPads from the Apple corporate stores in Tulsa and Oklahoma City as well as most Best Buys, Radio Shacks, Targets, and Wal-Mart's. Some Verizon and AT&T wireless stores also have iPads available for sale. If you take in your municipal tax exception certificate to Apple, Best Buys and Wal-Mart Stores, you can usually make tax exempt purchases. Apple stores also provide discounts on accessories to government agencies when you make your purchase from an Apple Business representative at one of the Apple corporate stores.

## Accessories and Screen Protectors

There are several accessories and other support items available for the iPad.

- Screen Protector: One of the more necessary accessories is a screen protector. Some sort of clear, plastic screen protector should be used to help keep the iPad screen from being scratched. There are several brands available but some are not as effective as others. One of the best is the screen made by Zagg. It comes with a lifetime warranty so if your screen protector is ever damaged you can get a free replacement. Zagg screens can be purchased from the Zagg website [www.zagg.com](http://www.zagg.com) , BestBuy and at Zagg kiosk carts in some shopping malls.
- Zagg screens can be installed by IT staff or by attendants at Zagg kiosk carts. OGITA members have reported that in the Zagg kiosk carts in some malls, attendants will install the screen protectors on an iPad for around \$11. Zagg kiosk cart locations can be found at [www.zaggcart.com/OK](http://www.zaggcart.com/OK) . This site also provides online shopping for screen protectors and back protectors. Special order back protectors are also available from Zagg and most Zagg resellers.

Occasionally discount coupon websites such as [www.retailmenot.com](http://www.retailmenot.com) will have 50% off coupons on Zagg purchases, so be sure and check these sites before going shopping. OGITA has an email address and phone number for the Zagg cart in Tulsa's Woodland Hills Mall. If you have a several iPads or other devices that need Zagg screen installations, your agency may be able to make arrangements with the operator of the cart kiosks to come and pick up the devices up at your agency. OGITA plans to sponsors monthly meetings where the cart operator will come and pick up devices needing installations, which are brought to the meeting by OGITA members. Watch the OGITA website for these meeting dates.

- External video connections. There are several options that allow viewing of the iPad on a larger screen. By using the Apple "iPad to VGA" connector you can display your iPad on a larger traditional computer monitor. You can use this adaptor to send out presentations to a projector as well. By using the keyboard mentioned below along with the VGA adaptor and external monitor, you can make the iPad a possible desktop replacement for users who:
  - Mainly email
  - Have limited Word and Excel use
  - Browse the Internet Browsing
  - Use a few smaller applications.

Using this configuration, the user can take their entire office desktop with them everywhere they go. On the iPad 1 only presentations and movies can be sent out to an external monitor. But on an iPad 2 you can send all video out so it is almost a full laptop equivalent.

Other optional devices for viewing videos and PowerPoint presentations are available from Apple and other manufacturers/suppliers. These devices connect to the iPad and provide either a Standard Definition or High Definition out using RCA connections.

- **Bluetooth Keyboards:** Zagg makes a metal case with a built-in bluetooth keyboard. It has a built in stand that allows the iPad to be displayed either horizontally or vertically. The keyboard is rechargeable from a USB port on your computer or by plugging it in to an AC USB adapter such as an iPhone and iPad charger. It adds several extra keys like Home, Search, and others as well as arrow keys. It sells for \$99 which is about the same price as buying a case and the Apple keyboard mentioned in the next paragraph. The external video adapter is still accessible when using the Zagg keyboard.

Apple makes a conventional Bluetooth keyboard that will connect to the iPad. It is useful when you want to have a larger, full size keyboard. When using the iPad with an external monitor or when typing for extended periods, it is more comfortable on the hands to use this larger

keyboard. The iPads' virtual keyboard is not displayed when the external keyboard is used. This keyboard costs about \$59. Overall the Zagg keyboard is a better option if you want portability and Apple keyboard is a better option if you are going to use the keyboard at a desk, or using the iPad as a desktop replacement.

- **Cases:** There are many cases out there. This will be an individual choice you will have to make. Some just have a rubberized back and do nothing to protect the screen. Others fold close and protect the screen while transporting the iPad. Some cases also fold to allow them to be used as a stand for viewing or typing.

There is a case that also has storage for paper and pencils, business cards, and has a zipper enclosure to protect from dust and water while transporting. You can find this on the web by searching for "rooCase Executive Folio case". It is about \$35. You can buy some cases at Wal-Mart, Radio Shack, Best Buy, Staples, Apple stores etc.

Staples carries a couple small multi pocket cases so that you can pack the iPad as well as many accessories including the Bluetooth keyboard, chargers, screen cleaners, and other supplies. [www.boxwave.com](http://www.boxwave.com) carries many cases you can look at online. The Zagg keyboard/case mentioned above is one such multi case.

- **Styluses:** There are many styluses available as well. Our tests have shown the silicone rubber tipped styluses to be superior to all others. You can see some of these styluses at [www.Boxwave.com](http://www.Boxwave.com). And you can buy these rubber tipped styluses at Best Buy, Office Depot and Staples and are sold under the Targus label instead of the Boxwave label. Boxwave and Targus sell a stylus with a ballpoint pen on one end and a silicone rubber tip on the other end. This stylus is useful to carry inside the zippered "rooCase" mentioned above.
- **Chargers:** Chargers are important. You may want to purchase an optional car charger. Conventional iPhone car charges do not work with iPads because the iPad requires a 10 Amp charger. iPad car chargers can be purchased at many different stores. Just make sure that the charger says that it is compatible with the iPad. If the manufacturer's instructions do not list the iPad as a compatible device, the charger will most likely not work on an iPad. You may also want another home charger to carry with you as a backup. This ensures that you will always have a charger available when at that special meeting you suddenly realize you are running out of battery.

- **Screen Cleaners:** A screen cleaner is a necessary accessory. Since the iPad screen is touched regularly by fingers it will get body oils on it. Several good moist cleaners are out there. Just look for the ones that say iPad/iPhone compatible so that the iPad screen is not damaged by the solution. Monster makes a multi use cleaner that is small and flat and easy to carry.

## Application Configurations

There are currently four recommended configurations: Council/Mayor, Department Heads, IT Staff/Support, and department end-users.

### MobileMe Configuration

It is highly suggested that you use MobileMe to setup a Find My iPad account. When you first setup a new iPad it will ask you if you wish to set up a MobileMe account. You can do it then or do it later, but either way it is needed to be able to locate the iPad if it is stolen or lost. During the setup of MobileMe it will ask you for an account to use. You can use the user's iTunes account or you can use a shared IT resource account. It is not used for purchasing or anything else except enabling MobileMe to find the iPad. If you create a shared IT resource ID, it can be used on all organizational iPads and that one account can know where any iPad is in case the location needs to be found. By using the Find My iPad option, you can go the website [www.me.com](http://www.me.com) and type in the same iTunes account and password and a map will come up and display where the iPad currently is. This is useful if you lose the iPad or have it stolen. It then allows you to send a message to the iPad screen so you can ask the person who has it now to call you or meet you. It has a feature where you can lock the iPad and as a last resort you can issue a remote wipe and it will erase the iPad. If you have an iPhone you can do the same and use the same ID for both the iPhone and iPad. There is also an app called FindMyiPhone that you can put on the iPhone and trace the iPad just like using the [www.me.com](http://www.me.com) website

### Council/Mayor Configuration

- **iAnnotate** for viewing and markup of PDFs including agendas, minutes, and other documented items that are shared with Council members. iAnnotate is the leader and is chosen by most of our municipalities. It currently costs \$9.99 from the iTunes store. It allows you to use a stylus and write on the PDF document like you would on notepaper. It allows highlighting using a highlighter. You can choose different colors for the pen and the highlighter. You can underline, highlighter, insert drawings, bookmarks, stamps, and also use the keyboard to type in notes on the PDF. It can also utilize bookmarks created by automated agenda software. It allows folders on the iPad to be created by subject or by a date. It can connect to a remote server and sync the agendas or PDFs to the iPad.

