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# Community Health Maps

Information on Low Cost Mapping Tools for Community-based Organizations

Los Ranchos de Albuquerque

# Welcome



# Community Health Maps

Information on Low Cost Mapping Tools for Community-based Organizations

Los Ranchos de Albuquerque

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Community Health Maps Project  
Funded by the National Library of Medicine



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Library of  
Medicine

# Community Health Maps

Information on Low Cost Mapping Tools for Community-based Organizations

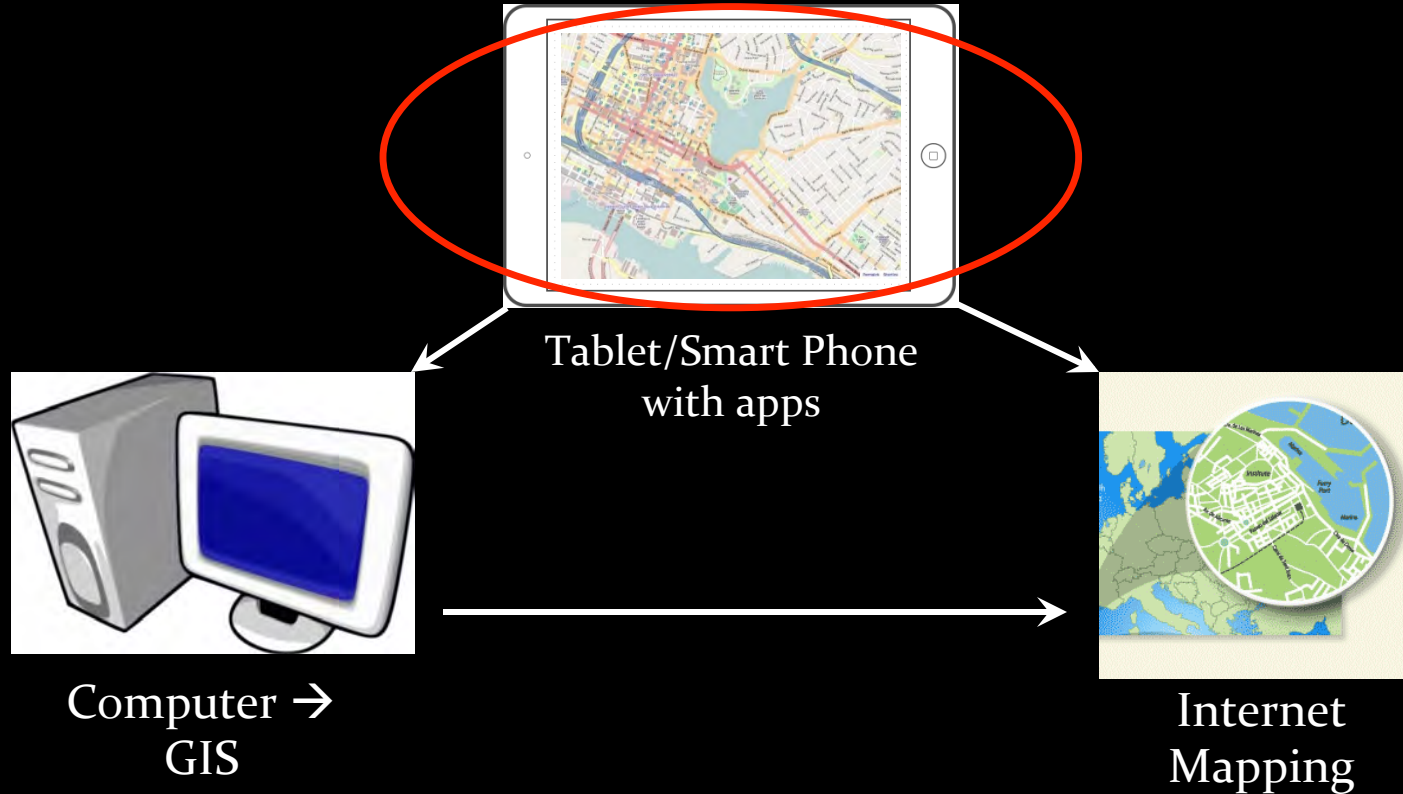
Los Ranchos de Albuquerque

# LOCATION MATTERS!

# Let's Make a Map!

1. Build a Data Collection Form
2. Collect Data
3. Map it!

# The Community Health Mapping Workflow



# Tools

1. This Presentation
2. Handouts
3. Community Health Maps Lab Series

# Agenda

- 8:30 – 9:30 Building data collection form
- 9:30 – 10:00 Collecting data
- 10:00 – 10:15 Break
- 10:15 – 11:00 Mapping data online in CartoDB
- 11:00 – 12:30 Desktop Mapping with QGIS

