

Open Source Mapping, Closed Platform

Justin Miller • MapBox / Development Seed • [@incanus77](#)



State of the Map US 2012 • Portland, OR, USA

Intro

- I do primarily iOS development at MapBox
- MapBox does primarily:
 - Open source cartography tools (TileMill)
 - Open source web & native toolkits
 - High-availability cloud hosting of maps

MapBox iOS SDK

- Backstory
 - Route-Me ~2008
 - Alpstein fork ~2011
 - MapBox ~2012

Apps

MADE IN L.A. 2012

ARTISTS

EVENTS

VISIT

BLOG

ABOUT

UPCOMING EVENTS

MADE IN L.A. 2012 CATALOGUE
\$49.95

GENERAL INFO

Made in L.A. 2012, organized by the Hammer Museum in collaboration with LA<>ART, will be presented at the Hammer Museum in Westwood, LA<>ART in Culver City, and the Department of Cultural Affairs' Los Angeles Municipal Art Gallery at Barnsdall Park in Los Feliz.

Wells Fargo Debit and Credit card holders receive FREE admission plus 1 guest to Made in L.A. 2012 just by showing their card at the Hammer Museum welcome desk now through September 2, 2012.

MADE IN L.A. SOUNDMAP

Made in L.A. Soundmap is a site-specific mobile audio experience designed for use while traveling to, from, and in between the three biennial venues in Culver City, Los Feliz, and Westwood, providing visitors with insights into art making in Los Angeles today. Made in L.A. Soundmap explores Los Angeles as the context for the exhibition through interviews with Made in L.A. artists and curators. Made in L.A. Soundmap is a free iPhone app available in the [iTunes store](#).

DOWNLOAD THE APP



HAMMER

LA<>ART

LAMAG

VENICE BEACH

HAMMER MUSEUM

10899 Wilshire Blvd
Los Angeles, CA 90024
310-443-7000
<http://hammer.ucla.edu/>

[View Map »](#)