OGITA has been told by the makers of iAnnotate that the software will soon provide a "push" feature that will automatically distribute documents out to users. When this occurs users will not have to do anything and the agendas will appear on the iPad ready for viewing and markup. Once marked up, the PDF can be emailed to anyone, printed, or synced back up to a central server.

- A Note Taker. There are many note taking apps. The three that performed the best and offered many features as well as easy to use are the following:
  1. Penultimate for taking notes with a stylus like on normal paper, drawing, and other free form diagrams. It can email notes in JPG format so you have a copy at your desk or can send to someone else. Penultimate costs \$3.99. It allows different color pens and line sizes. Penultimate also uses wrist protection, which allows your wrist to rest on the iPad and not interfere with note taking. Without this feature it makes note taking rather hard, as your wrist will leave little marks on your screen and virtual paper. Penultimate is the easiest to use and most users can pick it up quickly.
  2. NoteTaker HD does most of what Penultimate does but adds more features like the option to write your notes at a box on the bottom of the iPad screen and then it will insert them above on the page where they go. This allows you to write a little larger with the stylus. It also allows easy insertion of pictures and other PDFs. It does take longer to learn and to use as there are more options than the basic Penultimate does. Cost is \$4.99.
  3. PaperDesk which does most of what the previous two do but has two other features, it can take audio recordings that are synced with what you type, and it has a presenter mode for presentations. The audio recordings will sync with iTunes to your desktop and you can listen to the recordings on your desktop. The presenter mode allows you to use the iPad screen as a drawing board and send the output to the external port to a projector. Good for collaboration efforts or ad hoc presentations.
- DropBox: DropBox is a cloud based file synchronization and storage program that allows the user to sync files and folders on the iPad with multiple platforms or users. Currently each user gets 2GB of storage for free with additional storage available for purchase. Most users do not need more than the 2GB. Currently each user has their own DropBox account and can store all their files in it. Their iPad, iPhone, Blackberry, Laptop, etc can access the files and they are all kept in sync so multiple versions of the same file are prevented.

Using the “Public Share” option, users can share folders with other users if they desire or can access shared folders from other users that have assigned them public share rights. No more using FTP to transfer or having to email a large file, just share the DropBox folder or file. DropBox is working on having a corporate version which will allow an IT staff member to setup rights and accounts much like you can on local servers now. It will cost and require more intervention from IT staff to maintain and control rights. Currently DropBox accounts are supported in many iPad applications for storage and the sharing of documents such as Word files, Excel Files, PowerPoint files, PDFs, photos, and even short videos. It is easy to use and set up. A small program runs in the background of your Windows or Macintosh computer to keep the files synced with your local computers and the iPad.

- Google Earth: Google Earth on the iPad allows the user to see the same aerial views from Google Earth that you can view on a desktop computer. It is useful to look at neighborhoods and other areas when construction or projects require aerial viewing. It also allows for use of map layers so that it can be a small, easy to use GIS system for much of the data that you may

have in your current GIS system and do not want to pay for an expensive GIS app that tends to run slower and is harder for the end-user to use. There will be GIS apps for the Department end-users, who require it, but most others do not require that type of system and Google Earth fits that need perfectly. There is no cost for Google Earth it is free.

To get your own data layers to display on Google maps you use maps.google.com and import KMZ or KML files to a www.maps.google.com free account. Then on the iPad you access the Google Maps account and all of the imported layers are there available for use. Using Google Earth in this fashion responds faster and is much easier to use than most of the true GIS apps that cost more. The advantage is that once set up, you can also allow all users, not just ones with iPads, to access these data layers on a standard desktop computer or conventional laptop by going to maps.google.com. When you upload and create these data layers on Google Earth, you are given the option to make the layers public or hidden.

We suggest that you use the hidden option and then only the people given the account password can view the data layers. One disadvantage to using Google Earth to show KMZ files is there is a limit to how much data you can upload. The limit is several thousand points but there is a limit.

- The Weather Channel: This app is very useful for watching the current weather as well as projecting future trends. It also shows actual weather radar displays as well as videos of the current weather events being shown on The Weather Channel. It also tracks severe weather events. You can use your current location or put in multiple locations. It is free.

- MyCongress: Allows the iPad user to pick out Congress members and monitor their activity, recent news, YouTube videos they put out, their Twitter Feeds, their websites, Contact information, and the Open Congress website, which displays a large amount of information about voting and current projects. It is free.
- Mike Allen's Playbook: Another resource for what is going on in Washington and around the world in Politics. Information is updated daily by multiple feeds and Mike Allen. It is free.
- The Hill HD. The Hill is yet one more resource of political information and news. Broken out more by various means it does contain information not yet seen in the other two. It is free.
- RtCongress. This is an app that displays more live items about Congress. Such as updates live from the floor, Whip notices, voting, hearings, documents, etc. It is free.
- Pcalc Lite. The iPad does not come with a calculator. Pcalc Lite is a free calculator that offers a little more than just a plain calculator but is easy to use. It is free.
- USA Today. A source of information from around the world. It contains most of the main news items from the printed version of USA today. It is free.
- ABC News. Gives live updated information on news around the USA and the World. It also allows viewing of the various ABC news shows. It is free.
- CBS News. Gives live updated information on news around the USA and the World. It also allows viewing of the various CBS news shows. It is free. It is a little slower to respond than the ABC application.
- Fwix. Fwix is a local news reporter. It will give you news about your current location or a location of your choosing. Typically it will give you news as reported in Oklahoma City, Tulsa, Wichita, Dallas, etc, the larger cities. But some of these feeds do have information about other Oklahoma based Cities. It is free.
- iBooks. Allows access to thousands of free books as well as other books for purchase. Much like the kindle application but from Apple. It is free.
- Wikipanion. Wikipanion is an application that gives access to all the various information the website WiKipedia. It serves as a collection point for large amounts of data about almost anything. It is free.
- Dictionary. Exactly as the name says, it is an electronic dictionary. It is free.
- Dragon Dictation. This allows you to dictate to the iPad in a spoken voice to create a text based written version of what you said. Then it can email that text to someone, it can be copied and texted, it can be sent to Facebook or to a twitter page. It is free.
- White and Yellow Pages. Allows an iPad user access to the White and Yellow pages with search capability and phone number reversal.

