Rapid Analytic Interactive Scenario Explorer (RAISE)

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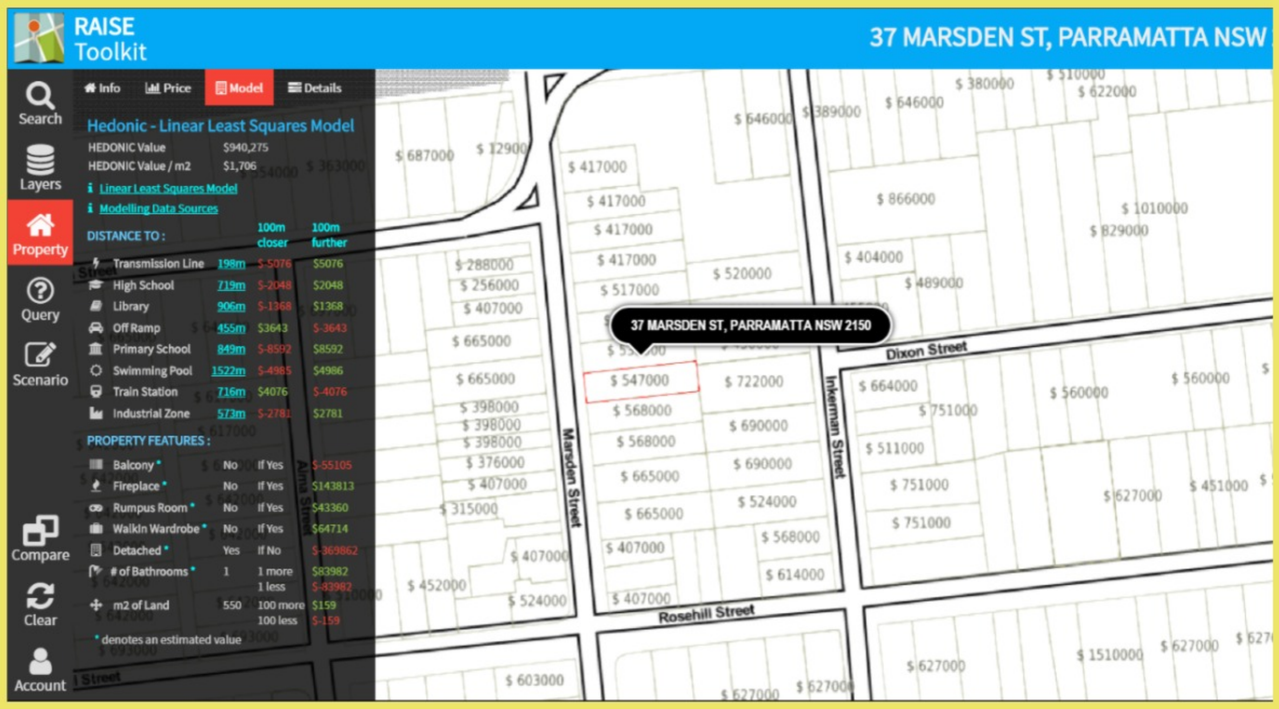
What is RAISE?

RAISE is a spatial data tool that enables users to quickly estimate and visualise property value. Property values are rapidly calculated using any one of the automated valuation models available on the toolkit. The generated values are visualised on a map and can be overlayed with other geospatial information layers relevant to investigating trends in property price.

