Smart lighting for efficiency and dark skies in Hobart

Team EconData stories

Objectives

How can we empower policy analysts with the right data and tools to make decisions about street light investments

How can we combine public and corporate data to support conceptual ideas about lighting policy tradeoffs

How can we best visualise the short term and long term financial benefits of various policy options

Policy trade-offs examined

Budget vs Safety

- Use 'pedestrian traffic' volume as a gauge for where lighting is more essential.

- Bus stops nearby from Google Maps API is best proxy for pedestrian traffic.

- Other proxies include tourist attractions and parks nearby

Budget vs Environment

-Costs consider initial investment costs of pole installation (solar) and light replacement (LED) vs electricity saved (40 kWh / lamp)

Budget vs. safety vs. environment

Our tiering strategy makes it clear where safety / budget / environment considerations are most important. We consider tiering regions into 3 zones, green / amber and red.

Green

Characterised by heavy foot traffic. High importance of 'safety', and policy should consider long term benefits

Amber

Amber policy should be less efficiency and cost saving driven than the red tier

Red

Red tiers have the least trade off to public safety because there's not much foot traffic, costs should be minimised

App overview