- A Task manager. There are hundreds and too many to evaluate all of them. In reading reviews, looking at options, Apple staff recommendations, the following appear to be the top of the heap and in testing all three appear usable:
  - 2Do: Tasks Done in Style. \$6.99. The most user friendly and eye appealing task manager and loaded with features. Will sync with Toodledo (web based free task manager and a better choice to sync with) or with a desktop using its free task syncing procedure that runs on the desktop but requires a WiFi network same subnet connection. Tons of options as well as voice recording. Easy to use and looks like an iPad app should. It can sync with Outlook using another vendor's free app that run on the local computer. It is named Chromatic Dragon Sync. This can also be used with Toodledo below to sync as well with Outlook.
  - Toodledo – To Do List. \$3.99. This is Toodledo's own app that interfaces in to their web based task manager. Toodledo is a web based task/note manager that is free with limited options. Then they offer upgrades at \$14.95 and \$24.95 a year expanded features. The free one works for most people. They have a list of supported options on their web site at [www.toodledo.com](http://www.toodledo.com). The screen is not very fancy but it does do tasks lists. 2Do above has more options.
  - TaskTask HD (Exchange Tasks). \$4.99. This so far is the only one to interface in to Exchange to use its task list. Very basic on look and feel. Does not support all Exchange options but some. Will sync remotely if you have Exchange Web Services on Microsoft Exchange 2007 server or if you have DAV access enabled on a Microsoft Exchange 2003 server.

OGITA has many members who do not use the "tasks" function provided by Exchange, but use external task managers that are more robust. OGITA is leaning toward 2Do, because it has some very good task related options and can synchronize with Outlook using a separate application that is installed on a local desktop computer. If TaskTask HD were to improve and become more compatible with Exchange options, it might be good selection as well. Toodledo appears to be the big leader in task manages and you can use its browser based web interface without installing the basic app on your iPad. , just can not get to your tasks unless connected to internet. But it does have a loyal following.

- Printing. iOS 4.2 added printing capabilities but it is very limited. The printer must be one of only a handful HP supported printers and on the same subnet as the iPad. OGITA still recommends using PrintCentral. PrintCentral allows printing from the iPad to any wireless printer on the same subnet as you are. It also allows remote printing using a Google email account and a small monitoring app on the computer with the printer connected or access to a network printer. It costs \$9.99 and is well worth it. It allows printing of web pages, email photos, documents, and other items. Built-in iOS 4.2 printer support does not do all of these and as mentioned, limited.
- Bat Reminder. This tool will display how much time is left to do certain iPad functions based on the amount of battery charge you have left. It will display items about Cellular Internet, WiFi Internet, Audio, or Video lengths. The cost is free.
- Built In Apps. There are several built in apps that come on every iPad that cannot be deleted. These include:

- ❑ Maps (allows viewing of standard street maps).
- ❑ Safari (Internet web page viewer)
- ❑ Calendar (multiple calendars can be accessed)
- ❑ Mail (multiple emails can be accessed)
- ❑ iPod (playing of music, podcasts, audiobooks, etc)
- ❑ Settings (You can lock some of these down)
- ❑ Photos (collection of photos synced, sent by email, etc)
- ❑ Contacts (can sync with Exchange or other remote LDAP contact lists)
- ❑ Videos (no videos come preloaded)
- ❑ YouTube (a link to the YouTube website)
- ❑ App Store (where you go to purchase more apps or you can use iTunes on your desktop computer)
- ❑ iTunes (used to purchase music, audio books, and podcasts)
- ❑ Apple Store (purchase Apple accessories online)
- ❑ Notes (this is a keyboard driven note taker. No stylus free form handwriting allowed).
- ❑ Photo Booth [iPad 2 Only] (Allows you to take pictures of your self and save them to your iPad for use in email or websites).
- ❑ FaceTime [iPad 2 Only] (Can talk and see another iPad 2 or iPhone 4 user who has FaceTime turned on. Much like Skype).

## Department Heads/Directors Configuration

The Department Head/Director configuration includes all the items mentioned in the Council Configuration section plus:

- Office Programs. To qualify the Suite must not only read but edit Word, Excel, and PowerPoint.
  - QuickOffice. It costs \$14.99. It graphically looks the best and allows decent basic editing of PowerPoint. The Word and Excel editor does most of the normal Basic commands and will work for most on go editing of Word, Excel and PowerPoint. This app is slowly taking the lead and new functionality is being added in each upgrade. The company that created QuickOffice has created other applications for the iPhone as well as for the desktop that edit Office products so they should be around to support and improve as time goes on. You really can't go wrong with QuickOffice or DocsToGo, except that QuickOffice works better with DropBox.
  - DocsToGo – Premium Office Suite. It costs \$16.99. There is also a DocsToGo Standard for \$9.99, which does not allow use of Cloud storage, like Dropbox, or the editing of PowerPoint documents. The premium version allows the editing of PowerPoint documents, but is not as good of an editor as the interface in QuickOffice, so we recommend that if you have to do a lot of PowerPoint editing you should purchase QuickOffice. Apple Keynote is a good PowerPoint editing program but does not support DropBox. The premium version of DocsToGo can access DropBox, email, or other locations to read, edit, and share Word and Excel documents. The standard version only allows the reading of PowerPoint documents. If you did buy the standard version of DocsToGo, you can do an in app upgrade purchase to the premium addition for \$7.99 with will allow you to get cloud support and PowerPoint editing.
  - Apple Office-like Applications. Apple does make some very good Office products named “Keynote”, “Numbers”, and “Pages”. They sell for \$9.99 each. But currently they do not utilize cloud storage like Dropbox which easily transfer documents back to a desktop system. If Apple adds Dropbox support these apps will become very useful but will cost a little more.
- Motion X GPS Drive is a possible driving directions mapping program. This application is much like a TomTom or Garmin GPS unit but it allows users to get directions before travelling. It can also be used in the car and give spoken voice turn by turn directions. It costs \$2.99 initially and \$20 a year after that. Another useful one is the actual TomTom application. It currently is a one-time purchase of \$29, no yearly fee. Does everything like Motion X a little cleaner, but just costs more upfront. But we believe that TomTom is the much better application for the dollar.
- Remote access software: There are several out there that work great.
  - LogMeIn - for \$29.99.
  - Itap RDP - for \$11.99.
  - Mocha VNC for \$5.99.
  - Iteleport VNC for \$19.99.

- ▣ GoToMyPC for \$29.99.

All of these remote access programs work great but you should decide on this based on how your network is set up. Some do screen refreshes a little faster as well. All require some sort of port openings or server software to work except LogMeIn. It creates an account on the LogMeIn website and an application is installed on each machine you want remote access to. You can then access these machines from an iPad, iPhone, or any other remote computer that has access to an internet browser. LogMeIn does not need a port opened in your firewall because the remote connection is made from an inside request.