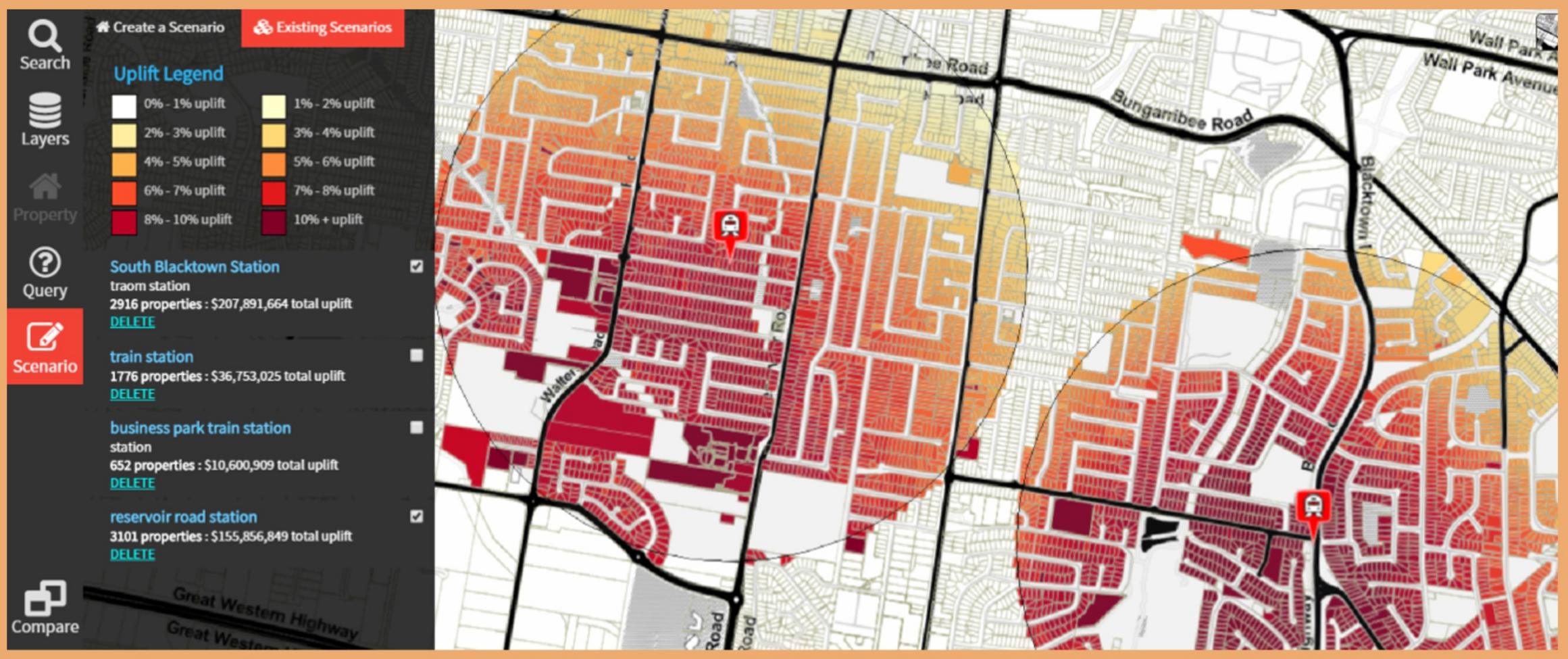
Key features

- **Value uplift modelling:** Users can investigate potential value uplift from hypothetical addition of infrastructure.
- **Interactive scenario exploration:** The tool's dashboard interface will allow easy comparison between different development scenarios and their projected value uplift.
- **Collaborative planning:** RAISE's back end is built on open, cloud-based architecture that enables the toolkit to link diverse property and geospatial data to models and visualisations.



Tool showing automated valuation for a selected property with a breakdown of variables used to calculate its value

- **Cloud-based architecture:** Rapid and interactive visualisation of property values, potential value uplift, and other relevant data layers can facilitate communication and collaborative planning with different user groups. Development of 3D visualisation for the toolkit is currently being explored.



