ATLYST PROGRAM - BUSINESS CASE

TRAFFIC COUNT CENSUS PROGRAM FOR LOGAN CITY COUNCIL

1. INTRODUCTION

As part of Logan City Council business plan 2018/2019. Councils' program and service for traffic operations and design has listed a priority to establish and implement a Traffic count survey program. (LCC_DOCS-#11808824)

2. PROFILE

Logan has experienced significant growth since 2008 when local governments amalgamated and continues to grow. Along with a newly established Traffic Management Centre in 2020, the aim is to provide leadership in operational planning and traffic management of Council's road network including formulation of road safety strategies, action plans and solutions.

Currently the Traffic Management Centre is staffed by;

- Kin Kan – Principal Traffic Engineer – Chief of Traffic Operations Controller – CTOC
- Deva Naiker – Traffic Services Co-ordinator – Senior Traffic Operations Controller STOC
- Jerimia Tukadra – Traffic Management Officer (Traffic Data)
- Anthony Gangemi – Traffic Management Officer (PSAS)

3. BACKGROUND

The Traffic Program regularly undertakes traffic surveys consisting of automated tube and intersection movement counts as part of traffic investigations and for various other sections of Council. Logan City Council since 2019 delivered over 850 traffic classifier sites, this has enabled more accurate/replicable collection of traffic count data, integral to monitoring growth and seasonal changes in calculation of Annual average daily traffic (AADT) for a range of purposes including:

- Road design purposes (particularly seal design);
- Traffic modelling;
- Project funding applications/grants.

Benefits include:
- Provide more accurate data for transport planning study;
- Improve efficiency/cost savings - replacement of mobile unit with piezo-electric sensors, enabling the collection of detailed axle-based data onsite/remotely;
- Assist with more informed and timely responses to community concerns relating to anti-social driving, speeding, as well as identifying and monitoring growth corridors.

4. PROPOSED PROGRAM IMPROVEMENTS TO LOGAN CITY COUNCIL AND TMC

The ATLYST program enables users to quickly compare all sites and identify points of interest, such as speed violation, rat runs, intense heavy vehicle traffic and gaps in survey network. The web based program allow easy access of Council's road network which will enable specific queries and the ability to apply filters such as Date, Class, Direction, Speed and Headway.

A historical collection of surveys conducted at the same location can now be placed side by side for comparison. This will allow Logan to build a coherent traffic database by creating MTE Site Lists from scratch or reusing previous survey details.

ATLYST also streamline the date validation process. Once all raw data are uploaded, the system will check each file and inform users of anomalies that require further investigation. This save enormous time for users to identify any data issue with suppliers.

ATLYST allow users to download yearly summaries of all sites into one .csv file. This information can then easily be imported into GIS applications. The ability to share comprehensive and graphical reports from every site. It is envisaged that with reciprocal agreements, Council can view traffic data from neighbouring organisations. This unique feature allows users to identify adjacent traffic that might affect Council's road network, or to compare traffic patterns on similar roads.

5. COMPARATIVE PROGRAMS

As MetroCOUNT® is the company that makes the Traffic Counter that widely used in Australia. There is virtually no competitor in the market that can offer similar products. A comparative program would have to have its own traffic counter along with its own Traffic Census Program. Primarily it should be noted that any other competing program would require MetroCOUNT to certify their process to allow for traffic tubes to be downloaded into a competitors program.

6. IMPLEMENTATION

Currently the ATLYST program only requires a computer with internet access to work, it can be used on a desktop or any smartphone or internet accessible tablet.

7. OFF THE SHELF VS CUSTOMISED SOFTWARE

There is no conclusive way to determine a build versus buy dilemma. The primary concern should be the on the efficiency with which the software allows us as a Council to serve our business needs and other stakeholders in the most effective manner. As ATLYST is an off-the-shelf product, it is considered that to be priced very competitively when compared to a custom developed product. This is because the cost involved in developing an off-the-shelf product is distributed among a large number of buyers, and thus pricing is spread across many licenses to be sold to be local government agencies.

A tailored product, on the other hand, is specifically developed for Logan City Council will be borne by ourselves. What is not quantifiable is the time and resources required to develop custom software in-house. The development team needs to take into account, not just the initial design, build, test, and implementation costs, but also the lifetime cost required for support, headcount enhancements, patches, and general maintenance. There is also the issue of costs for the inevitable functionality enhancements and upgrades in future to consider. With custom software, it is expected that Logan City Council will have to bear the brunt of all the drawbacks until the glitches are ironed out, and the software finally matures. While, theoretically, developing a custom software may seem like an attractive and manageable proposition despite the high level of skills required, on the ground, enterprises could find such developmental tasks to be a distraction from their core focus. The internal IT resources may already be engaged in routine maintenance activities, and development works could pose a drag on their efficiency.

8. Upgrades

ATLYST has regular updates, which are free for the life of our subscription. The upgrades are hidden in the web browser so by simply clicking reload after a refresh the latest upgrades are patched across the entire network. It should be known that MetroCOUNT offers flawless customer support.

9. Scalability

Scalability is one of the most important factors to consider when choosing a traffic census product. Currently Logan has over 1800 traffic tube counts that are logged in the ATLYST System. This is anticipated to grow every year as we add on over 500 new counts every financial year.

Overall in five years' time it is expected that we will have over 5000 traffic tube counts managed in one system. ATLYST is scalable enough to accommodate the present requirements of our business and also make room for future additions.

10. Key Outcome

To establish an organised traffic count program to assist in the collection of current traffic census data used for traffic analysis and assessing traffic growth on Council's major road network.

11. Impact on Other Branches

There are no identified impacts on other branches apart from being able to provide reliable traffic census data to assist with road and development planning in areas such as Road Infrastructure Delivery, Road Construction and Maintenance, Development Assessment and Economic Development and Strategy.

12. Media Considerations

An annual traffic count program will provide necessary traffic data to assist with more informed and timely responses to community concerns relating to anti-social driving, speeding, as well as identifying and monitoring growth corridors.

13. Manager Recommendation

That RIP manager support the annual subscription (Master Plan) of ATLYST program.