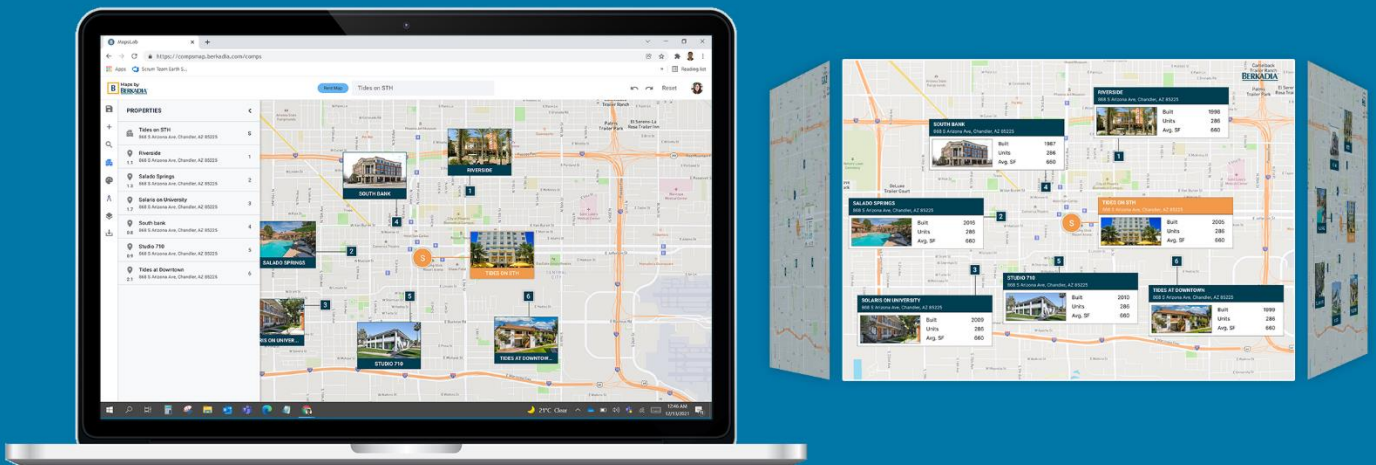
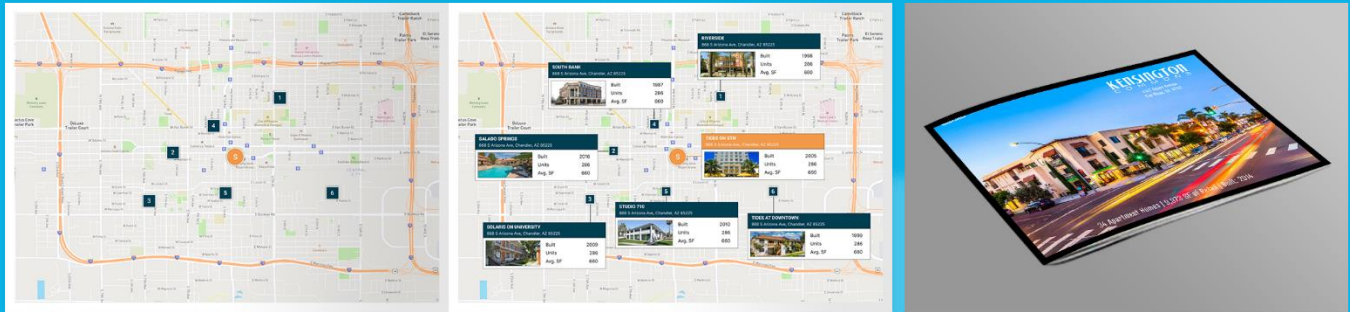


# UX Case Study - Maps APP

Status – Shipped and live



*Maps app is a platform where users will be able to locate and compare subject property (a property being sold) with all nearby properties on map and generate high quality reports, which can be used in the sales and marketing at Berkadia.*

# 01 - Project Overview

## Role

Senior Product Designer

## Duration

Jan 2020 – May 2021

## Tools



Figma



Lucid  
Chart



Airtable



Creative  
Cloud



Excel



Word

## Team

We used Agile Scrum Methodologies for development of product.

- Product Owner
- Scrum Master
- Senior Product Designer (Me)
- Developers (4)

## Background

Maps by Berkadia is a deal marketing app, used to compare subject property (a property being sold) with all nearby properties on the map and generate reports, which can be used in the sales and marketing at Berkadia. It consumes Google APIs for address search, draw mathematical shapes, place pins on a geographical map.

It gives value and maximize the price of the subject property. It helps Investment Advisors to tell the story about a property being sold to its customers. Types of Maps reports:

1. Location Map
2. POI Map (Points of Interest)
3. Employer Map
4. Rent Comp Map
5. Sales Comp Map
6. Radius Map
7. Isometric Map\*
8. Drive Time Map\*
9. Pipeline Map\*

## Problem Statement

The user needs a way to create, customize, and utilize maps report for sales and marketing purposes. This solution will lead to faster turnaround times and design experience.

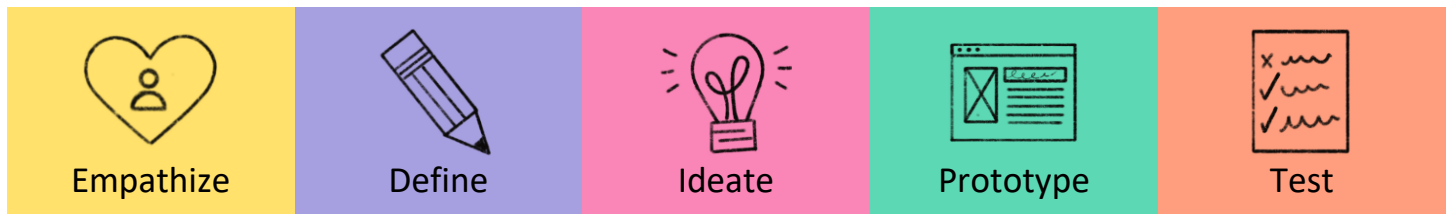
## Goals

- Provide a one-stop shop for all Berkadia's mapping marketing needs.
- Increase the speed of creating, publishing, and distributing of mapping marketing efforts.
- Continuously innovate on mapping marketing.
- Get rid of the existing manual process and reduce the time-to-task for the creation of comparison report.
- Save \$300,000 worth of additional graphic design talents.

---

## 02 - Design Thinking Process

There are many ways to describe a design process and here's one that covers strategy through production.



---

## 03 - Empathize

### Research

Both **quantitative and qualitative** research were conducted. The primary goal was to gain insight into the journey of the user and their pain points.