Value uplift comparison between two hypothetical train stations

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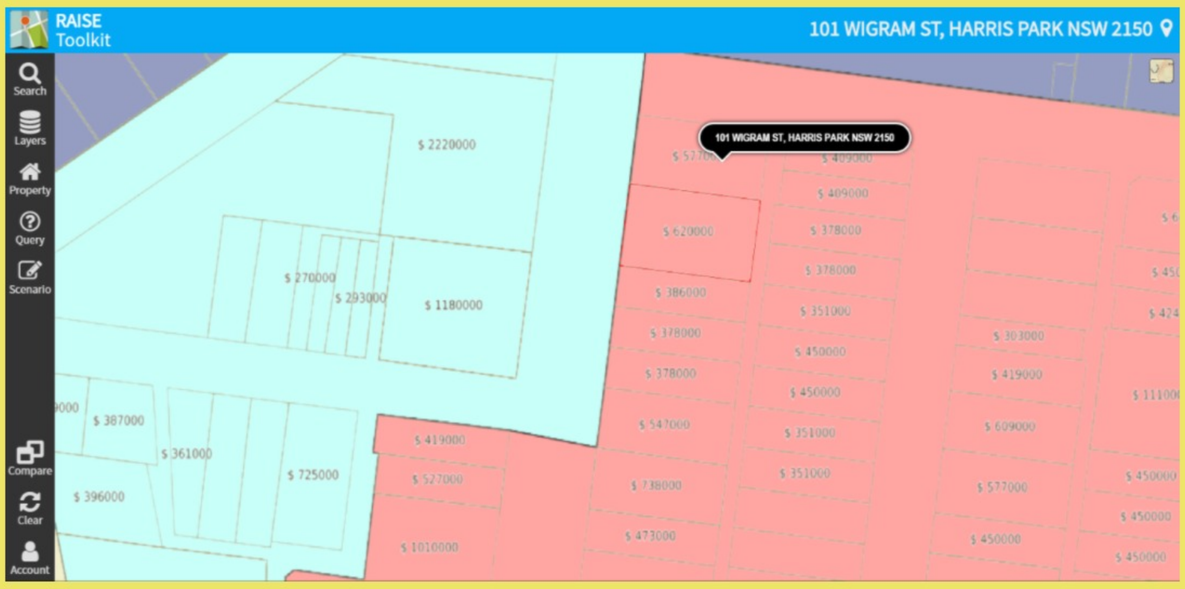

Tool showing land value data overlayed with land zoning category

Why RAISE?

Governments and businesses have access to unprecedented amounts of information to guide their decisions: big, diverse and rapidly changing data. And they increasingly have to turn to **spatial data tools** to combine and process it all. But to harness collective intelligence and foster transparency in decision making, these tools must enable that data to be analysed in **collaborative** ways.

Tools like RAISE which allow **interactive scenario exploration** can support collaborative analysis. Interactive scenario exploration would allow users to rapidly formulate and test hypotheses and options. The spatial data tools draw together and analyse the data with automated modelling; and offer immediate visual feedback on how scenarios compare with each other.

Key end users

Key end users of the initial RAISE toolkit include **land valuers**, **city planners** and their **respective partners** investigating different transport infrastructure options. The toolkit will help understand the impacts on land values, and the potential for value sharing policies to contribute funding to this infrastructure.

About the project

Toolkit development and research are collaboratively undertaken by UNSW's City Futures Research Centre and QUT's Creative Industries Design Lab. The project team is working with industry partners Australian Property Monitors and Omnilink, and government partners NSW Land & property Information and Parramatta City Council.

Along with financial and in-kind contributions from the project partners, RAISE is funded by the **Cooperative Research Centre for Spatial Infrastructure**. Established in 2003, with a renewed funding commitment in 2010, the CRCSI is an international research and development centre, comprising over 100 partner organisations in business, government and education.


Valuers from LPI NSW using data overlay feature to query a parcel's valuation during a workshop exercise

Partners:

Research

UNSW THE UNIVERSITY OF NEW SOUTH WALES

QUT Queensland University of Technology

Government

NSW GOVERNMENT Land & Property Information
A division of the Department of Finance & Services

PARRAMATTA CITY COUNCIL

Industry

OMNILINK LINKING PEOPLE AND INFORMATION

AUSTRALIAN PROPERTY MONITORS

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