Our video

# Ideas

* Audience: a dashboard for the ATO and other government departments to help visualise what suburbs will look like in 2030. This includes:
  + Who will be living in the suburb?
  + What are their life prospects?
  + What is their economic contribution?
* We have combined datasets from:
  + The Australian Taxation Office (ATO)



* + The Australian Bureau of Statistics (ABS)



* + The South Australian Attorney-General's Department (AGD)

[](https://data.sa.gov.au/data/organization/attorney-general-s-dept)

* + The Department of Planning, Transport and Infrastructure (DPTI)

[](https://data.sa.gov.au/data/organization/department-of-planning-transport-and-infrastructure)

* + The Department for Education and Child Development (DECD)

[](https://data.sa.gov.au/data/organization/dept-for-education-and-child-development)

* This includes the following datasets:
  + <list here>
* This visualisation will serve multiple purposes:
  + Help the ATO identify which suburbs are changing their economic profile and therefore their taxation profile
  + Help the AGD identify which suburbs are at risk of increased crime rates
  + Help the DPTI identify which suburbs could benefit from an increased focus on infrastructure
  + Help the DECD identify which suburbs could benefit from additional funding in schools and extracurricular programs to prevent youth delinquency and improve educational prospects
  + Help other government departments identify which suburbs could benefit from an increased focus on health promotion and crime prevention programs

What the GovHack video should cover:

* Introduce team name and members
* Aim of hack
* Dataset
* Technologies used
* Where is hack hosted
* Key expertise that went into it
* Interesting datasets being combined
* Screenshots, video and voiceover
* Plan your demo
* Describe missing features and what we could do next
* Who does it benefit, whose life does it improve
* Add progress shots if available
* Produce at 720HD – 10 minutes to render

# Project description

Suburb Outlook is a forecasting tool designed to assist government authorities with making forward-thinking and informed decisions about the future development of the suburbs in a given postcode.

Our goal was to bring together as many datasets as possible from different sources to help visualise the economic and social make-up of a given postcode. We then extrapolated the existing 2006-2015 data to present the outlook of each postcode as it might appear in 2030. Due to the limited timeframe of the GovHack event, we limited our tool to three different and diverse postcodes in South Australia, showcasing a range of socio-economic parameters. The chosen postcodes encompass struggling, emerging, and established areas.

## Datasets

For these data visualisations, we have brought together datasets from:

* The Australian Taxation Office (ATO)
  + GovHackATO
* The Australian Bureau of Statistics (ABS)
  + GovHackATO
* The South Australian Attorney-General's Department (AGD)
  + Crime Mapper: Charles Sturt (C) Local Government Area
  + Crime Mapper: Metropolitan South Australia
  + Crime Mapper: Playford (C) Local Government Area
  + Crime Mapper: Walkerville (M) Local Government Area
* The Department of Planning, Transport and Infrastructure (DPTI)
  + Metro median house sales
  + Population Projections for SA
* The Department for Education and Child Development (DECD)
  + Australian Early Development Index 2009-2015
  + Families and Income

## Purpose

Suburb Outlook will serve multiple purposes:

* Help the ATO identify which suburbs are changing their economic profile and therefore their taxation profile
* Help the AGD identify which suburbs are at risk of increased crime rates
* Help the DPTI identify which suburbs could benefit from an increased focus on infrastructure
* Help the DECD identify which suburbs could benefit from additional funding in schools and extracurricular programs to prevent youth delinquency and improve educational prospects
* Help other government departments identify which suburbs could benefit from an increased focus on health promotion and crime prevention programs

## Awards

Suburb Outlook is targeted at the following Awards:

* **Bounty: Plausible Futures**: this bounty was the main driver behind the creation of Suburb Outlook. Our objective was to extrapolate available trend data on many aspects of a suburb to provide government agencies with the most comprehensive and accurate set of predictions possible.
* **Bounty: .tech / .space**: the suburboutlook.tech domain name is a great place for our website as Suburb Outlook uses technology to enhance government decision-making.
* **Best Entry from South Australia**: we believe Suburb Outlook will be of significant value to the South Australian government in helping to shape the future of South Australia’s suburbs by identifying positive and negative trends and implementing remedial actions in a timely fashion. Suburb Outlook uses multiple datasets from data.sa.gov.au, including population projections, crime mapper data, median house sales data and the Australian Early Development Index.
* **Neighbourhood and Community Confidence**: Suburb Outlook integrates crime mapper data from the Attorney General’s Department with the Australian Early Development Index to help identify suburbs where youths are most vulnerable and therefore most at risk of experiencing poorer educational, social and legal outcomes, which would in turn impact on crime rates in these suburbs. The combination of these datasets could help inform the Attorney General’s Department and SA Police as to which suburbs would most benefit from additional crime prevention programs and police resources, thus improving quality of life for the residents of these suburbs.
* **Numbers hack**: Suburb Outlook is very much grounded in government data and trend analysis and extrapolation. Despite the limitations of the available aggregated data and the timeframe of the GovHack event, we have attempted to create realistic projections of income, childhood development, house prices, cultural diversity and crime rates for a selection of Adelaide suburbs. The Excel spreadsheets supporting the creation of the data visualisations are available from our website.
* **Places hack**: Suburb Outlook is designed to assist government authorities in making better-informed decisions about the allocation of resources to different suburbs to support their economic and social growth and improve the lives of the people who reside in these suburbs. Better quality of life will help people be happier and more productive.

## Technologies

The following tools were used in the creation of the Suburb Outlook proof-of-concept:

* Microsoft Excel (data analysis and trend forecasting)
* Visme.co (data visualisations)

The following tools were used in the creation of the promotional video:

* Microsoft PowerPoint (presentation)
* iSprint (Microsoft PowerPoint screen capture)
* Soundation.com (music)

## Future work

The proof-of-concept is limited to data visualisations for three postcodes (5011, 5081 and 5112) located in metropolitan Adelaide. In future, Suburb Outlook could be expanded to include all suburbs in South Australia, as well as in other states providing the same data is available for these states.

The accuracy of the future predictions could be significantly improved by increasing the integration between the available datasets, having access to non-aggregated data and using more sophisticated data analysis tools.

Due to the limited timeframe constraints of the GovHack event, the data visualisations were created manually using an online tool (visme.co). This proof-of-concept lays the groundwork for the future development of an application framework that would allow these data visualisations to be available through web and mobile applications.