### Stakeholder interviews:

- We conducted interviews with multiple stakeholders such as VP, product management and various teams.
- This gave us a better understanding of the Berkadia internal processes and organizational structure.
- We also had opportunity to interview key stakeholders at Berkadia from design, engineering, and sales.
- It played a major role for gathering data and other marketing document insights.
- We arranged the interview notes into an Affinity Diagram and found some key insights.
- They helped us to identify the users.

## User Survey:

- Online surveys were conducted to collect quantitative data from 260 users.
- This helped us to understand users and their demography.

## User contextual inquiry:

- We identified the target users. They are mainly Analysts, designers, and people from sales.
- We prepared goals, method, and questions before interview.
- We conducted one-to-one interview, using online video call with a small sample of users in their normal work environment.
- This helped us to define user personas, product features, understand their goals and pain points.
- We recorded the interview in the form of video and updated the key point in Airtable.

## Questions

### User Interview:



Participants: 10  
Age: 22 – 38

1. What does your daily schedule look like?
2. How often you need comparison reports?
3. What are the elements you had used in your reports?
4. What was the last time you sought help from designers to create reports? How did you find the experience?
5. Did you encounter any problems getting these reports?
6. How could this experience be improved?
7. Have you ever used an app for report generation before? If so, which one and how did you find the experience?
8. What features would be most important to you in an app like this?
9. Can you walk us through your current process of getting the reports?

### User Survey:



Participants: 260  
Age: 22 – 85

1. What is your employee ID?
2. Select your role.
3. What is your age?
4. What is your gender?
5. Where are you located?
6. Have you ever worked on generating comps report? *(If answer YES, following question were asked, else exit from survey with thank you message)*
  - i. Select the elements you used in your reports from the list?
  - ii. If anything is missing from above list, please mention here.
  - iii. Do you find creating reports form designer is time consuming?
  - iv. Have you ever used a website or app for report generation before? *(If answer YES, following question were asked.)*
    - a) If you answer YES to the previous question, can you explain what app/website you used, and what features you like about it?
  - v. What are you first impressions and feelings towards the concept?

vi. Please leave your comments or thoughts here.

## Building User Personas

Creating a user profile (persona) normally include social and demographics characteristics, goals, pain points and motivations.

Investment Advisor	Analyst	PMs, TMs and Office support
Total: 113	Total: 18	Total: 129
Age: 23 – 85	Age: 22 – 38	Age: 22 – 65
Under 40: 52% Over 40: 48%	Under 30: 78%	Under 40: 61%
Male: 92% Female: 8%	Male: 89% Female: 11%	Male: 42% Female: 58%

### Demography:



Name	Michael Breland
Occupation	Analyst
Age	33 years
Status	Married
Location	US
Education	Master of Business Administration
Tech skills	Expert

### Goals and needs:

- Should be able to create/customize marketing materials and reports by self in less time.
- Provide a clear grasp of the local market trends.
- Tee up potential clients for the IA and BOV/deal valuation.

### Pain Point:

- He was asked to gather missing data for properties, which takes him away from analysis work.
- Must involve multiple teams to provide materials to the designers to design.
- Time-to-task – everything is too slow.

### Motivation:

- Be financially independent.
- Following the path to become Investment Advisor.

### Demography:

### Goals and needs:

- Should be able to create/customize high quality marketing materials and reports for IAs in less time.
- Assist in data gathering, document prep, and fact checking.
- Smooth the workflow for an IA to get a property pitched, listed, and sold.



Name	Rakesh Kodigella
Occupation	Design Process Expert
Age	29 years
Status	Married
Location	India
Education	Bachelor of Fine Arts
Tech skills	Expert

#### Pain Point:

- Much of the workflow is tedious and requires sign-off or confirmation from IA.
- Depend on multiple teams for design inputs, as it is difficult to understand data reports given in excel sheet.
- Time-to-task – everything is too slow.

#### Motivation:

- Be financially independent.
- Recognize a good job.

## Usability Evaluation / Literature Reviews

- We have studied the organization related documents, style guides and corporate colors.
- MaRc team provided us the previously designed marketing materials and documents.

---

## 04 - Define

- We put together all findings into one place, to create a collage of experiences, thoughts, insights, and stories.
- Empathy Mapping of what the users: Said, Did, Thought, and Felt.
- Define Problem Statement in a human-centered manner using Point of view (POV)

---

## 05 – Ideate

- With the help of Brainstorm session with the team, we came up with 15 concepts to solve the problem for the initial phase.
- We tested our idea with Stakeholders to know the sustainability and viability of the notions.
- We requested team to vote for the best idea.

## 06 – Prototype

- It was decided to build **MVP (Minimum Viable Product) product** first with basic features.
- The final product was released in the market only after getting sufficient feedback from the product's initial users.
- The low fidelity interactive prototypes were built first and discussed technical feasibility with developers.
- These low fidelity prototypes were tested with users before working high fidelity.

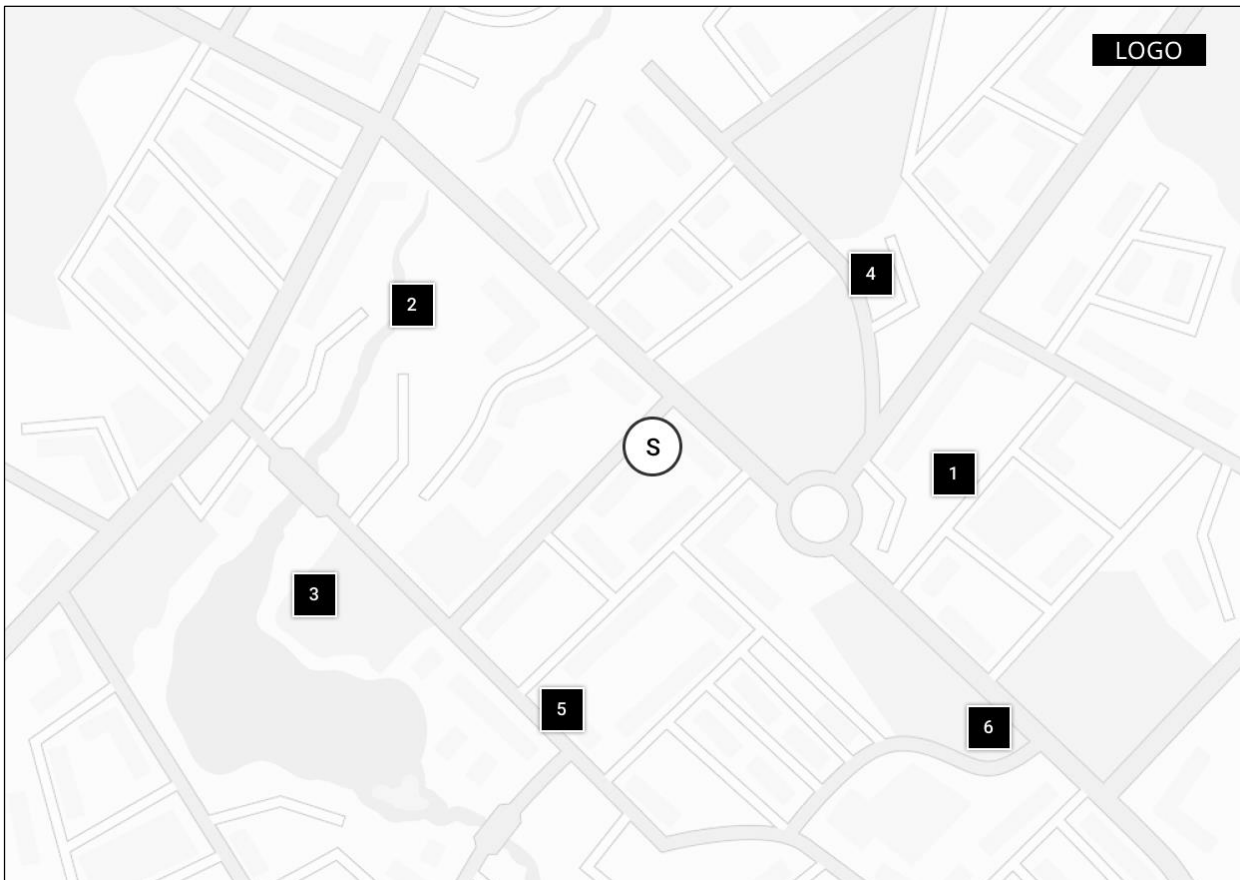
### Features used in MVP release:

- Upload excel sheet and display map on screen
- Generation of Location Map
- Re-arrange the order of the comparable properties
- Export/ Download Map Report in the form of PDF

### Low Fidelity Designs

#### Map report:

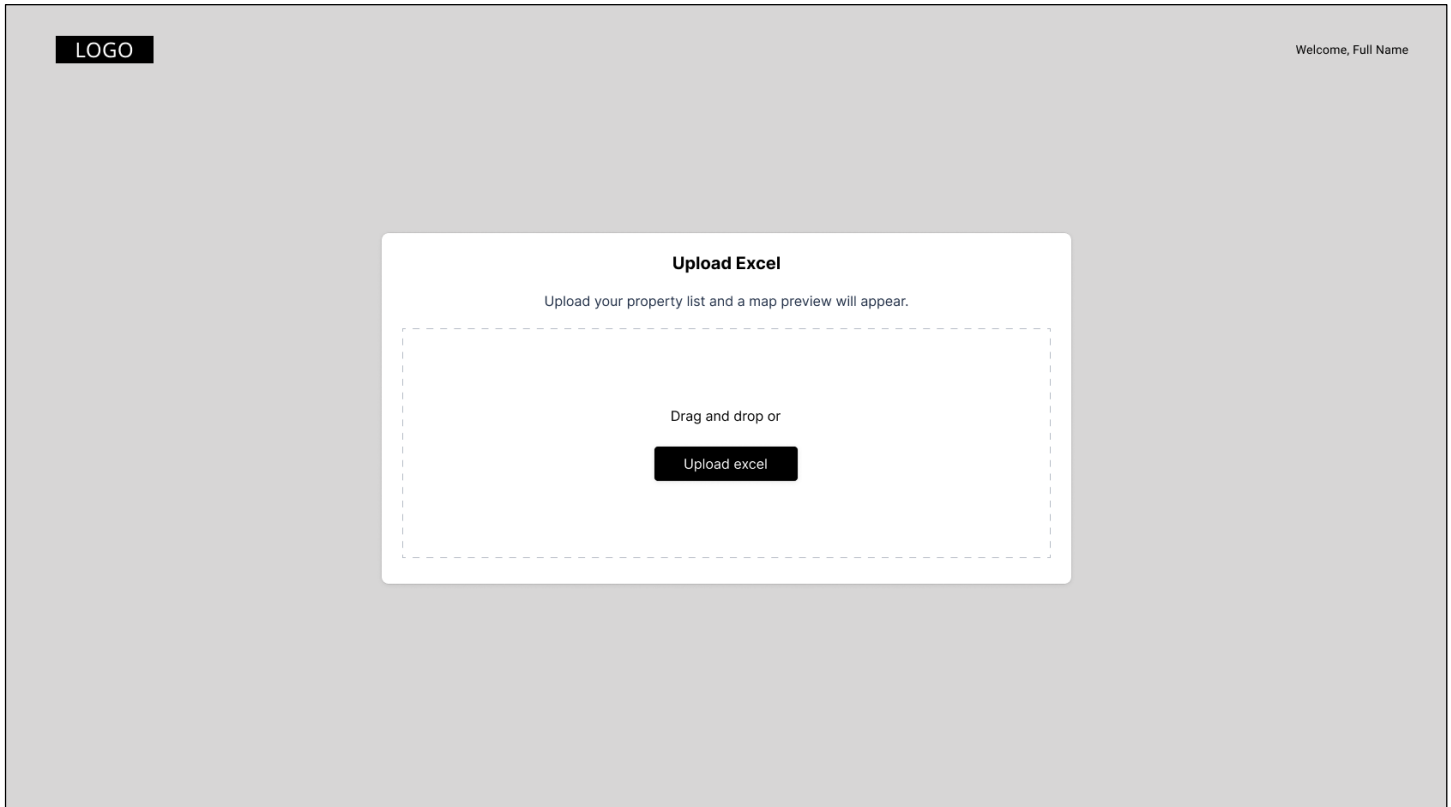
[Map Report]