- TextPlus. Allows the iPad to have text capabilities just like a cellular phone does. It uses the Internet as its carrier so you must be connected to the Internet to send or receive text messages. The application supplies a “pop up” notification notice just like a cell phone does when you receive a text. One nice thing is that you can have group texts where multiple people can send and receive text messages in to a group so group discussions using text messaging can be accomplished.
- Teleconferencing Applications
  - Skype. The same video conferencing software that has been on the desktop for years. Useful on an iPad to get an AdHoc conference going to discuss troubleshooting strategy or get support. You can do group conferencing if the conference is started from a PC or Mac. The iPad can join it, just not start it. You can get a real phone number and people can call you from a regular phone or you can call real phones. With the iPad 2 you can add video. You can connect iPads, iPhones, Desktops, laptops, other smart phones, etc. Cost for the app is free. Some additional services cost. [www.skype.com](http://www.skype.com) for more information.
  - FUZE Meeting. This application is a lot like Skype. But is the next step towards full mobile teleconferencing. You can show documents, desktop screens, etc. You can join using an iPad, iPhone, smart phone, or any web connected computer. For free you can have a one to one audio conference. For \$9.99 a day you can have up to 15 attendees, still audio only. For \$29 a month you can have up to 25 attendees, only audio still. For \$49 a month you can have 45 attendees, still only audio. But for \$69 a month you can have up to 100 attendees and now you can have video to see the first 10 attendees. The other 90 are audio only. On the monthly plans they are a one-time purchase and do not auto renew. So you can have a one-time meeting and not worry about reoccurring costs. [www.fuzemeeting.com](http://www.fuzemeeting.com) for more information.
  - WebEx. This application is a lot like FUZE Meeting with some minor changes and cost differences. WebEx is owned by Cisco. It does basically the same but allows 25 attendees for \$49 a month and once again it does not auto renew so you can use it as an impromptu meeting organizer. [www.webex.com](http://www.webex.com) for more information.
  - FreeConferenceCall.com is a website used to sign up for a free phone number that you can use for conference calling from any phone. You are limited to 96 callers at a time, the caller pays the long distance charge if there is one, you keep the same phone number every time, and the best part is.....it is free. OGITA and several municipal organizations use it all the time and it works great. More information at [www.freeconferencecall.com](http://www.freeconferencecall.com).

- **GIS Software.** If you also desire to have a more robust multi-layer GIS application than Google Earth, several OGITA member cities are working on solutions and an OGITA “GIS Task Force” has been charged with coming up with “iPad GIS recommendations”. They will report their findings at the OGITA Annual conference on April 29<sup>th</sup>, 2011. They will publish the results in this document in May of 2011. It will be detailed and cover the following apps and vendors:
  - Google Earth (<http://maps.google.com/>)
  - AutoCAD WS (<https://www.autocadws.com/>)
  - ESRI (<http://itunes.apple.com/us/app/arcgis/id379687930?mt=8>)
  - Terrapad (<http://www.fasterre.com/en/products/terrapad/terrapad.html>)
  - GIS4Mobile (<http://www.gis4mobile.com/>)
  - IGIS HD (<http://www.geometryit.com/>)
  - GISRoam (<http://www.gisroam.com/>)
  - PDF Maps (<http://www.avenza.com/pdf-maps>)
  - iExtMap (<http://www.extmap.com/index.php?pid=5>)
  - iCMTGIS (<http://www.cmtinc.com/>)
  - Cartographica (<http://www.macgis.com/>)
  - KMLMap HD (<http://intelligentgadgets.us/>)

GIS systems are more complicated so GIS apps take a while before software developers come up with full interfaces to collect data and not just view it. Some of these vendors have applications already that are very usable and the apps will continue to mature. We suggest you use an iPad 2, which has a faster CPU to help with the intense data that is the nature of GIS systems. Check back on the OGITA web site for an update to this document with the GIS evaluations of the above apps.

## IT Staff/Support Configuration

Most of the applications in the Council Configuration as well as the Department Heads Configuration can be used based on IT staff needs, plus:

- Scany (Networks and Ports). This app allows you to scan network ports, servers, routers, switches, etc. It also allows ping and trace and whois look up. It costs \$3.99
- INetQCheck. This will do a full network evaluation and tell many things about your network as well as the quality. It is free.
- Ookla Speed Test. There are many network speed tests out there and many are good. The Ookla one uses the same test servers as the [www.speedtest.net](http://www.speedtest.net) servers so you can compare to your desktop speeds. It also provides a visual of the speed every packet gets in a graph form, something no other does. It is free.
- WiFiTrack. This will tell you all WiFi networks your iPad can see. It will then test them to see which ones are open with a clear view of the Internet or if what kind of security they require. It also tells you the quality of the signal so you can tell if it is usable or not. It is free.
- Netstat. This will list all your wifi sockets that are running in the background. If you have the 3G iPad, it will also list all the open sockets that are using the 3G radio. Many applications continue to run in the background and use up battery. This tool lets you see what is communicating in the background. For an in App purchase of \$2.99 it will also allow you to see information about the IP address on the other end of the connection, do Whois, email csv files, see ports the socket is using, amount of data it has sent or received, last activity, and more.
- SubnetCalc. This is a subnet calculator. It is free.
- HostMonitor or Host Tracker. Allows you to input a list of servers, routers, switches, etc and then at a glance it will tell you if it can see them or if they appear to be offline. Both are free. Host Tracker allows you to put in ports. If you purchase HostMonitor Pro then you can input ports.
- Vtrace. This allows you to input a host ip address or domain name and it will trace through all the hops to get to that location, even if it goes over seas to hit a domain. You will get a text based list as well as a visual map of these hops. You can click on any hop to get more information about that hop. It is free.
- ISSH. Is a remote SSH terminal. It costs \$9.99.
- Mocha Telnet. Is a telnet application with automation. It costs \$5.99 but there is a free lite version.
- MyRoutersPro. Is a remote access application to get to your routers and change or view their configurations. It costs \$4.99.

- VAlInfo. This tells you many of the hidden workings of the iPad. How much memory is being use? What apps are running in the background? What version of stacks are you using, etc, etc. It is free.
- SkyGrid. This is an automated news collector but covers many technology based feeds. It is free.
- Engadget. Covers various technology feeds and has a review of most every Apple announcement or new accessory for Apple products and other mobile hardware.
- PulsaNews. Yet another news collector but you can pick out all the feeds to collect. Can use it to get Engadget, SkyGrid, and other feeds in one application.

There are many more network related utility apps available. Many have “lite” versions of their applications which allow you to install and evaluate a limited featured version of the application for free before purchasing the full feature rich version.

### Department End User Configuration

These are the daily people in the field who need access to some various parts of your network plus general business applications like:

- GIS information.
- Word documents
- Excel spreadsheets
- Remote access to a servers or workstation

You can pick from all the applications listed in the above three configuration areas and select the applications based on department needs. You can add a free Skype application to talk with iPad users without the use of a cell phone if there is Wi-Fi coverage available or they have the AT&T or Verizon 3G option.

### iAnnotate Server Setup

If you use iAnnotate as your agenda distribution system instead of email then you have to do a couple setup items on a server and router. You start by going to [www.ajidev.com/iannotate/](http://www.ajidev.com/iannotate/) and downloading the Aji PDF Service. There is one for a PC and one for a Mac. Then do a normal install on the machine you wish to use as your iAnnotate PDF server and where your agendas will be accessible from. Typically the agendas are stored on the network somewhere so this machine needs access to those agenda files in order to serve them out when requested.

After installing the Ajo PDF service you need to set it up as follows:

1. Start the service and click on Settings.
2. Give the service a name like Agendas or something.
3. Change the port to some larger number that you have not used on your router. Like 6815.