# Let's Make a Map!

1. Build a Data Collection Form
2. Collect Data
3. Map it!



# Plan Data Collection

**Where** is the closest tree? (location)

**How far** is my car from the front door? (proximity)

**How many** lunch benches surround the casino?  
(density)

# Today's Form

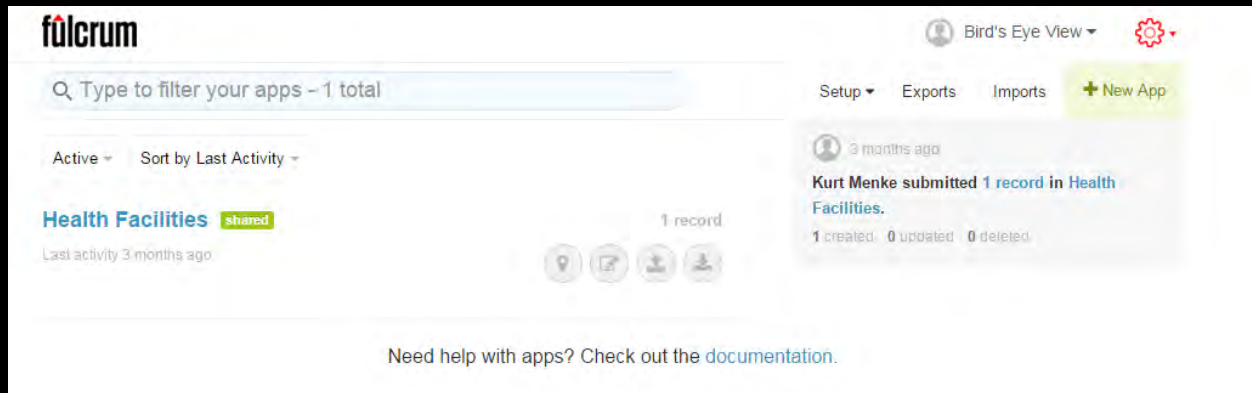
This morning we will collect locations of:

- Benches
- Signs
- Trees
- Bike racks

Label (Question)	Field Type
What type of infrastructure is it?	Multiple Choice
What is the capacity of the bike rack?	Numeric
How many bikes are there?	Numeric
What type of sign?	Text
What type of tree?	Text
Take a photo	Photos
Today's Date	Date

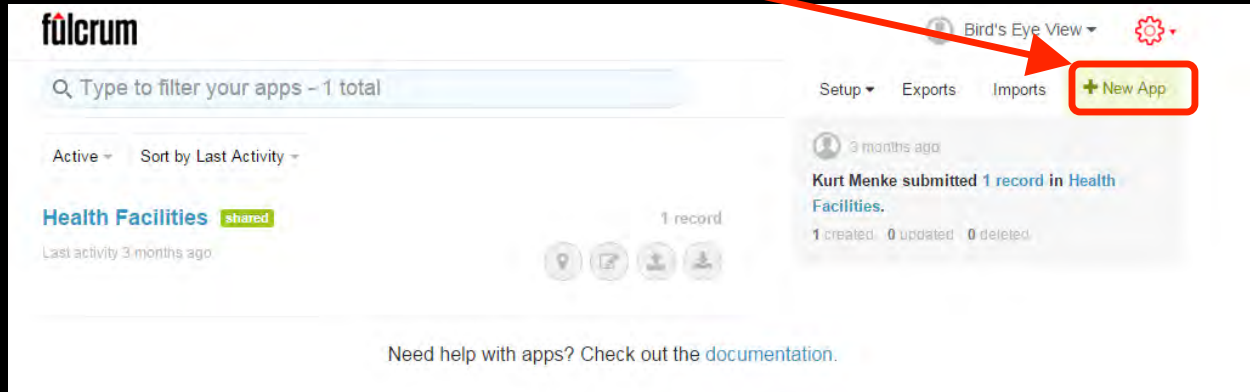
# Login in to FulcrumApp.com

On your laptop computer in a web browser:

A screenshot of the Fulcrum web application interface. The top left corner features the 'fulcrum' logo. A search bar contains the text 'Type to filter your apps - 1 total'. Below the search bar, there are filters for 'Active' and 'Sort by Last Activity'. The main content area displays a card for 'Health Facilities' with a 'shared' tag, indicating '1 record' and 'Last activity 3 months ago'. To the right, a sidebar shows a user profile for 'Kurt Menke' who submitted '1 record in Health Facilities' '3 months ago', with statistics for '1 created', '0 updated', and '0 deleted'. The top right corner includes a 'Bird's Eye View' dropdown and a settings gear icon. A bottom navigation bar contains icons for location, map, upload, and user. A footer message reads: 'Need help with apps? Check out the [documentation](#).'

# Create a New App (aka data collection form)

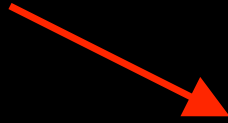
Click on the **New App** button



The screenshot shows the Fulcrum web interface. At the top left is the 'fulcrum' logo. Below it is a search bar with the placeholder text 'Type to filter your apps - 1 total'. To the right of the search bar are navigation links: 'Setup', 'Exports', 'Imports', and a green '+ New App' button which is highlighted with a red box. A red arrow points from the text 'Click on the New App button' to this button. In the top right corner, there is a 'Bird's Eye View' dropdown menu and a gear icon. Below the search bar, there are filters for 'Active' and 'Sort by Last Activity'. The main content area shows an app named 'Health Facilities' with a 'shared' tag, '1 record', and 'Last activity 3 months ago'. To the right, there is a notification card that says 'Kurt Menke submitted 1 record in Health Facilities.' with statistics '1 created, 0 updated, 0 deleted'. At the bottom, there is a link to 'Need help with apps? Check out the documentation.'

# Fulcrum App Designer opens

Types of fields  
you can add!



The screenshot displays the Fulcrum App Designer interface. At the top, the 'fulcrum' logo is on the left, and navigation options like 'Preview App' and 'Bird's Eye View' are on the right. The main area is divided into three panels: 'Add Fields', 'Field Settings', and 'App Settings'. The 'Add Fields' panel on the left is highlighted with a red border and contains a list of field types categorized into Basic, Choice, Design, Media, and Advanced. The 'Field Settings' panel in the center shows a large grey area with the text 'Drag Fields Here'. The 'App Settings' panel on the right includes fields for 'App Name', 'Description', 'App Status' (set to 'Active'), 'Record Title' (set to 'Title'), 'Enable Status Field' (set to 'Status Field (Disabled)'), 'Location Settings' (set to 'Location Settings (Enabled)'), and 'Auto Assign Records' (unchecked). At the bottom right of the 'App Settings' panel are 'Save and Exit' and 'Save and Continue' buttons, along with a link to the reference manual.

# Your App: Field Settings

Build your form here by dragging and dropping fields

The screenshot displays the Fulcrum app designer interface. At the top, the 'fulcrum' logo is on the left, and navigation options like 'Preview App' and 'Bird's Eye View' are on the right. The main workspace is divided into three sections: 'Add Fields', 'Field Settings', and 'App Settings'. The 'Add Fields' section on the left lists various field types categorized into Basic, Choice, Design, Media, and Advanced. The 'Field Settings' section in the center contains a large, light-gray rectangular area with a red border and a red arrow pointing to it from the text on the left. Inside this area, a faint gray box contains the text 'Drag Fields Here'. The 'App Settings' section on the right includes fields for 'App Name', 'Description', 'App Status' (set to 'Active'), 'Record Title' (set to 'Title'), 'Enable Status Field' (set to 'Status Field (Disabled)'), 'Location Settings' (set to 'Location Settings (Enabled)'), and 'Auto Assign Records' (unchecked). At the bottom right of the 'App Settings' section, there are 'Save and Exit' and 'Save and Continue' buttons, along with a link to the reference manual.