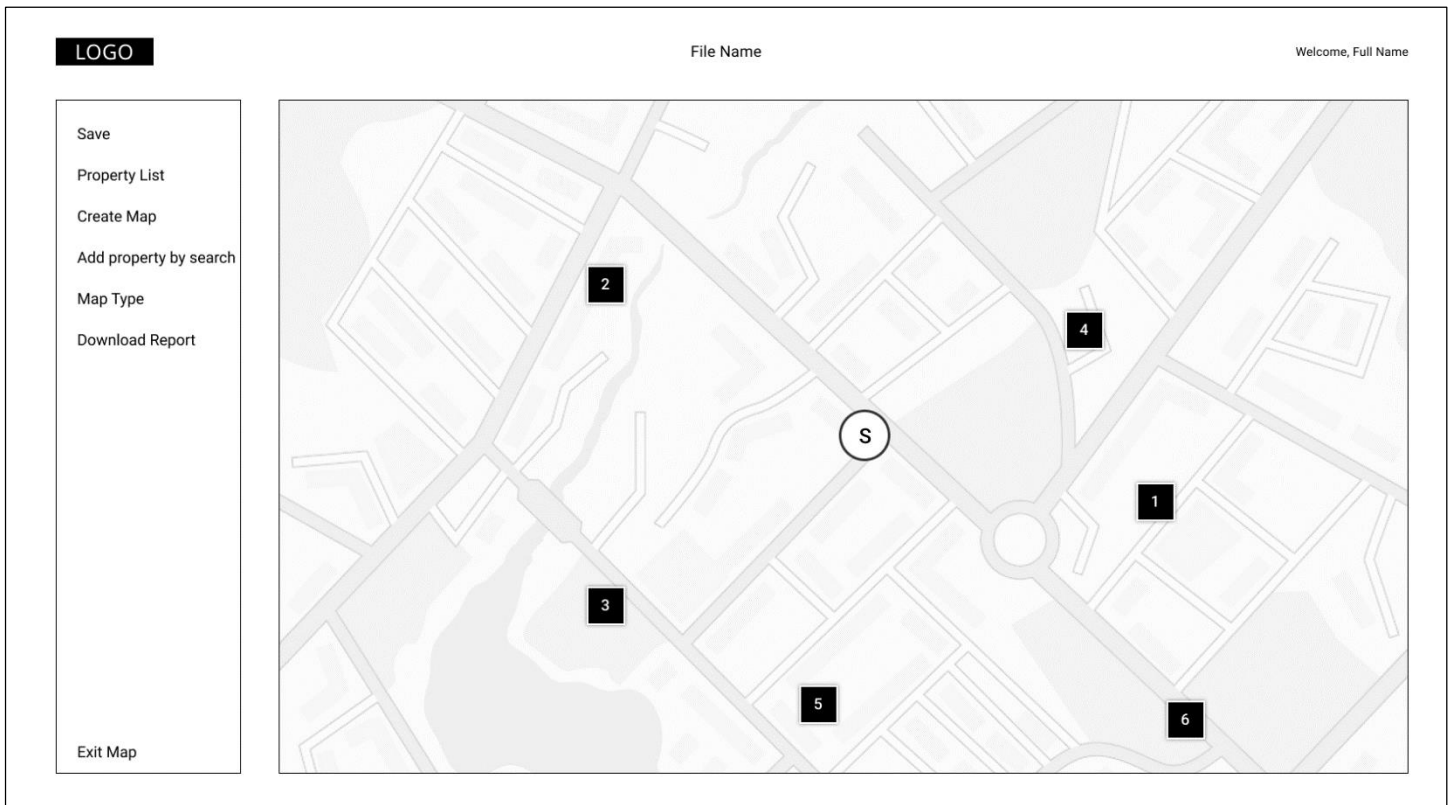


## Application:

[Upload Excel]



[App Interface]