4. Choose a location for new documents if someone uploads one by accident. Choose a location on the local machine so that it does not interfere or put anything on your actual agenda directory.
5. Leave the box unchecked that says "Replace Originals with Annotated Files"
6. Check the box next to "Allow all devices to connect". If you do not check this box, you will have to approve every new iPad that requests to download the agenda. Since most agendas are public anyway, this saves time by checking it. If you want to though, check it, and then approve people one at a time.
7. Then click OK.
8. Back now on the main Aji screen you will click ADD.
9. Pick out the location of your agenda files you wish to share. Most use a networked drive or share. In our case there is only one secretary that has write rights and can update this directory with the new agendas each week.
10. Once you pick the location it will save it and add it to the list of available areas to download. You can add more locations by starting on step 8 again and adding another location but give a different name. We use one named Agendas, one named Archived Agendas, and one named Commission Communications. This way the main Agenda directory only has the last four or five so it is quicker to locate the current ones. The same secretary moves agendas from the Agendas directory to the Archived Agendas directory as they expire pass the top four or five. You can use this method to distribute any PDFs.



## **Sample Information Technology Policy**

This policy will dictate to users that agency provided technology devices like iPads, Cell Phones and other electronic devices are not to be used for official agency business and not for personal use or personal gain. The policy follows traditional IT municipal practices. OGITA recommends that each agency should use the following sample policy to develop a technology policy for their agency, before issuing technology devices to users. OGITA also recommends that each user acknowledge receiving a copy of the policy with their signature. Other sample policies should be available on the OGITA website in the future.

CITY OF   SAMPLE  

TECHNOLOGY, EMAIL, CELLULAR, MESSAGING, AND INTERNET POLICY

In connection with your employment or involvement with the City, you may be furnished technology, which is to be used by you for official City business purposes only. Technology is defined as including cell phones, iPads, laptops, notebooks, netbooks, desktop computers, and other devices issued to you from the Technology Services department. Technology equipment, its component parts, all hardware, software, and its stored electronic memory are the sole property of the City. The City may, from time to time, for any reason or without reason, access any technology equipment, monitor all contents, copy (download) any and all contents and use any such contents for any purpose it deems necessary.

For these reasons, you are advised that you have no expectation whatsoever of privacy as to any communication generated, received by, sent by or stored by any technology device. Additionally, the use of passwords does not ensure confidentiality. "Deleting" documents does not ensure confidentiality, as deleted messages may also be stored and may be retrieved by management.

Under no circumstances should anyone load any hardware or software to a City technology device without first obtaining approval from the City Manager or the Director of Technology Services, unless prior approval has been granted in form or by definition of use. All external storage devices (flash drives, external hard drives, diskettes, DVD's or CD's must go through a virus scan before being used on any City owned technology devices. Electronic Agendas, GIS related software, and other electronic data used by standard desktop computers is excluded from requiring approval and is defined by form.

The City maintains an electronic mail (email) system and Internet access. This is provided to assist in the conduct of business and should be used for work purposes only. Use of email and/or Internet access is prohibited for personal, recreational, or non-City business use except for occasional incidental personal usage that does not interfere with the email system operation. Using Internet access to post on electronic bulletin boards, blogs, Twitter, Facebook, chat rooms, or any other recreational, and non-City business use is not allowed.

Email and Internet use may be monitored, and is the property of the City. Users of the City's email system will have no expectations of privacy regarding e-mail, text messaging or Internet use. Even when messages are erased, it is still possible to retrieve and read those messages. The City utilizes an automated archive system that captures all emails and may be accessed by the City as needed for any means.

Cellular phones, text messaging, or sending and receiving from any technology device to another, provided by the City, is not allowed for personal or non-City business if that usage incurs additional charges to the City. If unauthorized use incurs any charges to the City, those charges will be passed on to the user to pay and disciplinary action may occur. Cell phone calls in a moving vehicle should be done using a hands-free device. At no time should the driver use a cell phone that requires attention to be taken from the main task at hand, driving. Text messaging is not allowed in a moving vehicle by the driver or while the vehicle is on a marked or public roadway. Such user should pull over off the roadway to use text messaging or place a cell phone call. A passenger in the vehicle can use text messaging and dial using a cell phone, as long as it does not require the driver's attention.

During City Council meetings, the use of computer hardware, including cell phones, iPads, notebooks, netbooks, desktop computers, and other technology devices, by Council members, to access the Internet/intranet or receive/send email or text messages is not permitted. This prohibition shall also apply to City Board, Commission, and Committee members during their respective public meetings.

Employees who violate this policy or use the email system or Internet for improper purposes shall be subject to discipline, fines, up to and including termination and may be subject to criminal prosecution under the laws of the State of Oklahoma.

ACKNOWLEDGEMENT:

I understand my password and user ID create a unique user account and that the City of \_\_\_\_\_ reserves the right to monitor my activity on any City provided or City issued technology device and within any application therein. I understand I am accountable for any activity within the application linked to my unique user account and that I may be questioned about my activity. I understand I will be accountable for any document or data creation or modification linked to my unique user account. I understand that sharing my password, using someone else's password or signing on for others to use the application are all breaches of security, patient confidentiality and my duty to ensure the safety and security of confidential system information. I acknowledge that I will follow proper computer security procedures (such as signing off, not sharing passwords, etc.) to protect information maintained electronically from being accessed by an unauthorized user.

I am aware that my unauthorized or inappropriate use of the Internet may result in disciplinary action against me, up to and including fines and/or termination. I further acknowledge my responsibility to keep my password confidential and in the event of a suspected compromise or a security problem, I will immediately notify the Technology Services Director. In addition, when sending files or attachments via e-mail, I will observe the City of \_\_\_\_\_ security and confidentiality policies as well as the policy defined on Page 1, 2, and 3 of this document titled TECHNOLOGY, EMAIL, CELLULAR, MESSAGING, AND INTERNET POLICY.

With my signature, I indicate I have read and understand this Acknowledgment.

Signature \_\_\_\_\_

Date \_\_\_\_\_

## iPad Training Notes

These are sample training notes to help a department prepare a manual for iPad users to reference. These are generic as much as possible but you will need to edit them for your particular installation.

### Inside the Carrying Case

*Stylus* – Use the rubber tip of your stylus for screen use. Do not use just any stylus as it has to be one designed for Apple iPhones or iPads. Others will scratch and ruin the screen.

*Charger* – Must be an iPad charger. Some iPhone chargers work but charge at a slower rate. *White Cable* – iPad syncing and charger cable. One end can plug in your computer or the wall charger.

*Black Cable* – Keyboard charger cord if you received a Zagg Wireless keyboard.

*Soft cloth* for cleaning the screen. Use the solution first and then the cloth to dry. Make sure if you purchase something that it is iPad screen compatible.

### Cleaning your iPad

Your iPad has a special Zagg screen installed; use the soft cloth to remove fingerprints. Any damage to the Zagg screen that makes it unreadable requires us to replace the Zagg screen. It has a lifetime warranty but we must take it to Zagg representative to replace it. Do not replace with your own or remove the Zagg screen, bring it to IT staff and it will get replaced.

### Charging your keyboard

If you received a Zagg wireless keyboard, the keyboard plug to connect the charger is on the left of the keyboard. Plug the charger into the black keyboard cable & connect to the plug on the left. You can also charge your keyboard from your desktop computer.

### Charging your iPad

Your iPad charger will charge your iPad and your iPhone.

Some iPhone chargers will NOT charge your iPad so plug it in and check to see if it is charging or not.

Car chargers specifically made to charge iPads will charge your iPad & your iPhone, but car iPhone chargers typically do not charge iPads.

