Property Boundary Documentation

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Project Lead:

Erdene Batbayar

Authors:

Christian Galvez Diego Fonseca

Revision Control:

Erdene Batbayar Diego Fonseca Christian Galvez

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1.0	Christian Galvez	Template update	2025/09/26

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CHAPTER 1

Introduction

This document is the general documentation of the Property Boundary app.

The Property Boundary app is an interactive map viewer with elevation analysis, property boundaries, and subscription-based usage tracking. It was built with React, Type-Script, MapLibre GL, and Chart.js., and uses open-source geojson data to display land boundaries across various distances.

The interactive map features both satellite and street view options and adjusts accordingly to the display ratio of the user.

The Elevation Analysis tool allows the user to draw a line, based off two closeby chosen points, and generate elevation profiles with detailed statistics: the total distance between the two points, the minimum & maximum elevations, the average elevation, and the elevation gain.

The map currently has property boundaries defined for the majority of Australia, and parts of the US. Each property boundary comes with border measurements and the land's total area calculations.

The app supports search for locations worldwide with autocomplete suggestions. Real-time usage tracking with visual indicators ensures each search is up-to-date.

The app supports Iframe integration, so other developers may easily embed the app in other applications.

The app works both on mobile and desktop devices. [1]

CHAPTER 2

Software

Total Distance Min Elevation Max Elevation Avg Elevation Elevation Gain 35.0m 19.4m 19.5m 19.4m 0.1m



- · Hover over the chart to see detailed elevation data at each point
- The chart shows elevation changes along the measured path

CHAPTER 3

Tests

Bibliography

[1] Property Boundary. https://github.com/Syren0914/Australia-property-boundary-v. 3>, September 2025.