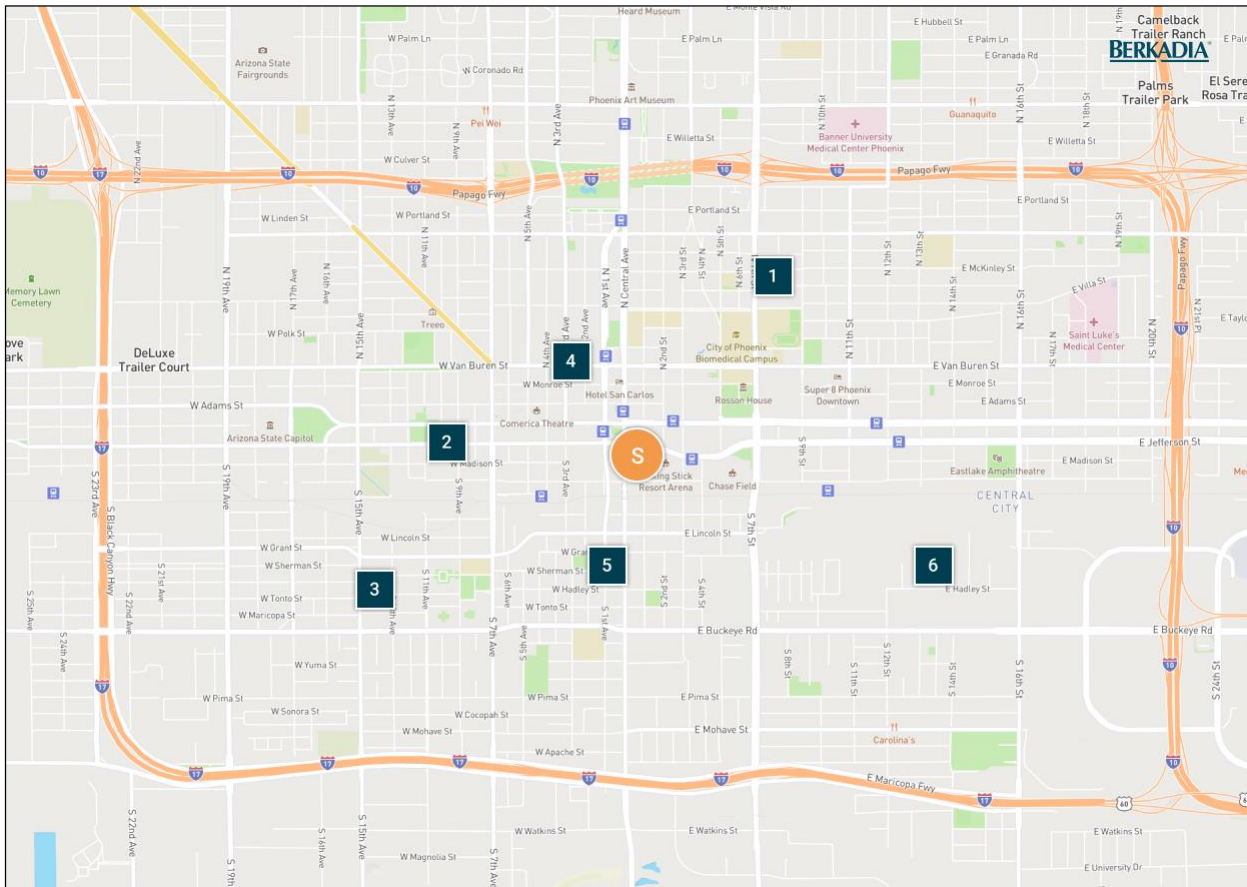




# High Fidelity Designs

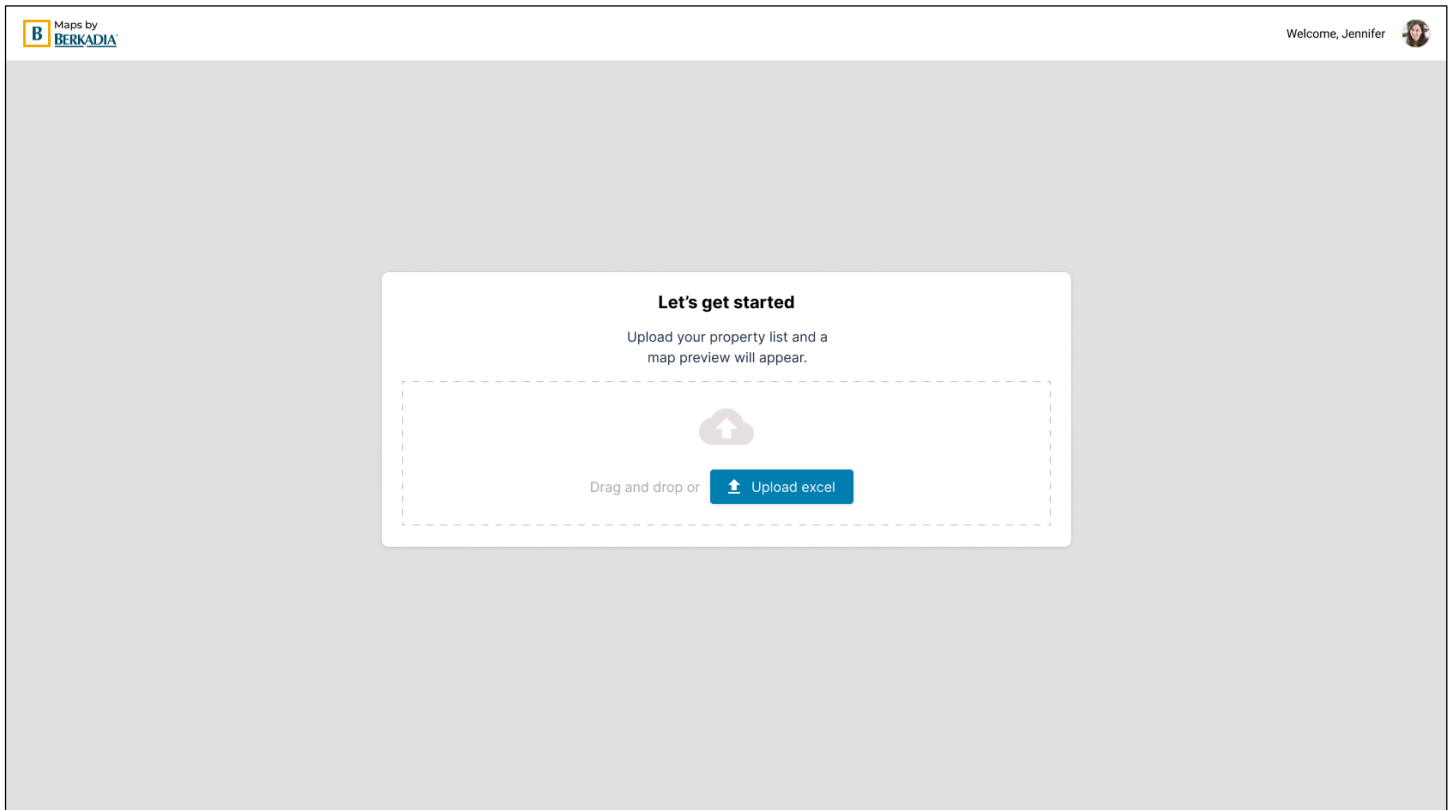
## Map report:

[Map Report]

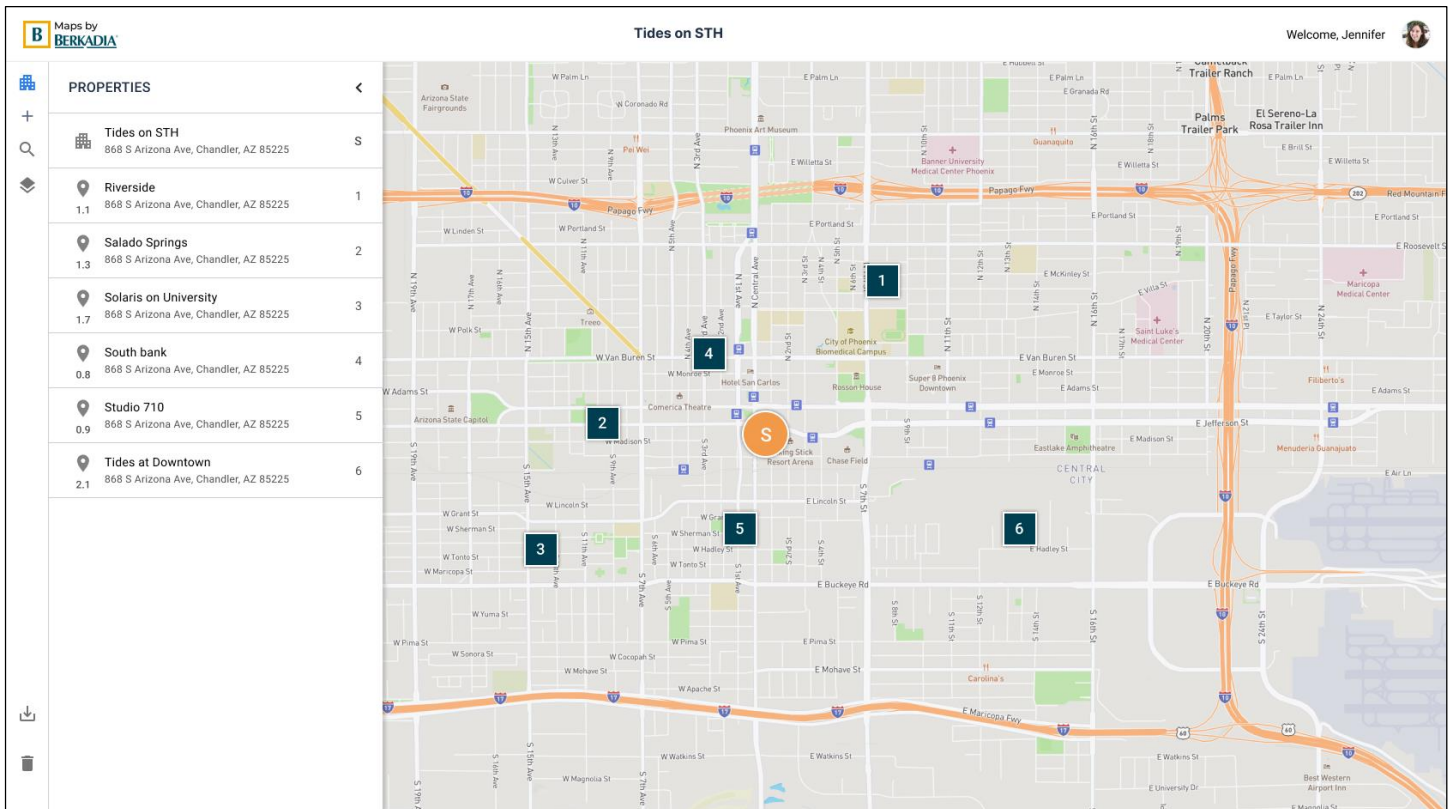


## Application:

## [Upload Excel]



## [App Interface]



---

## 07 - Test

- We used **remote moderated method** for usability testing.
  - We assigned tasks to each user and observed them to understand their pain points.
  - This helped to improve the designs further.
- 