### Buttons

*Silencer Button* – located on the top of your iPad when iPad is horizontal. If the orange dot is showing on the slider than your iPad is on mute. If not, then people will hear it. You can change this button to

be a screen rotation lock so the screen does not rotate if you wish. This is changed in the Settings area described later.

*Volume Button* – located on the top of your iPad when iPad is horizontal. Touch one side to decrease and the other side to increase the volume. If the Silencer Button is on mute, this will not make a difference.

*Main Menu Button* – It is located on the front of the iPad when you are looking at the screen. It is round and in the middle bottom. Typically it should be at the bottom or the right side, depending on how you have the iPad orientated. It is used to wake up the iPad when it is asleep or to go to main menu when awake. As you use it more you will learn it does several things depending on where you are at currently on the iPad. If iPad is asleep simply Press Main Menu Button. Slide the slider on the screen to the right to unlock. Your screen goes blank and sleeps after 2 minutes (settable in settings area of iPad) of non-use.

*Main On & Off Button* – located on one of the sides when iPad is horizontal depending on how you are holding it. Hold for less than a second to turn iPad on or off. Hold for three seconds to turn your iPad completely off. When off you will not get emails, agendas, notices, anything. Normally just put the iPad to sleep by touching the Main On/Off button for less than a second. BUT it is good to turn it completely off about once a week to clean the ole cob webs out. Then turn it right back on. If you are having problems, turn it off and restart it, this solves a lot of problems.

### **Placing the iPad on Your Zagg Keyboard**

If you received a Zagg wireless keyboard, gently press the clip at the top of the keyboard to release or set the clip that serves as a iPad and holder. Center the iPad on the clip either vertically or horizontally your choice, but keep your volume & silencer buttons to the top usually is the best choice and easiest to use. Looks more like a laptop screen in that orientation.

### **How to Turn On Your iPad**

Press the Main Menu button and then slide the slider to the right. If you have a passcode turned on, as we like you to have, then you will enter it as well. If you press the Main Menu button and nothing happens, your iPad may be completely asleep. In that case, just press the Main On /Off button and follow the same procedure.

### **IPad Folders**

You can make group apps into folders to make room for more apps. Push and hold an icon till they all vibrate; then use your finger to drag one app on top of another. The 2 apps will be placed in a folder, and will have an opportunity to change the automatic file name if you want. Click the Main Menu Button to finish. Apps will stop vibrating.

NOTE: If you put your finger on the BLACK X sign on the vibrating icon, the app will uninstall. Put your finger elsewhere on the icon to move it. So don't click on the X unless you want to remove that app from the iPad completely.

### **What's Running on Your iPad?**

Double click the Round Button, and a row will appear at the bottom of your iPad screen showing all the apps that you have open. Since these apps use memory (some use battery power), it is a good idea to close those you aren't using and clear up memory. Press one of the apps till they begin to vibrate, then click on the Red Minus sign of each app you want to close. Clicking the minus sign will simply close the app, not uninstall it. If you turn off the iPad using the procedure described in the Buttons section above, all running apps will be stopped.

If you are using apps from different pages, this is a useful tool to use to go from one app to the next. You don't have to close your app; When you are in another app, double click the Main Menu Button and it will open the bottom row of running apps and click on the app you need to go to.

### **SETTINGS (Click the Settings app icon)**

- Wi-Fi should be set to ON in order to get agendas, email, Internet, etc.

Note: On the road, use Wi-Fi networks from trusted sources only (hotels, restaurants, etc). Verify them as many pretend to be legitimate but turn out to be people trying to get access to your iPad or computer.

- Notifications Normally set most to OFF

OFF (to conserve battery) but some may require to be on. Turn ones that need to be on for work related apps, on. But games, weather, dictionaries, etc, should be off.

- Blue Tooth Normally set to ON

This is used to connect to items such as speakers, headsets, keyboards, etc. If you have none, then you can turn this off. If you have a keyboard, this must be ON to use the keyboard.

- Brightness

Auto Bright – drag icon to brighten or dim screen

- Wallpaper

2 wallpapers available by default. You can also add your own pictures using apps like Fotopedia and choose from many more backgrounds.

Lock Screen wallpaper appears only when iPad is turned on but before it is unlocked.

Home Screen background wallpaper is used for all your application screens.

- Picture Frame

Once you have photos saved to your iPad, Picture Frame can be activated for a slideshow presentation while the iPad is locked. Useful to use as a kiosk or a presentation that needs to loop.

- Auto Lock ON

Screen will lock at 2 minutes (recommended) & will require a 4-digit numerical password to unlock.

The lock time can be changed from immediately to never and several in between.

- Simple Pass Code Normally set to ON

The simple pass code is your 4-digit numerical pass code.

- Simple Pass Code OFF

If you turn off Simple Pass Code, you can use a word as your pass code to unlock your screen.

- Erase Data OFF

**DO NOT TURN THIS ON!**

It will erase all data from your iPad should unauthorized or accidental pass codes be entered too many times. This has happened to someone just messing around and not realizing that is what it does. Do not use it unless prepared to restore after it erases the entire iPad.

- Mail

For City employees, your government email account is installed & automatically syncs with your desktop and iPad wirelessly. You can install other email accounts here. As with your iPhone, you must update your password whenever your desktop password is changed.

For Mayor and Commissioners, you can set up your email here if you desire. Please keep in mind that email sent to this iPad may be subject to Open Records if ever such a request made. It is up to you whether you wish this or not. It is very useful to have an email so you can send items from several applications to other people for collaboration.

- Calendar

For City employees, your Exchange Calendar is installed. It automatically syncs with your desktop and iPhone wirelessly.

For Mayor and Commissioners, you can sync to a calendar of your choice or have it just use the calendar built into the iPad.

- Contacts

For City employees, your Exchange Contacts are synced wirelessly. It automatically syncs with your desktop & iPhone.

For Mayor and Commissioners, you can sync to a contacts list as desired.

## **Keys to your iPad**

There are multiple screens of App icons; the first screen is called the Home Screen. The iPad can accommodate up to 19 pages. To get to different pages, swipe the screen with your finger from right to left or left to right to reverse screens.

You can return to the Home screen by pressing the Main Menu Button or if you have the Zagg keyboard, pressing the Escape key on the keyboard.

There is a series of dots on the bottom of the home page indicating the number of pages; the lit dot is the current page.

On the Zagg keyboard:

- **ESC**    Escape. Upper Left button. Used much like Escape on computer. Also can use to exit an application or to return to the Home menu.

- F1 Search
- F2 Show slide show
- F3 Brings up keyboard on the screen for touch screen typing
- F4 Locks the iPad
- Mute Second Button from right on top row
- World Button on upper right: Connects to Bluetooth; DON'T PUSH IT!

## Applications

- iAnnotate PDF

This app stores PDF files which is how the City Commission agendas are now being distributed. This app will download the agenda PDFs by doing the following routine:

1. Click on the Down Arrow in the upper left screen area. If you are in the File Cabinet area, you will first have to click on DONE to get back to the screen that has the Down Arrow at the top of the screen.
2. Choose Aji PDF Service.
3. Choose 123.123.123.123 (this server should be the only choice). [Note to IT Staff: change this number to your public ip address you gave the agenda server that has the iAdj software running on it. You will also need to open a port like 6810 and use this when setting up iAnnotate on the iPads.] Do not click on the Orange Down Arrow on the right of this choice, just click on the number itself. If you click the Orange Down Arrow button it will down load every agenda out there and will take a long time, as there will be more and more as time goes on until moved to the archived directory. Typically there are the last four to six agendas there and the rest are in the Agenda Archived directory so you can retrieve them if needed in the future.
4. You will see a list of Agenda Packets by date. From here you can click the Orange Down arrow on the packet you wish to download and it will down load all the documents for that packet.
5. Repeat Step 4 for additional dates.