# App Settings

## Settings:

App name

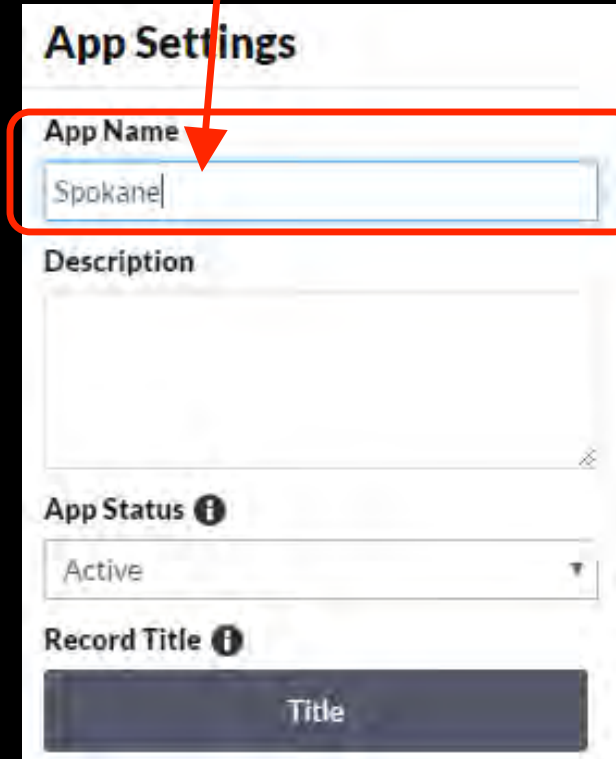
Description

Save buttons

The screenshot displays the Fulcrum app designer interface. On the left, there is a sidebar with various field categories: Basic, Choice, Design, Media, and Advanced. The main area is titled 'Field Settings' and contains a large box with the text 'Drag Fields Here'. On the right side, the 'App Settings' panel is visible, which is highlighted with a red rounded rectangle. This panel includes fields for 'App Name' and 'Description', a dropdown for 'App Status' (set to 'Active'), a 'Record Title' dropdown (set to 'Title'), a toggle for 'Enable Status Field' (set to 'Status Field (Disabled)'), a toggle for 'Location Settings' (set to 'Location Settings (Enabled)'), and a checkbox for 'Auto Assign Records'. At the bottom of the panel are two buttons: 'Save and Exit' and 'Save and Continue'. A red arrow points from the 'Settings:' text to the 'App Settings' panel.

# Name your App

Name your  
app  
Spokane



The image shows a screenshot of an 'App Settings' form. The 'App Name' field is highlighted with a red box and has a red arrow pointing to it from the title above. The text 'Spokane' is entered in this field. Below it is a 'Description' text area, an 'App Status' dropdown menu set to 'Active', and a 'Record Title' dropdown menu set to 'Title'. Information icons are present next to the 'App Status' and 'Record Title' labels.