## 08 – After MVP release

- Based on the feedbacks from the users, we modified the prototype with new design.
- We had listed all the features, prioritized according to user needs.
- These features were updated in Product Backlogs which later moved to Sprint Backlogs.
- Each features designed and developed one by one in Sprints.
- Followed Design Thinking process for design each feature.

### More features:

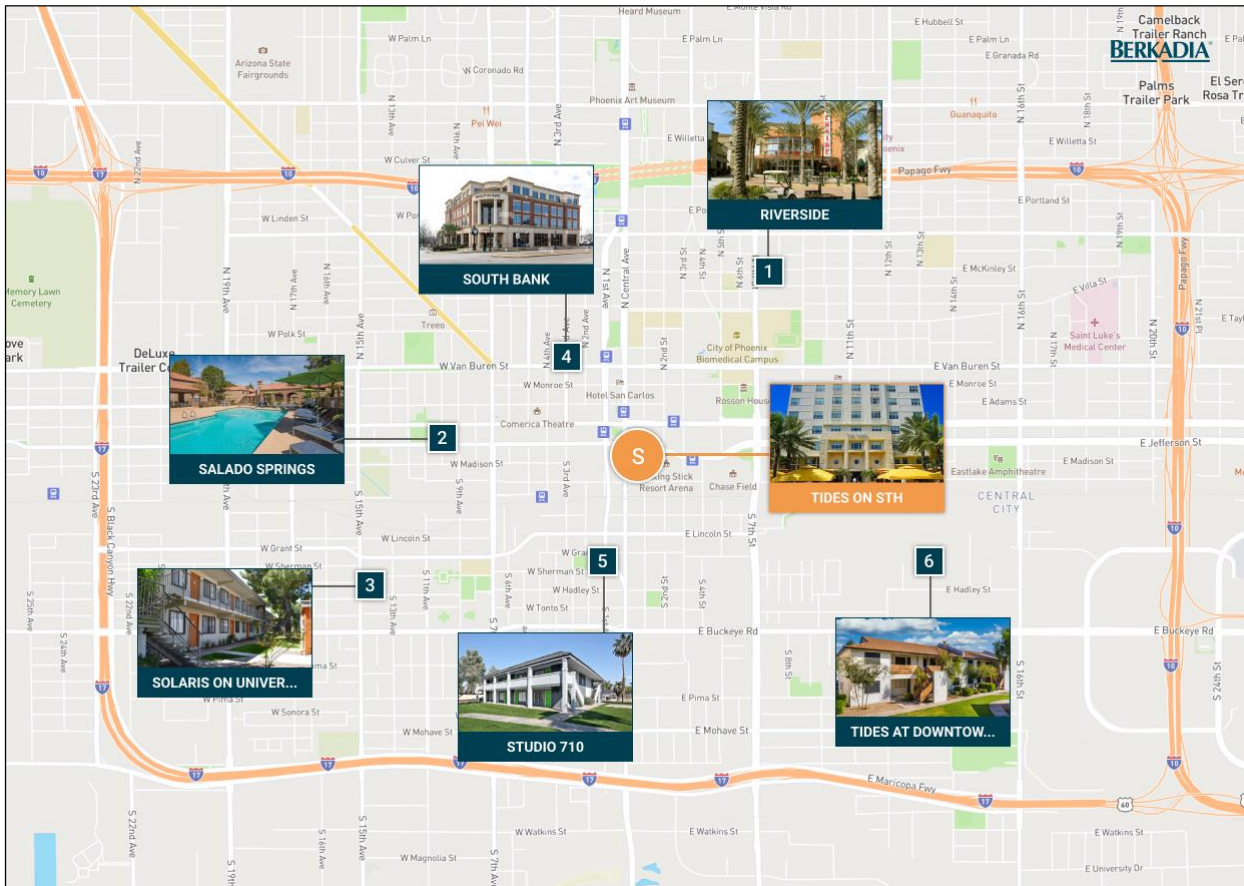
- New user interface
- Home page with search and folder structure
- Save maps project
- Add a property by search
- Create a Blank Map
- Edit/delete a property
- Edit/delete property images
- Enable Dialog Box for Property Pins
- Customization of colors and sizes of map marker
- Map Layers
- Map Labels Toggle ON/OFF
- Export/ Download Maps Report (Standard, Premium, Pro upload IN JPG, PNG & PDF with legends and map only)
- Duplicate projects
- Rename and Delete Maps Projects
- Undo and Redo Marker Movements and Marker Deletions
- Reset Map to the Last saved state
- Customize Legends (Choose either Left side and Right-side view of Legend templates, Change Font and Font Size)
- Applying colors for the Dialog box Text
- Displaying Employer Data in the Dialog box
- Adding POI from map

- POI Search
- Grouping POI
- Create a Blank Map for different map types.
- Customize legends (Bottom side)
- Text Properties in dialog box for subject & Comparable
- Deal id on dashboard
- Enable dialog box in one click for subject / Comparable
- Adding image to the subject markers
- Radius Map
- Drawing tools for poi maps
- Improving dialog box
- Maps & Comps integration
- Advance filter options to search saved projects
- Integration of Matomo in Maps application (analytics application)

