NSW DEPARTMENT OF PLANNING & ENVIRONMENT STREAMLINES DATA ANALYSIS AND REFRESHES MONITORS WITH MIP

NSW GOVERNMENT | Planning & Environment

The NSW Department of Planning and Environment is the state government department tasked with creating structured strategies for the future development of the state. The Department's responsibilities cover the revitalisation of urban areas, growth in regional areas, and the provision of new land for homes and businesses.

To underpin these activities, the Department relies on a wide range of data. These include everything from population growth and movement numbers to housing approvals, construction completions and the progress of new developments. The Department's Economics Population and Land Use Analytics Branch is tasked with sourcing, analysing and presenting the data to both internal users and interested external parties.

CHALLENGES:
- Growing volumes and varied range of data
- Presenting the data to internal and external stakeholders in an accessible format

OUTCOMES:
- Improved ability to work with very large data sets
- Ability to source and blend data in minutes, not weeks
- Data presented in an appealing and informative way

THE CHALLENGE

As the volume of data being received by the Analytics Branch has been growing during the past few years, the amount of staff time required to process and present it had reached a tipping point. The Branch's small team were spending an increasing proportion of their time updating tables and ensuring that generated reports were as accurate as possible.

The team was also responsible for managing a series of customer-facing 'monitor reports' (monitors) that present the data in visual form. While these had been in place for a number of years, user feedback was that they needed to be redesigned.

"We found we were not getting a lot of traffic to the monitors on our website," says Manager, Data Governance and Reporting, Daniel Brake. "We were finding that even our internal staff were coming to us and asking for information that was clearly already available. They were just finding it difficult to access."

In early 2018 a decision was taken to redesign the monitors and improve the data-delivery systems supporting them. "We were keen to find a better way to present our data and streamline the underlying processes supporting our monitors," he says.

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THE SOLUTION

The Department had worked with MIP on a number of projects in previous years and knew the company would be able to assist with this latest challenge. The Department's data team worked closely with the MIP consultants and the scope of the project was agreed and a deployment timeline put in place.

"We had been using SQL Server loaded with data from a variety of sources as our back end for the monitors and MIP recommended we shift to using an Alteryx deployment," says Brake. "They also recommended we make better use of Tableau visual analytics software to support a thorough redesign of the monitor interfaces."

Work on the project began in April and the first of the new monitors went live just four weeks later. "The support provided by MIP was invaluable," says Brake. "My team is constantly busy and the MIP consultants were very happy to work with us in a flexible manner."

OUTCOMES

Once the first of the new monitors was in operation, positive feedback was received almost immediately.

Housing monitors for the Greater Sydney Metropolitan region and the Central Coast and Illawarra Region assembled data from a range of sources and presented it in an appealing, visual format. Users found they are now quickly able to see trends in things such as housing approvals and completions broken down for each local government area in the region.

"Our new Employment Lands Development Monitor contains information on the availability of land zoned for employment and where development has recently taken place," says Brake. "Having recently gone live, our new Greenfield Monitor displays areas that are suitable for residential development and where progress is being made to bring them to market."

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Brake says that, thanks to the work completed by MIP, the new Alteryx data blending platform has radically changed the way the team works on a day-to-day basis. "Rather than spending all our time just preparing the data, we can instead focus on data analysis and add more value to what we produce."

"For example, where it had been taking the team around two full weeks each quarter to source and blend the data for our Greenfield Monitor, this can now be completed and uploaded in a matter of minutes."

"We are essentially the data engine room for the entire NSW Department of Planning and Environment, so the faster we can provide analysis the better it is, both for the Department as a whole and the wider public audience."

Blake says the team's enhanced Tableau skills mean data sets can be presented in different ways that make them more appealing and informative to users. This is something that will continue to be improved in coming months.

"We will continue to work with MIP to find more ways to improve the level of service we offer both our Department and our external users," says Brake. "I'm confident that the platform we have in place now, based on Alteryx and Tableau, will support our activities well into the future."