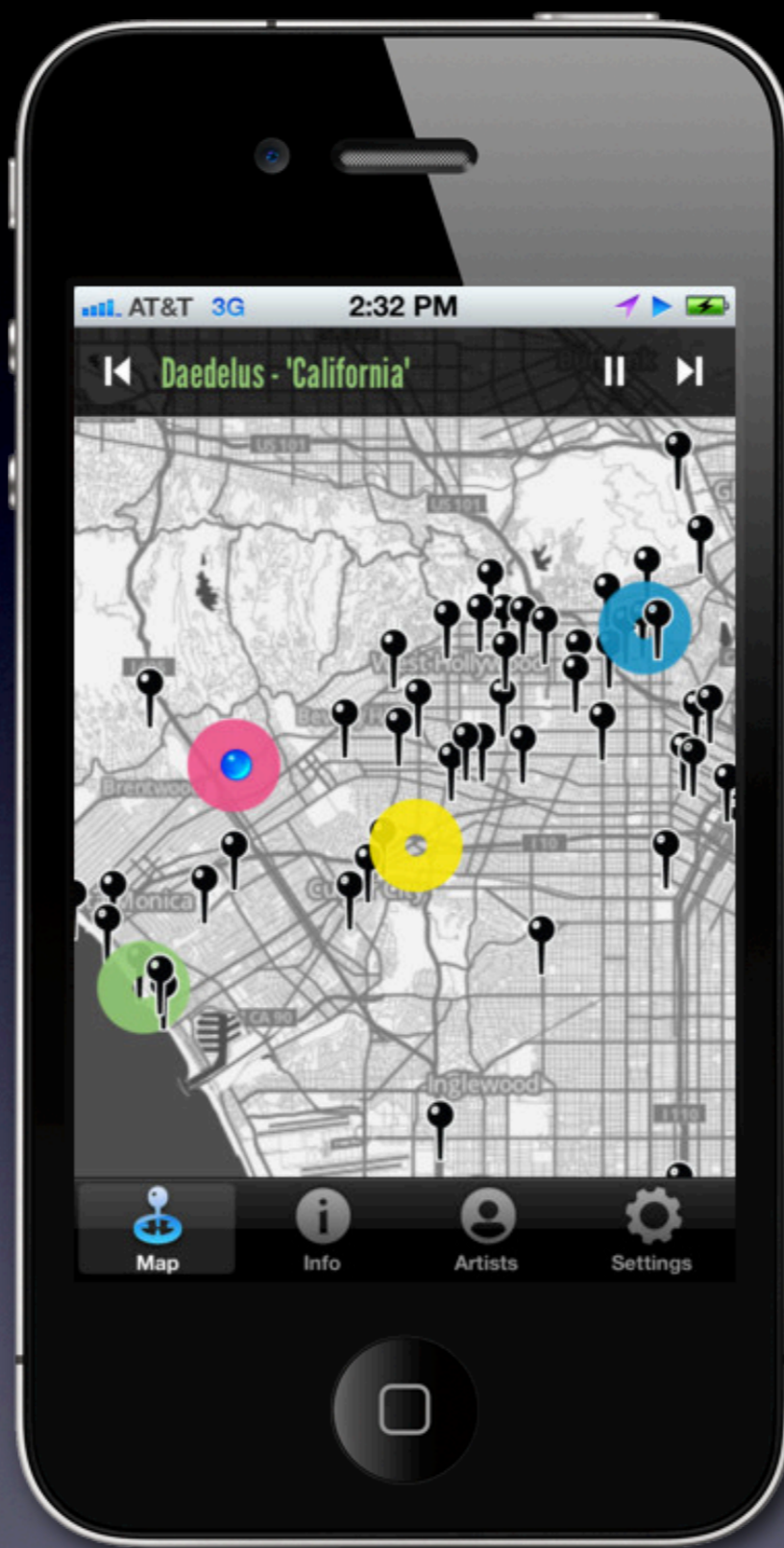
ADMISSION

HOURS

Tue-Fri 11am-8pm
Sat & Sun 11am-5pm
Closed Monday and July 4

PARKING

Parking is available under the Museum. Rates are \$3 for the first three hours with Museum stamp; \$1.50 for each additional 15 minutes.