After they are downloaded you will use the File Cabinet icon to go through the list of downloaded agendas and documents. Pick one or multiples to look at it. Once you are viewing

the agenda, you can use the various tools to mark it up such as highlight, underline, cross through, etc. You can also type notes or touch an area and write notes using your stylus.

It comes with a tutorial document. It will greatly help you to go through that tutorial, as this is a great tool once you understand its usage. It will save thousands of trees since gone paperless for agendas.

- NoteTakerHD or Penultimate

This app allows you to use the stylus & take handwritten notes.

By default Wrist Protection is on which ever one you use.

You can write on the screen with the stylus, no other device should be used on the screen.

Go through the short tutorial for best use practices.

- Weather Channel

Capability to daily forecasts, radar, hourly or 10 day projections, and watch live Weather Channel. It defaults to Ponca City but you can add multiple cities.

- USA Today

Read news items of various areas as they are printed in USA Today.

- ABC News

Can read or watch news information as ABC reports it.

- CBS News

Can read or watch news information as CBS reports it.

- FWIX-Global News

This is set for Oklahoma City news area. This will retrieve various news feeds as they are reported around Oklahoma. The Daily Oklahoman is not on this app, because it is available by paid subscription only.

- My Congress

Can check out Oklahoma congressional members by default or any of the other United States Congress members information, activity, etc.

- Playbook

Can check out congressional activities from Washington.

- RealTime Congress

Shows live votes of Congress and other live feeds from Washington.

- iBooks

This is Apple's version of Kindle. Has thousands of free books as well as books for purchase. If you acquire a book here you can also read it on your iPhone.

- PCalc Calculator

iPad does not have a built in calculator. So here is one to use. You can get hundreds of other free or paid ones in the App store.

- Wikipanion

Same information you can get on a standard computer from Wikipedia. Very similar to an encyclopedia except it is kept up to date by the internet viewing audience.

- Dictionary

A dictionary.

- Google Earth

GIS information – GIS overlays are not open to the public, only on your iPad.

To View GIS Maps:

1. Click Upper Left Hand corner labeled *Layers*.
2. Click *My Maps*.
3. Then choose layers you wish to view on Google Earth. The more you click, the more data needs to be downloaded and thus the slower to display. Too much data and it may not show if you have too many other apps running in the background. Use the Double Click Main Menu Button method to stop some.

Two fingers on the map will spread the map (zoom in or out)

Click N on the top of the screen and north will be at top. Might have to do this as you use the map as Google Earth tends to rotate.

- Maps

Maps is installed by default on the iPad from Apple. It will show street-based maps and search data is provided by Google. You can first search for a town. Then search for something in that

town such as a specific name of a business or a general name like food. It can also give directions but it does not automatically talk like a Tom Tom. There are apps in the App Store that do give driving turn by turn verbal directions for a price.

- Dragon Dictation

You can verbally dictate text; save as Word or Text or Email to clean up later. The app will recognize your voice with no training needed.

- White Yellow Pages

This is a White Pages and Yellow pages searching app in one. You can also do phone reverse look-up searches.

- 2Do Task Manager

It uses Toodledo on the Internet to sync. After Syncing to Toodledo you can sync to 2Do on your iPhone or use Toodledo on your desktop to look at your tasks. Very powerful as allows not just tasks, but sub tasks, voice recording, mapping, etc. Your Toodledo account was created by IT and the password is the same as your iTunes password.

It comes with a tutorial task and the short tutorial is worth clicking to learn how to use this app to its fullest.

- Safari

Is the iPad's Internet access program. Similar to Internet Explorer on Windows.

- Log Me In

For City Employees: Remote access to desktop or other City resources as we give permissions out. If you need to set this up on your machine or access to our remote machines, give IT a call first.

- TextPlus

For City Employees: Text Messaging with capability to send text messages to more than 1 person with a single text or conversations with one person on a cell phone.

- Quick Office (City Employees) (Commissioners will have to purchase if desired)

Word – Excel – PowerPoint

Click Getting Started for a short tutorial on each program. Is not as full blown as desktop versions but does what 95% of users need to do. Can read files from Dropbox, email, our network, etc.

- Bat Reminder

Bat Reminder will display information about your battery remaining if you do certain activities such as use Cellular or wi-fi Internet, watch a video, listen to music, etc.

- App Store

Your iTunes account is tied to your personal credit card. You can purchase apps you desire but always ensure you know or research they are from a reputable company. The City will not purchase apps or reimburse you for apps you purchase that are personal in nature. If you know an app that you require for City business, you can contact IT and they will gift it to you so you can install it and they will do the accounting to pay for it.

- iPod

Plays & stores music you download or add by syncing to your desktop.

- Dropbox

File sharing for files on the iPad, desktop, or any other Internet connected device.

Files saved to your Dropbox can be accessed from any computer that has Dropbox installed or by going to a login screen using a web browser. This allows you to have access to your files that normally you only can get to while in your office or home. You can install Dropbox at home, office, iPhone, iPad, or any other smart device and share your documents among all of them automatically. It syncs them up every time you make a change to a file or create a new one. Quickoffice uses Dropbox to store your documents in.

- Print Central

For City Employees: Print Central ties to office printers; can also be tied to a home printer if you install the Print Central Windows or Mac app at home you can print to a printer there . It needs a program installed on the desktop computer printer to be used which IT will install in your office. This allows you to print most items like email, Word, Excel, Web pages, etc.

For Mayor and Commissioners: Same as above but you will probably want us to help you set it up at home or your office. Make an appointment with IT to get someone to come set it up.

- As a GIS solution besides Google Earth is decided on, the app will be gifted to you and you will receive an email with instructions on how to install. Then you will have access to the GIS system. Expect this in May or June 2011.
- Other Apps: There are a few apps that Apple installs on the iPad that cannot be removed. You can use them and most are self-explanatory. iPad 2s have some photo taking and editing tools.