**App Settings**

**App Name**

Spokane

**Description**

**App Status** ⓘ

Active

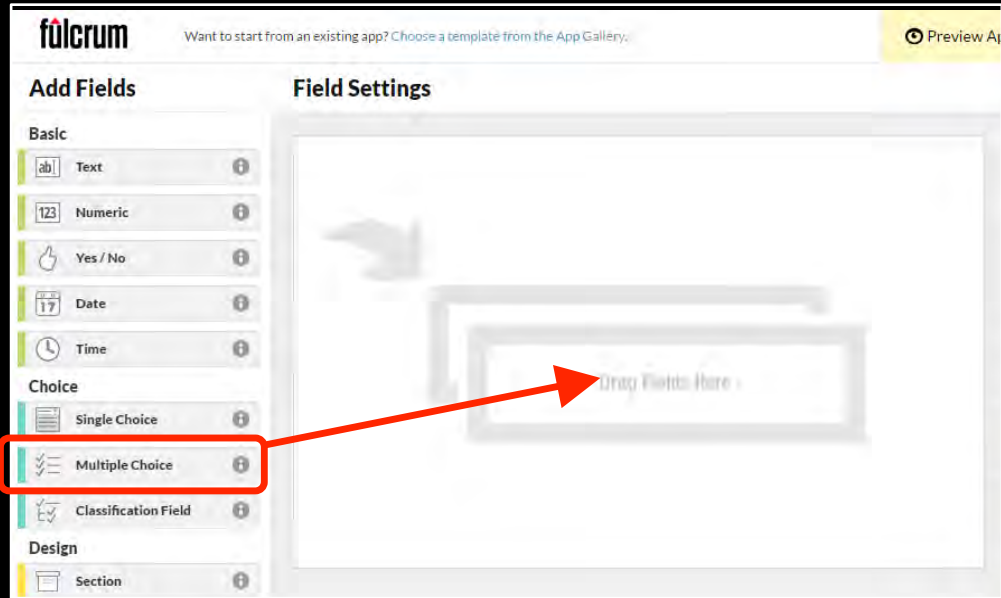
**Record Title** ⓘ

Title



# Add First Field

Drag and drop a  
**Choice**  
→ **Multiple**  
**Choice** field  
onto your App



# Fill in the Field Parameters

**Label:**

*What type of infrastructure is it?*

**Field Settings**

What type of infrastructure is it?

**Label** What type of infrastructure is it?

Description Enter a description of the field

Default Value - No default value -

Data Name what\_type\_of\_infrastructure\_is\_it

Allow "Other"

Required field?

Specify choices here

Use a pre-defined choice list

Choices Enter the choices, one on each line. Optional value text for each choice can be added at the end of each line after a semicolon. Example: Banking;00001

Sort A-Z

# Fill in the Field Parameters

- **Description:**
- **Default Value:**
- **Data Name:**  
*infrastructure*
- **Allow “Other”**
- **Required field?**

**Field Settings**

What type of infrastructure is it?

Label	What type of infrastructure is it?
Description	Bench, Sign, Tree, Bike rack, other
Default Value	- No default value -
Data Name	infrastructure

Allow "Other"

Required field?

Specify choices here

Use a pre-defined choice list

# Populate the Choices

## Choices:

Bench

Sign

Tree

Bike Rack

Other

**Field Settings**

What type of infrastructure is it?

Label: What type of infrastructure is it?

Description: Enter a description of the field

Default Value: - No default value -

Data Name: infrastructure

Allow "Other"

Required field?

Specify choices here

Use a pre-defined choice list

Choice: Bench  
Sort A-Z Sign  
Tree  
Bike Rack  
Other

# Add Field #2 - Capacity

Drag a **Basic** →  
**Numeric** field  
onto your app

Label: *What is the capacity of the bike rack?*

Data Name:  
*capacity*

Format: **Integer**

Field Settings

What type of infrastructure is it?

123 What is the capacity of the bike rack?

Label: What is the capacity of the bike rack?

Description: Enter a description of the field

Default Value: Enter an optional default value

Data Name: capacity

Format: Integer

Required field?

Hidden?

Read-only field?

Minimum Value: Enter min value

Maximum Value: Enter max value

You can leave either the min or the max values blank to allow any value.

Visibility Rules Requirement Rules

# Add Field #3 - # Bikes

Drag a **Basic**  
→ **Numeric** field  
onto your app

Label: *How many bikes are there?*

Data Name:  
*num\_bikes*

Format: **Integer**

**Field Settings**

What type of infrastructure is it?

123 What is the capacity of the bike rack?

123 How many bikes are there?

Label: How many bikes are there?

Description: Enter a description of the field

Default Value: Enter an optional default value

Data Name: num\_bikes

Format: Integer

Required field?

Hidden?

Read-only field?

Minimum Value: Enter min value

Maximum Value: Enter max value

You can leave either the min or the max values blank to allow any value.

Visibility Rules

Requirement Rules

# Add Field #4 – Type of Sign

Drag a **Basic** →  
**Text** field onto  
your app

Label: *What kind  
of sign is it?*

Data Name: *sign*

Required field?

The screenshot shows the 'Field Settings' dialog for a text field. The field is titled 'What kind of sign is it?'. The data name is 'sign'. The 'Required field?' checkbox is checked. The 'Hidden?' checkbox is unchecked. The 'Read-only field?' checkbox is unchecked. The 'Default to previous value?' checkbox is unchecked. There is a 'Validation Pattern' button. Below that are 'Min Length' and 'Max Length' fields, both containing 'Enter min length' and 'Enter max length' respectively. At the bottom are 'Visibility Rules' and 'Requirement Rules' buttons.