Buy Now >

GAMES

TRAILERS



NEWS

COMMUNITY



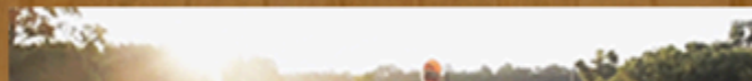
APP OVERVIEW

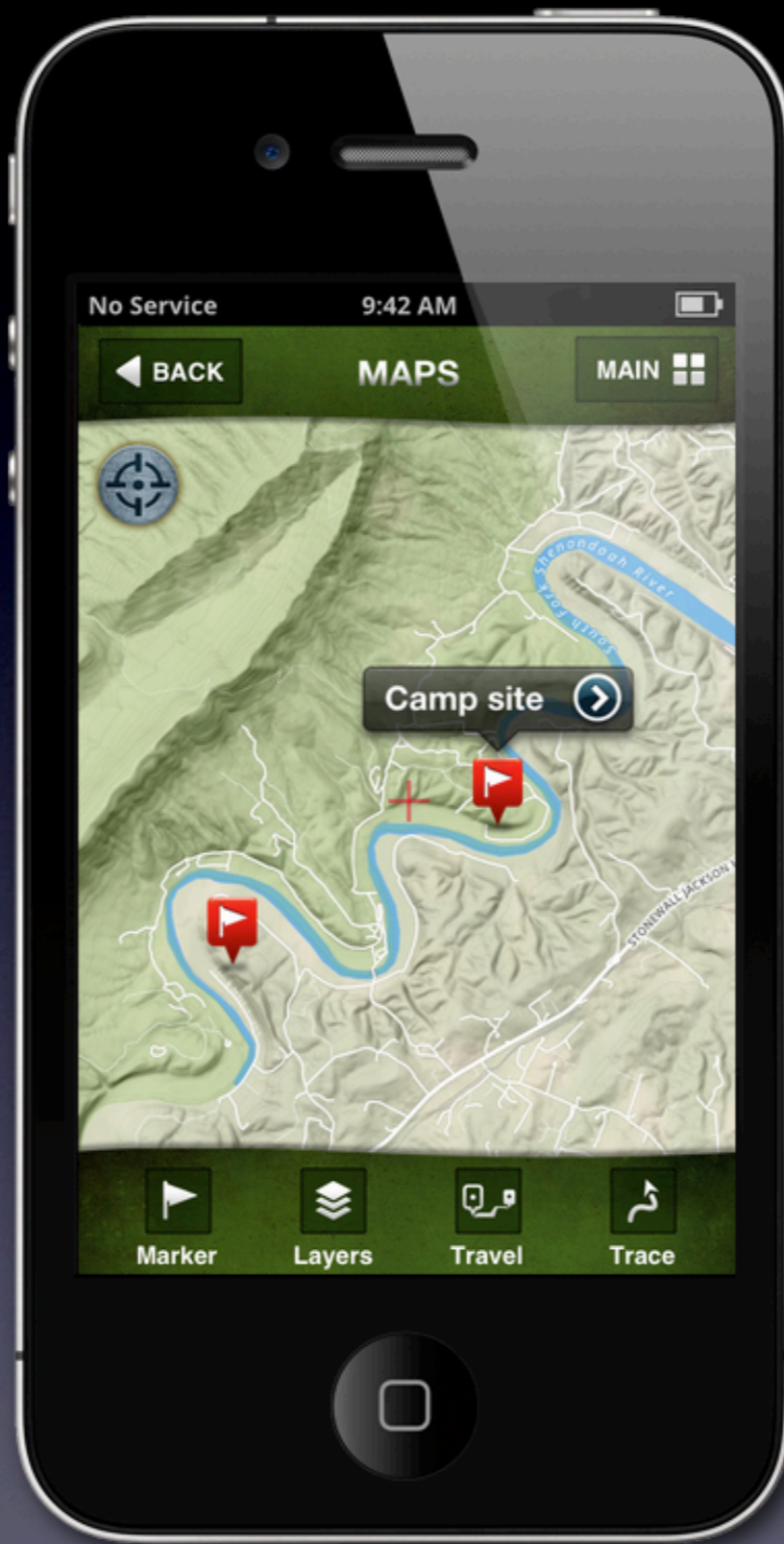
REQUIREMENTS

YOUR NEW HUNTING COMPANION



Bass Pro Shops MyGuide: HUNT is a mobile GPS app made specifically with hunters in mind. This full featured multi-tool rolls all of your favorite hunting utilities into one app that's easy to use in the field. Find your favorite hunting spots on a map, mark animal signs you encounter, track your movements through the wilderness, document your trophies and much more! We hope you make it a must-have on every hunting trip.





“ENTIRELY REVOLUTIONARY” – WIRED

THE SILENT HISTORY

A NEW KIND OF NOVEL



Los Angeles Times

The New York Times



ESPN

WIRED

BuzzFeed

appadvice

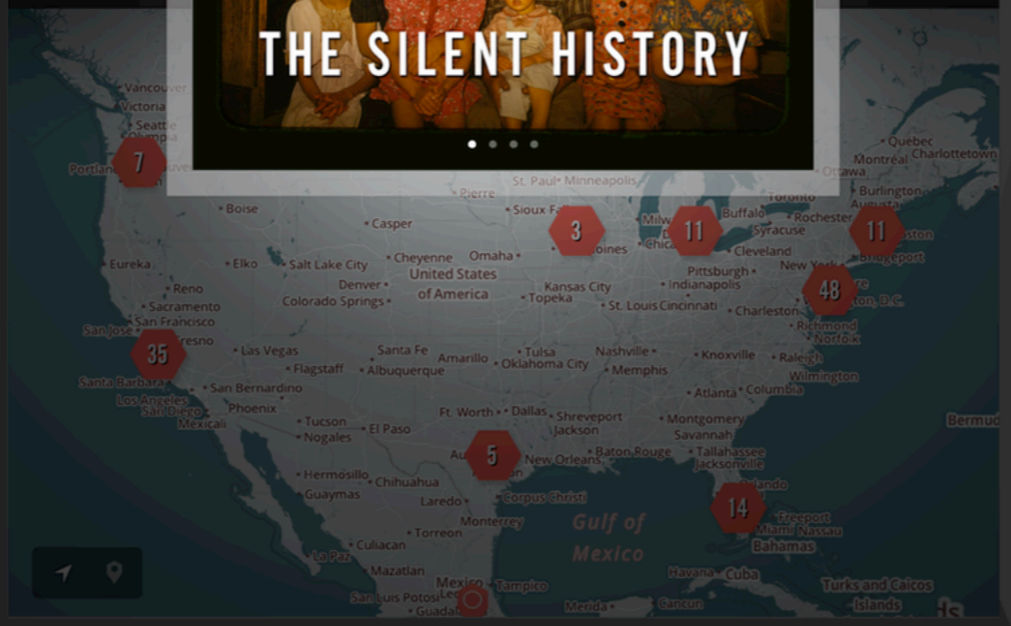
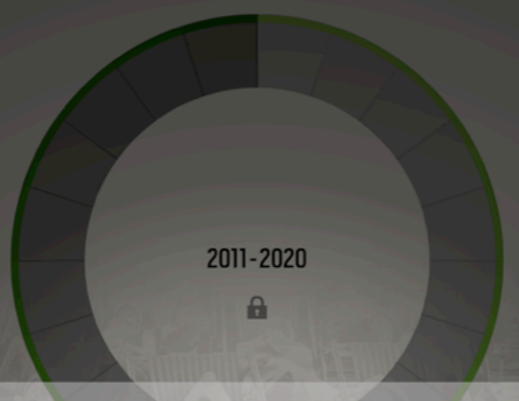
THE WEEK