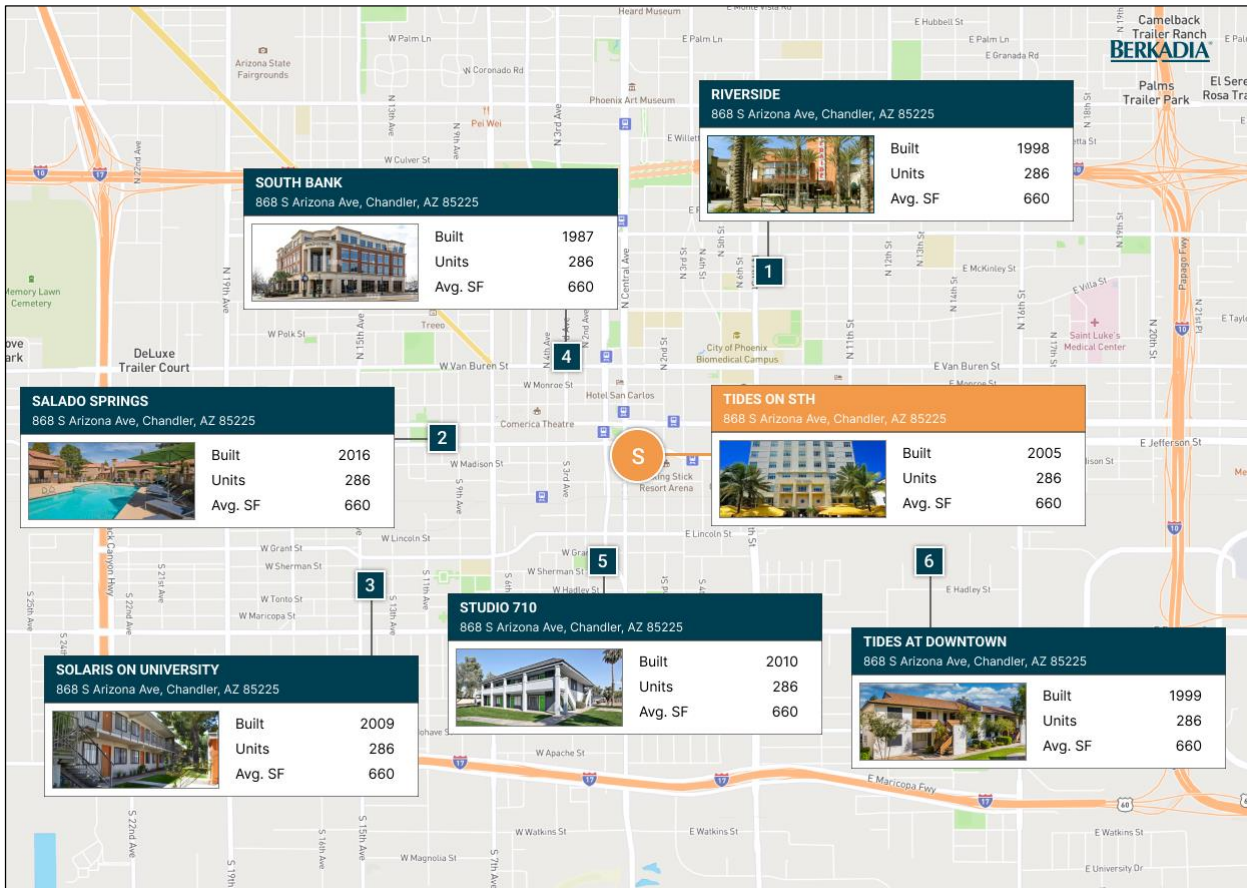
## Final Designs

### Map reports:

[Screenshots]



[Screenshots]







## [Home/Dashboard]

+

CREATE NEW

All projects

Portfolios

Regions

Map Types

Recent

Favorite

Shared with me

Trash

My Map Projects

Recent Projects

**Tides on STH**  
 Deal ID: 1029384  
[DETAILS](#)

**The Cover Major Employers**  
 Deal ID: 1029384  
[DETAILS](#)

**Galewood Flats**  
 Deal ID: 1029384  
[DETAILS](#)

**Portofino SCM**  
 Deal ID: 1029384  
[DETAILS](#)

1233 projects

Sort by created on

	<b>Loramont on Thomas...</b> Location (City)	0795084 Deal ID	K. Farnsworth Owner	Today Last Modified		
	<b>Montecito Pointe Rent...</b> Location (City)	3738393 Deal ID	K. Farnsworth Owner	Today Last Modified		
	<b>Portofino SCM</b> Location (City)	2910292 Deal ID	J. Mars Owner	Yesterday Last Modified		
	<b>Tides on STH</b> Location (City)	0795084 Deal ID	K. Farnsworth Owner	Yesterday Last Modified		
	<b>7 River Rent Comps</b> Location (City)	3829287 Deal ID	J. Mars Owner	Yesterday Last Modified		

## [Project Page]

Rent Map

Tides on STH

Reset



[illegible][illegible]

**Maps by BERKADIA**

**EDIT GLOBAL STYLES**

**Subject Property** | Comparable Property

**Placemark**

20 pt

**Marker Color** | **Dialog Box Color**

Background | Background

Text | Text

Stroke | Secondary

**Dialog Box Text Properties**

Font: Roboto

Property Name Font Size: 14

Property Address Font Size: 12

**Text Align**

**Property Name** | **Address**

Number	Property Name	Address
1	RIVERSIDE	1000 N 1st St, Phoenix, AZ 85004
2	SALADO SPRINGS	1000 N 1st St, Phoenix, AZ 85004
3	PHOENIX ON UNIVERSITY	1000 N 1st St, Phoenix, AZ 85004
4	SOUTH BANK	1000 N 1st St, Phoenix, AZ 85004
5	STUDIO 710	1000 N 1st St, Phoenix, AZ 85004
6	TIDES AT DOWNTOWN...	1000 N 1st St, Phoenix, AZ 85004