## GIS on the iPad Project Report

### Objectives of GIS on the iPad

#### Task Force

- Evaluate GIS applications (apps) for the iPad
  - Technology
  - Available functionality
  - Data sources
- Make recommendations based on findings
  - Apps' pros and cons
  - Types of users
- Presentation and written report for OGITA

#### Background and Technology

- GIS (Geographic Information System)
  - Smart mapping
  - Linked to other information systems
  - ESRI, AutoDesk, SmallWorld
  - PC or workstation, laptops, PDAs
- Mobile computing
  - Notebook computers and laptops
  - PDAs (personal digital assistants)
  - Smart phone
  - iPad

### App Evaluation

#### Goals of Evaluation

- List criteria to be evaluated
- Define potential user categories
- Evaluate potential GIS apps currently available
- Determine the future development of upgrades or new apps

#### Evaluation Criteria

- GIS/Mapping functionality
  - Layering
  - Attribute viewing / ID capability
  - Query capability
  - Legend provided
  - Measuring tools
  - Markup tools
  - Graphic editing
  - Attribute editing

- Ease of Use
  - Ease of navigation
  - Graphic rendering speed
  - Graphics quality
  - Menus and tools easy to understand
  - Free from bugs
  - Easily distributable
  - Administration simple and not time consuming
  - Data loading
- Application Support and Cost
  - Type of support
    - Phone, email, user manual, help screens, website
  - Costs
    - App
    - Support
    - Data hosting or data transfer fee
    - Training

<b>Apps Evaluated by Task Force</b>
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- OGI Touch Map - OGInfo,LLP
- GISRoam - Cogent3D, Inc.
- iCMT GIS - CMT Inc.
- PDF Map - Avenza Systems, Inc.
- Google Maps / Google Earth - Google
- ArcGIS - ESRI
- Topo Maps - TrailBehind, Inc.
- iGIS - Geometry Pty Ltd.
- iEXT Maps - Alper Dincer
- AutoCAD WS - AutoDesk
- GIS4Mobile - GIS4Mobile
- Map Box - Development Seed
- KML Map HD - Intelligent Gadgets

GIS/Mapping Functionality Analysis

√	Meets criteria
•	May meet criteria
—	Does not meet criteria satisfactorily
?	Unknown
	Issues identified
text	Applications selected for focus

	ID	Query	Bookmark	Legend	Symbology	Measure	Markup	Export Data	Graphic Editing	Attribute Editing	Allows Printing	Data Format
iCMT GIS	?	—	?	√	—	√	√	√	√	√	—	SHP, PBM, PMP
ArcGIS	√	√	?	√	•	√	√	?	√	√	?	ArcGIS Server web service
OGI Touch Map	√	√	√	—	√	√	√	—	—	—	•	SHP
GISRoam	—	√	—	√	—	√	—	—	—	√	—	SHP (stored locally)
AutoCAD WS	—	—	?	—	—	√	√	√	√	—	—	DWG, DXF
PDF Map	?	—	—	—	•	√	—	•	—	—	—	PDF only
Google Maps / Google Earth	—	—	—	—	—	—	√	—	—	—	•	KML, KMZ
Map Box	?	—	√	—	—	—	—	—	—	—	—	KML, KMZ
KML Map HD	—	√	—	—	—	—	√	—	—	—	—	KML, KMZ
Topo Maps (topo maps only)	—	—	—	—	—	—	√	—	—	—	—	Topo Maps
iGIS (not ready)	?	?	?	?	?	?	?	?	?	?	?	SHP
iEXT Maps (not for iPad)	?	?	?	?	?	?	?	?	?	?	?	WMS, KML, other
GIS4Mobile (not for iPad)	—	—	—	—	—	—	—	—	—	—	—	ArcGIS Server map services

Ease of Use Analysis

	Ease of Navigation	Graphics Rendering	Graphics Quality	Menus / Tools	Behavior	Bug Free	Easily Distributed	Admin	Data Loading Ease
ArcGIS	√	√	√	√	√	?	●	—	ArcGIS Online or content server
PDF Map	√	√	√	√	●	●	√	●	iTunes, Dropbox
Google Maps / Google Earth	√	√	√	●	●	—	√	√	iTunes, Dropbox, online web account
AutoCAD WS	√	√	√	√	●	●	√	—	Webconnect
OGI Touch Map	●	●	√	√	●	●	√	√	Dropbox, FTP, Email
GISRoam	√	●	√	●		√	●	●	Webconnect, Localconnect SW
iCMT GIS	√	●	●	●	●	—	●	—	iTunes
Map Box	√	●	√	●	—	—	√	—	Dropbox, iTunes
KML Map HD	●	—	●	—	—	—	●	—	Email, Dropbox, iTunes
Topo Maps (topo maps only)	√	√	√	?	?	?	√	√	?
iGIS (not ready)	?	?	?	?	?	?	●	?	iOS URL via Wi-Fi
iEXT Maps (not for iPad)	√	√	√	—	?	?	√	—	URL
GIS4Mobile (not for iPad)	●	●	●	—	?	?	√	?	could not load

**Application Support/Cost Analysis**

	Support						Cost			
	Phone	Email	Online	Training Videos	Manual	Help	App	Support	Data Hosting / Transfer	Training
GISRoam	√	√	—	√	√	√	Free	—	Local - free Webconnect - \$19.99	—
ArcGIS	√	—	√	√	—	√	Free	Free with existing license	Free	Varies
iCMT GIS	√	√	√	—	—	—	Free	—	—	—
Google Maps / Google Earth	—	√	√	—	—	√	Free	—	—	—
PDF Map	•	—	√	—	—	√	Free	—	—	—
AutoCAD WS	—	√	—	—	—	√	Free	—	—	—
Map Box	—	√	√	—	—	—	Free	—	—	—
KML Map HD	—	—	—	—	√	—	Free	—	—	—
OIG Touch Map	√	√	—	—	—	—	\$3,500 +	Free	\$300/yr	\$45/hr
Topo Maps (topo maps only)	—	√	—	—	—	—	Free	—	—	—
iGIS (not ready)	—	√	√	—	—	—	\$29.99	—	—	—
iEXT Maps (not for iPad)	—	√	—	—	—	—	Free	—	—	—
GIS4Mobile (not for iPad)	√	√	—	—	—	—	\$552 +	\$345	\$172	—

**Focus Applications for GIS on the iPad**

iCMT GIS

Recommended User: GIS experience

- Pros
  - Best overall functionality
  - Free
  - Can perform editing
  - Can set projection
  - Can export shapefiles
  - Attributes easy to edit
- Cons
  - Behavior is rough
  - Naming conventions are odd
  - Issue with defining symbology
  - Issues with loading polylines and polygons

### **GISRoam**

Recommended User: General Map User\*

- Pros
  - App is free
  - Can be used beyond Wi-Fi
  - Fast processing
  - Dynamic legend control
  - Working on using ESRI map services
- Cons
  - \*Data connection not streamlined
  - Limited symbology
  - Data stored on unit
  - \*Had issues editing graphic data
  - Did not find means to print doc

### **PDF Map**

Recommended User: Non-experienced Map User

- Pros
  - App is free
  - Clean interface
  - Map designed in GIS and made into georeferenced PDF
  - Can be used beyond Wi-Fi
  - Can export waypoints
- Cons
  - Only PDFs can be viewed
  - Unable to perform data query
  - All changes to data must be performed in ArcGIS

### **ESRI**

Recommended User: General Map User\*

- Pros
  - App is free
  - ID features
  - Find addresses/places
  - Query map layers
  - Can use ESRI web services
  - Can do data collection
- Cons
  - Must have ArcGIS Server to create maps (as web services)
  - Can get data only from ArcGISOnline
  - More oriented to existing ArcGIS users
  - \*May need some training to learn functionality

## In Conclusion...

### Findings and Recommendations

- Applications to consider...
  - Experienced GIS User
    - iCMT GIS
    - ESRI ArcGIS for iPad
  - General Map User
    - GISRoam
    - ESRI ArcGIS for iPad
  - Non-Experienced Map User
    - PDF Map
- Very infant technology
- GIS' big world hard to put on little iPad
- Many city departments wanting to use iPad and see maps
- Expect to see fast growth in GIS/mapping capabilities on iPad
- The more power the better – trade in your iPad for an iPad2. GIS apps need the little bit of difference it provides in the graphic area.