KQED

PUBLISHERS WEEKLY

RUMPUS

contents



Lanyrd.com
the social conference directory

[Sign in with Twitter](#)
[conferences](#) [coverage](#) [video](#) [audio](#) [slides](#)


WhereCampPDX 5

12-14 OCTOBER
2012



[Portland](#)
in [United States](#)

[wherecamppdx.org](#)

[Save to iCal / iPhone / Outlook / GCal](#)

[@wherecamppdx](#)

[#wherecamppdx](#)

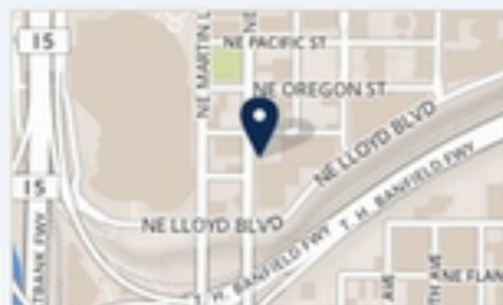
[lanyrd.com/cgymw](#) (short URL)

Sign in
TO SHOW YOUR
INTEREST

4 PEOPLE
attending

9 PEOPLE
tracking

[TELL YOUR FRIENDS!](#)
[Tweet about this event](#)



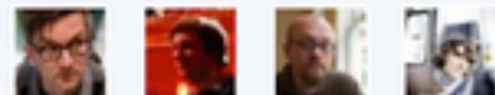
Metro Regional Center

[United States / Portland](#)

600 NE Grand Ave

[View on OpenStreetMap](#)

4 known attendees



[ATTENDEE DIRECTORY](#)

[Visit the WhereCampPDX 5 attendee directory](#)

9 people tracking this event

Topics

[Geo](#) [Geography](#)

[Neogeography](#)

[Open Source](#)

[OpenStreetMap](#)

[Unconference](#)

[WhereCamp](#)

[Browse and track topics on Lanyrd](#)



AT&T 3:31 PM
Event Metro Regional...



Your events Suggested

AT&T 3:28 PM
Suggested WhereCampP...

WhereCampPDX 5
Friday 12th to 14th October 2012



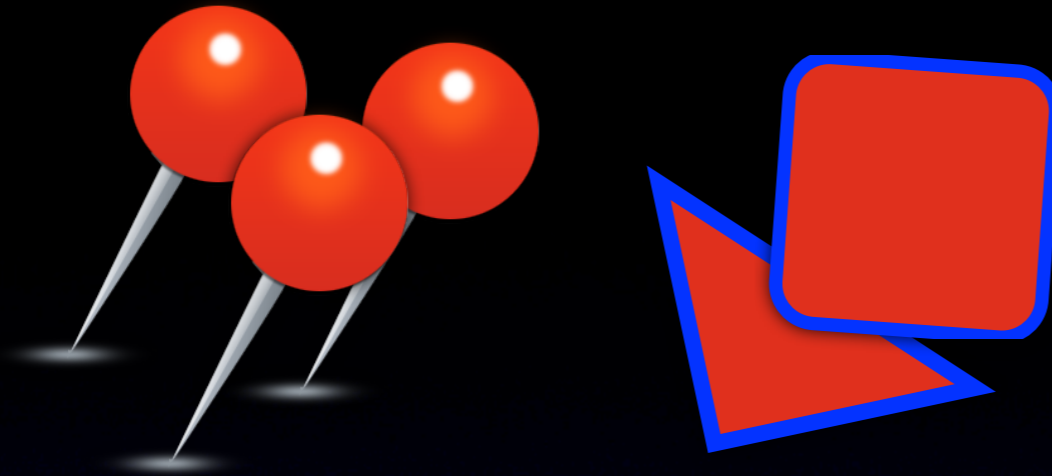
Metro Regional Center, Portland, United States