Maps by **B** BERKADIA
Rent Map    Tides on STH
 Reset

### DRAWING TOOL

Create Radius Circle

Select the property

Radius in Miles

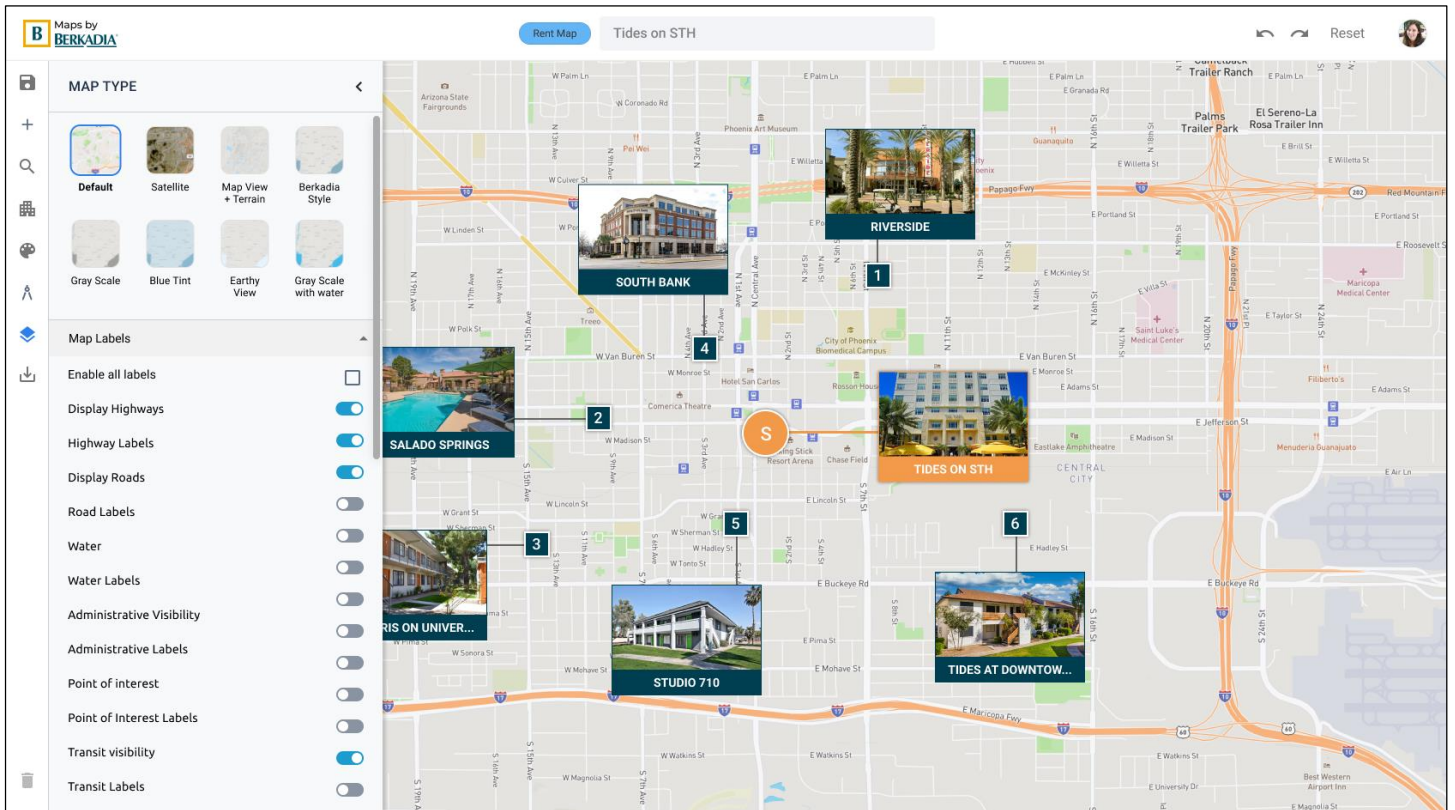
+ ADD ANOTHER MILE

Circle Color

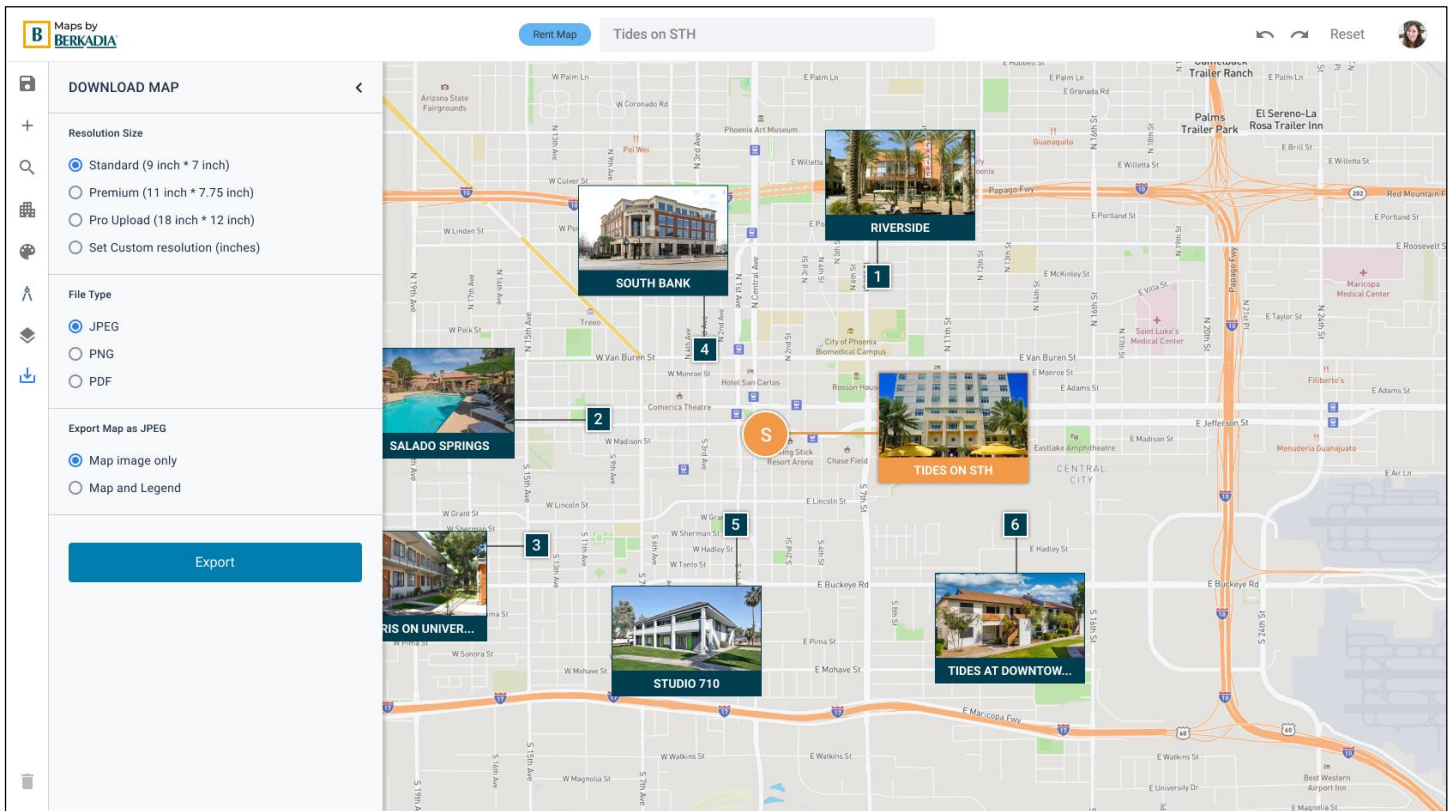
● Background
● Border



## [Customize Map]



## [Customize Map]



## 08 – ROI of the application

Based on the analytics report on December 2021

Total Projects: **4868**

Total Users: **207**