# Add Field #5 – Type of Tree

Drag a **Basic** →  
**Text** field onto  
your app

Label: *What kind  
of tree is it?*

Data Name: *tree*

Required field?

Field Settings

- What type of infrastructure is it?
- 123 What is the capacity of the bike rack?
- 123 How many bikes are there?
- ab1 What kind of sign is it?
- ab1 What kind of tree is it?

Label: What kind of tree is it?

Description: Enter a description of the field

Default Value: Enter an optional default value

Data Name: tree

Required field?

Hidden?

Read-only field?

Default to previous value?

Validation Pattern

Min Length: Enter min length

Max Length: Enter max length

Visibility Rules

Requirement Rules



# Add Field #6 - Photo

Drag a **Media** →  
**Photos** field onto  
your app

Label: *Take a photo.*

Data Name:  
*photo*

Required field?

The screenshot shows the 'Field Settings' dialog for a 'Photo' field. The 'Label' is 'Take a photo', the 'Data Name' is 'photo', and the 'Required field?' checkbox is checked. The 'Description' field is empty. The 'Min Photos' and 'Max Photos' fields are also empty. The 'Visibility Rules' and 'Requirement Rules' buttons are at the bottom.

Field Name	Label	Description	Data Name	Required field?	Hidden?	Read-only field?	Min Photos	Max Photos
photo	Take a photo	Enter a description of the field	photo	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Enter min photos	Enter max photos

# Add Field #7 – Today's Date

Drag a **Basic** →  
**Date** field onto  
your app

Label: *Today's  
Date*

Data Name: *date*

Default to today's  
date

The screenshot shows the 'Field Settings' dialog for a date field. The dialog has a title bar 'Field Settings' and a close button. It contains several sections: 'Label' with the text 'Today's date', 'Description' with the placeholder 'Enter a description of the field', and 'Data Name' with the text 'date'. Below these are several checkboxes: 'Default to today's date?' (checked), 'Required field?' (unchecked), 'Hidden?' (unchecked), 'Read-only field?' (unchecked), and 'Default to previous value?' (unchecked). At the bottom are two buttons: 'Visibility Rules' and 'Requirement Rules'. Red arrows point from the text on the left to the 'Label' field, 'Data Name' field, and the 'Default to today's date?' checkbox.

# Location Settings → Enabled

The screenshot displays the 'App Designer' interface, divided into two main sections: 'Field Settings' on the left and 'App Settings' on the right.

**Field Settings:** This section contains a list of fields for the application. The fields are:

- What type of infrastructure is it? (Icon: list)
- What is the capacity of the bike rack? (Icon: 123)
- How many bikes are there? (Icon: 123)
- What is the nearest building? (Icon: ab)
- Take a photo (Icon: camera)
- Today's Date (Icon: 17)







**App Settings:** This section contains various configuration options for the application:

- App Name:** Husky Infrastructure
- Description:** (Empty text area)
- App Status:** Active (Dropdown menu)
- Record Title:** Title (What type of infrastructure is it?)
- Enable Status Field:** Status Field (Disabled)
- Location Settings:** Location Settings (Enabled) (This button is highlighted with a red box and a red arrow points to it from the 'Location Settings' field in the Field Settings panel)
- Auto Assign Records:** (Checkbox)

At the bottom of the App Settings panel, there are two buttons: 'Save and Exit' and 'Save and Continue'. Below these buttons, there is a link to the 'reference manual' for more information on using the app designer.

# Save and Exit

## Field Settings

-  What type of infrastructure is it?
-  What is the capacity of the bike rack?
-  How many bikes are there?
-  What is the nearest building?
-  Take a photo
-  Today's Date

## App Settings

App Name  
Husky Infrastructure

Description

App Status ⓘ  
Active ▼

Record Title ⓘ  
Title (What type of infrastructure is it?)