Stop attending Track this event

#wherecamppdx
@wherecamppdx on Twitter
wherecamppdx.org

Geo Georanhv Neogeoranhv
Your events Suggested Search Profile

High-Level Parts



Annotation Layers



Annotations

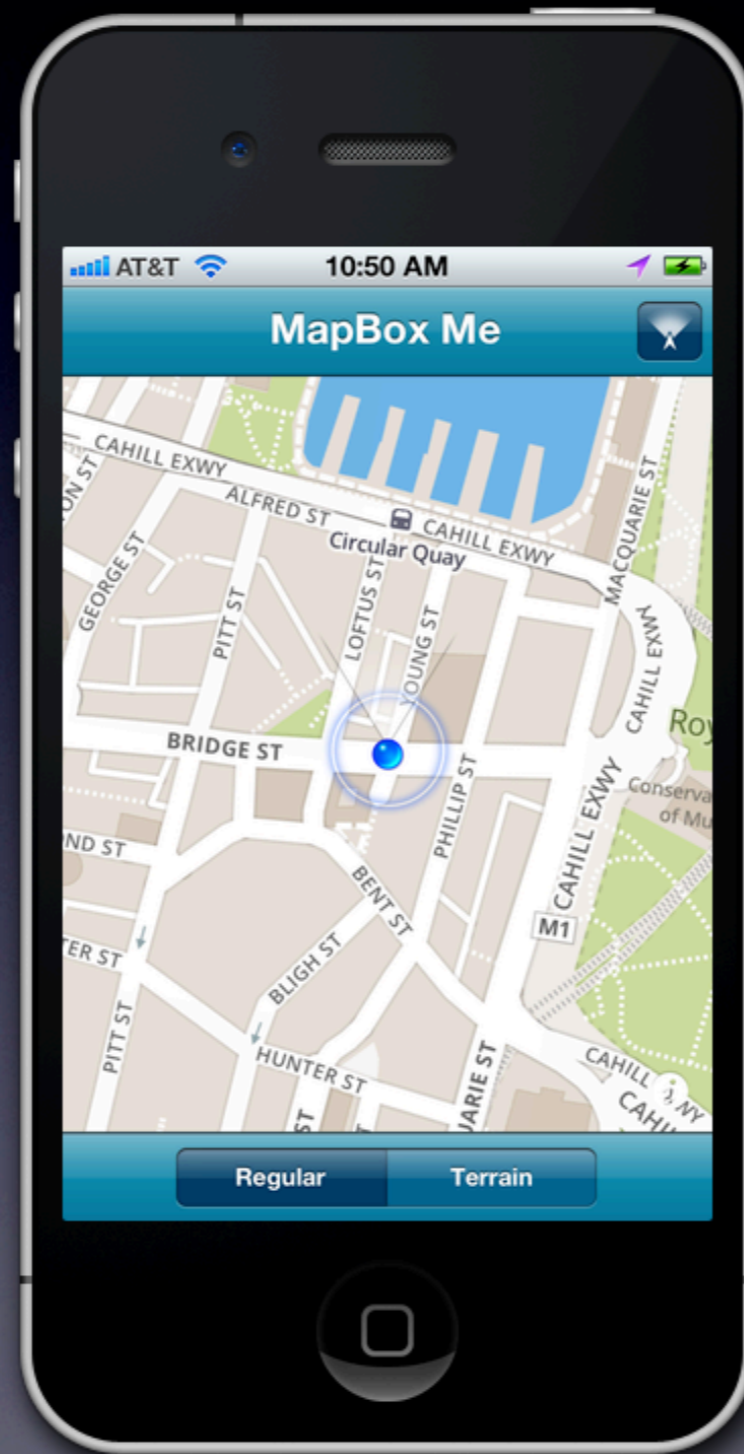


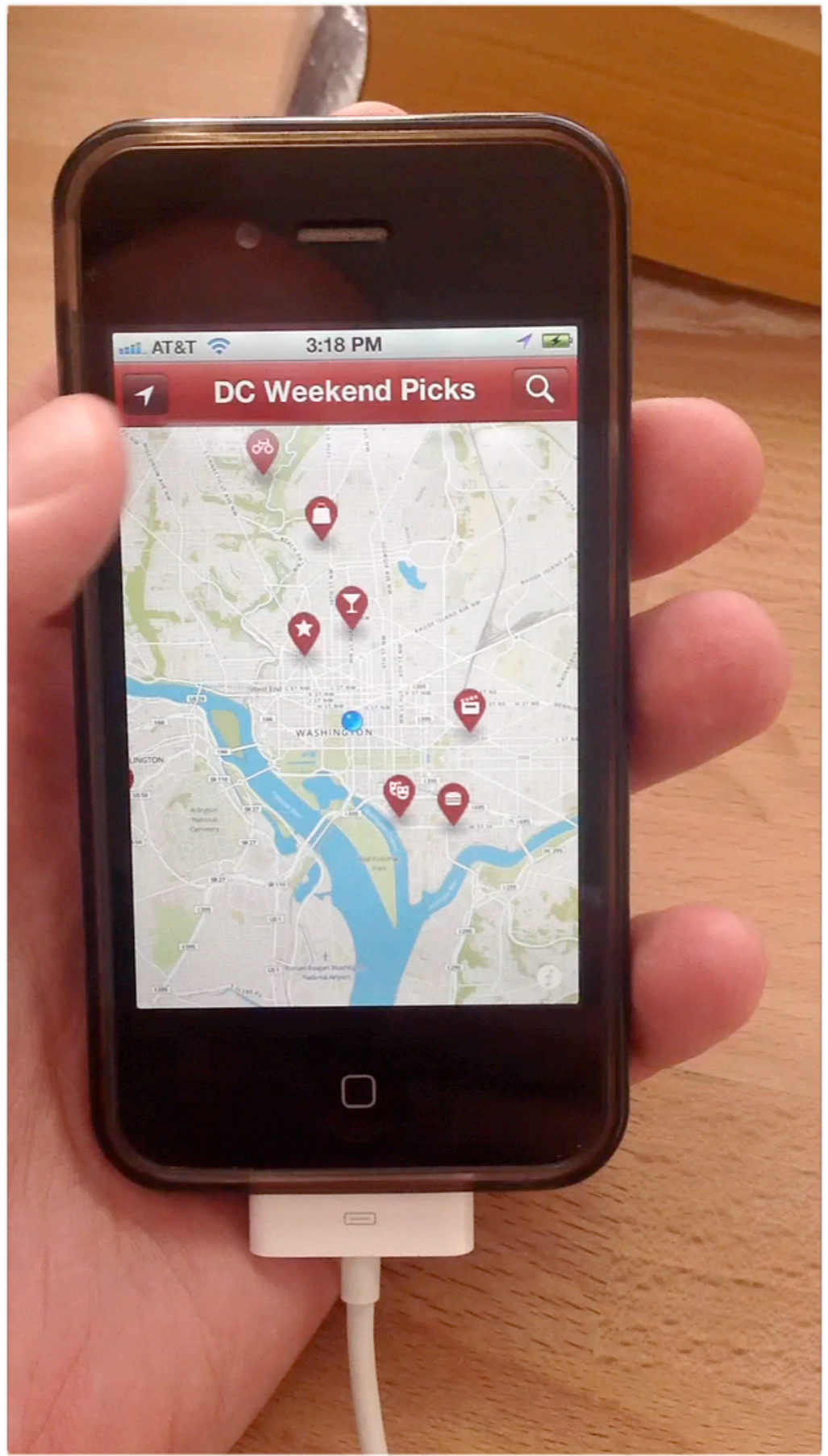
Map View

Tile Sources

Lower-Level Parts

User Location Services





Offline Use

- Cached tile reuse
 - *Deja vu*
 - “Take your tiles with you”
- Pre-packaged bundles
 - MBTiles: SQLite-based database of tiles