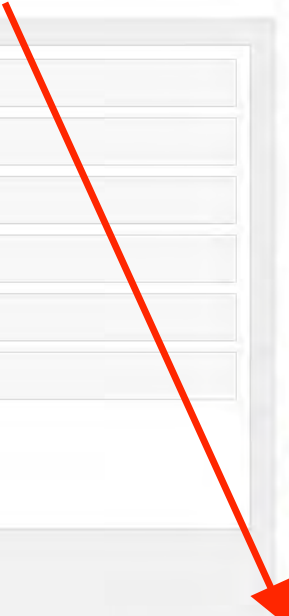
Enable Status Field ⓘ  
Status Field (Disabled)

Location Settings ⓘ  
Location Settings (Enabled)

Auto Assign Records ⓘ

[Save and Exit](#) [Save and Continue](#)

See the [reference manual](#) to learn more about how to use the app designer.



# App Completed



Your new app has been successfully created.



## Spokane

*No records collected*

[Activity](#) [Settings](#) [Members](#) [Data Share](#)


 0 records


 1 contributor

There is no activity for this app yet.

**View Data** 

**Edit App** 

**Duplicate App** 

**Import Data** 

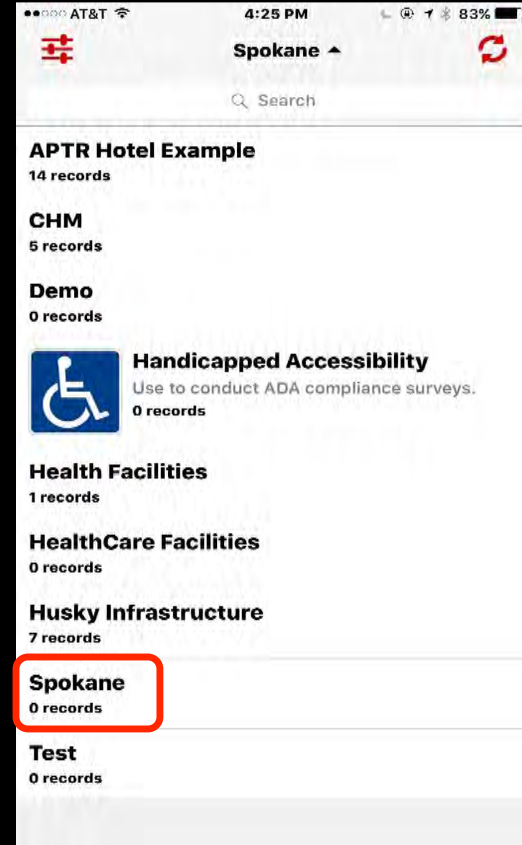


# Load Your Form

Open the Fulcrum app on your mobile device

If you haven't done so, log in using your user name and password.

Once you log in or tap **Sync** all your forms will be downloaded to your device.



# Let's Make a Map!

1. Build a Data Collection Form
2. Collect Data
3. Map it!

# Collect Data



AT&T 4:26 PM 83%  
Cancel Spokane Save  
What type of infrastructure is it? \* i  
Tree  
What is the capacity of the bike rack?  
How many bikes are there?  
What kind of sign is it?  
What kind of tree is it?  
Sycamore  
Take a photo \*  
Today's date  
August 9, 2016



**Go out and collect at least 10  
points**

**Some benches, some signs,  
some trees...**

**Be Back by 10:00!!!**

# Community Health Maps

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Los Ranchos de Albuquerque

**Are there any questions?**

# Fulcrum – Subscription Plans

- Pricing

ESSENTIALS	STANDARD	PROFESSIONAL
\$18/mo	\$22/mo	\$25/mo
Try It Now	most popular Try It Now	Try It Now
Photo Capture ✓	Parent-Child Records ✓	Barcode & QR Code Scanning ✓
Calculation Field ✓	Signature Capture ✓	Webhooks ✓
Data Importer ✓	Data Shares ✓	Record Linking ✓
Custom Online & Offline Maps ✓	Access to Developer API ✓	Geotagged Video & Audio Capture ✓
Media Storage <b>10 GB</b>	Media Storage <b>20 GB</b>	Media Storage <b>30 GB</b>
Export Formats All	Export Formats All	Export Formats All
Data Publishing N/A	Data Publishing 3 links	Data Publishing 5 links
<a href="#">See More Features</a>	<a href="#">See More Features</a>	<a href="#">See More Features</a>