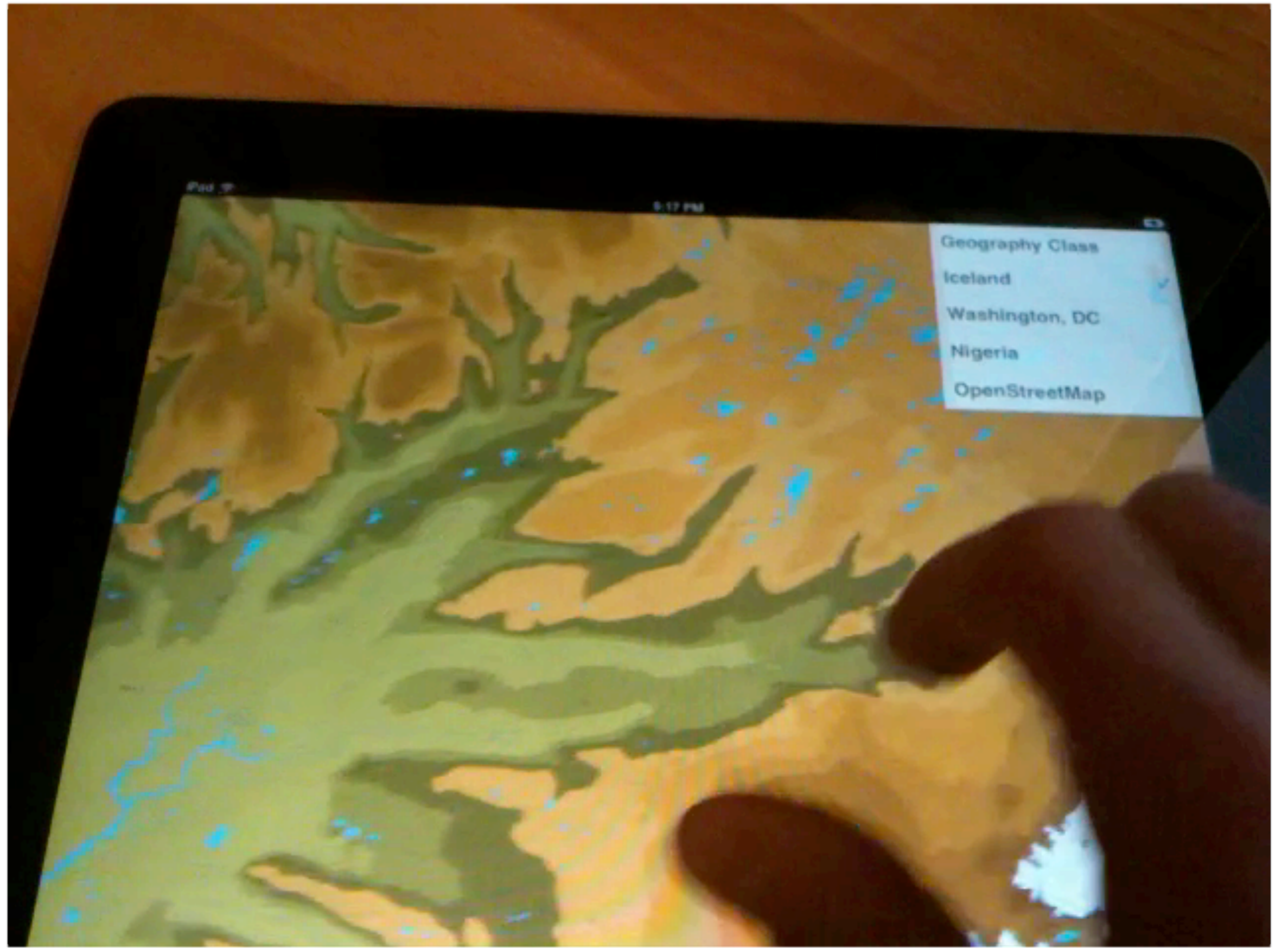
The Problem With Tiles

- Can easily number in the millions
- Zoom level 0
 - One 256x256 tile (4^0)
- Zoom level 17
 - 17,179,869,184 tiles (4^{17})
- Difficult to transfer reliably





MBTILES



9:17 PM

9:17 PM

Geography Class

Iceland

Washington, DC

Nigeria

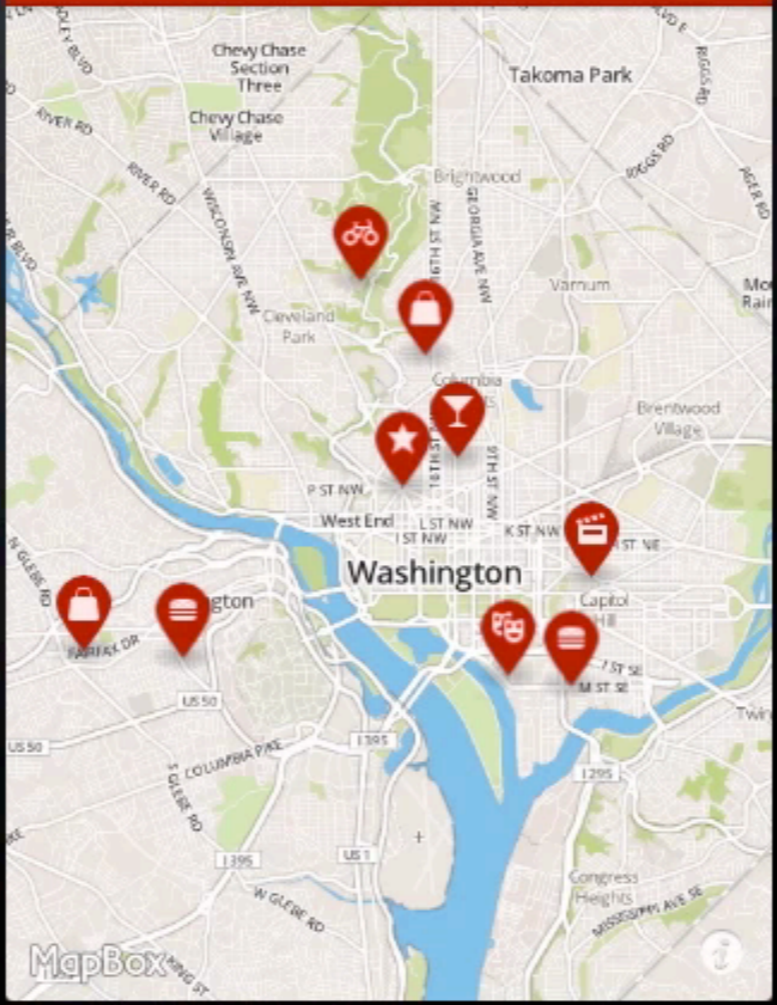
OpenStreetMap





Carrier 12:01 AM

DC Weekend Picks




No Service

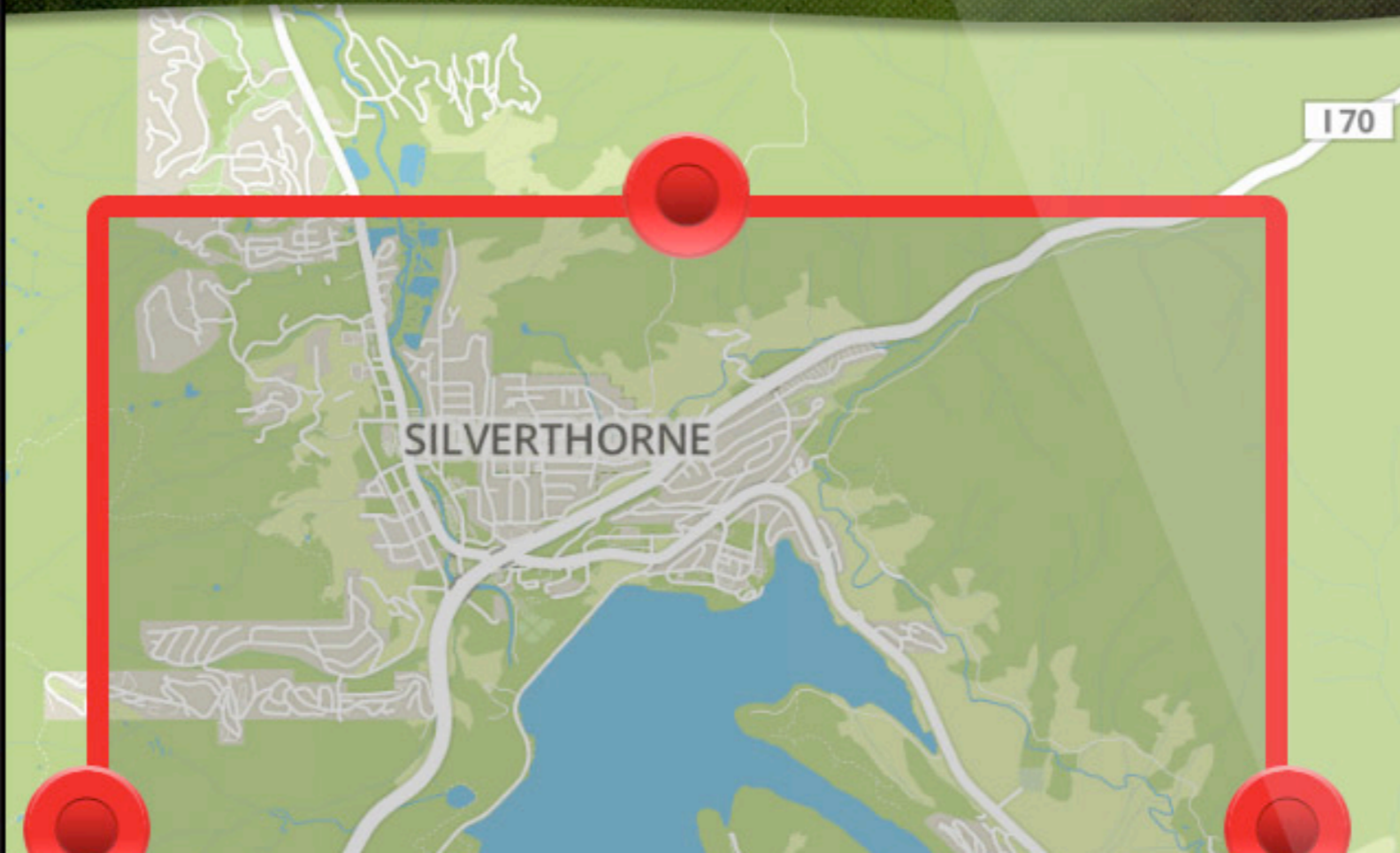
9:42 AM



◀ BACK

SAVED MAPS

MAIN 



Carrier

12:15 AM

100%



Thanks!



For More Info

- Twitter: *@MapBox* & *@incanus77*
- mapbox.com/mobile
 - Examples, API docs, guides
- github.com/mapbox/mapbox-ios-sdk
- support.mapbox.com & Freenode #mapbox
 - Support (i.e., me)