



Honorable Members of the City Council

May 9, 2016

Page 2 of 4

Towards this end, the ITA partnered with the University of Southern California (USC), Mayor's Office, the offices of Councilmembers Herb Wesson and Paul Krekorian, the Department of Transportation (DOT), and Los Angeles Police Department (LAPD) to conduct a semester-long data analysis pilot project regarding traffic collision data and the City's "Vision Zero" initiative. USC committed 23 Graduate data science students and 3 professors from the Marshall School Department of Data Sciences & Operations. These students were separated into 5 teams that each approached the massive amount of traffic and crime data in a different way. This award winning City/USC pilot project delivered statistical analysis that became a component of the initial DOT Vision Zero findings. In addition, this provided a unique opportunity for local university students to apply their sophisticated skills to a "real life" use case that ultimately affects the life or death of Angelenos. The pilot provided the City with:

- the scientific evaluation of traffic collision data – what happened,
- substantial insights into the contributing factors resulting in vehicle vs pedestrian/bicycle collisions – why it happened,
- recommendations for changes that could be made to the areas of highest risk for vehicle vs pedestrian/bicycle collisions and predictions on collision reductions – what should happen, and
- recommendations of key metrics to measure – what will happen.

This project even won the prestigious 2015 Best of California award in Data Analytics from the national Government Technology Magazine (<http://www.govtech.com/cdg/best-of-california/Best-of-California-2015.html>).

Another data analysis project tackling City of Los Angeles Worker's Compensation Fraud is also near completion with the University of Southern California, ITA, Personnel Department, Mayor's Office, and City Controller.

The ITA is actively soliciting partnerships with local universities and colleges to continue these projects. However, the establishment of analytics capabilities within the City of Los Angeles would also be effective to promote a "data driven" government that optimizes its operations as a Well Run City. The addition of in-house data scientists and data science platforms would allow rapid implementation of data and predictive analytics projects across the 38 City departments. Based on ITA's previous experience, the ITA would play a central role in the data science capabilities and management of the project, with City departments playing the vital role of providing use cases ("the challenges"), subject matter expertise, and implementation of beneficial recommendations. The ITA, or participating City departments, would provide briefings to City elected officials on the results of the analysis. The City of Los Angeles literally conducts thousands of operations and City services. Insight from elected officials and City departments would help ensure that the most relevant City operations and issues facing our City's residents, businesses, and visitors were being prioritized for data analysis. These data analysis skill sets could also be fostered across City departments, with the ITA helping to establish platforms and "tool kits" to perform this in an effective and efficient manner.

Based on general business and technology research, as well as the City's experience with open data and data analysis, ITA sees a clear potential to improve and unlock significant value to both City operations and the public.

"Data (analysis) and open data can transform business, government and society – and the combination of the two is especially potent....data (analysis) gives us unprecedented power to understand, analyze, and ultimately change the world we live in....and that the world we change will, with luck, become a fairer and more democratic one."

<http://www.theguardian.com/public-leaders-network/2014/apr/15/big-data-open-data-transform-government>

"Data can become an instrument for breaking down information gaps across industries, allowing companies to share benchmarks and spread best practices that raise productivity. Blended with proprietary data sets, it can propel innovation and help organizations replace traditional and intuitive decision-making approaches with data-driven ones. Open-data analytics can also help uncover consumer preferences, allowing companies to improve new products and to uncover anomalies and needless variations. That can lead to leaner, more reliable processes."

[http://www.mckinsey.com/insights/business\\_technology/open\\_data\\_unlocking\\_innovation\\_and\\_performance\\_with\\_liquid\\_information](http://www.mckinsey.com/insights/business_technology/open_data_unlocking_innovation_and_performance_with_liquid_information)

Therefore, as an expansion to the award winning "Vision Zero" data analysis pilot, the ITA has worked with the Mayor's Office and CAO to re-classify some existing FY2015-16 budget to be used for a limited expansion of the partnership with local colleges/universities, to onboard some part-time, on-premise data science resources, and to acquire basic data analysis tools.

### **Fiscal Impact Statement**

There is no General Fund impact as ITA and the Mayor's office have identified existing funds that may be repurposed to address the start-up costs for this effort. This is one-time money that will provide basic funding for data science resources, grants to local universities, and basic data analytic tools/licenses for FY2016-17 only.

Please contact Jeanne Holm of ITA at (213) 978-3311 or [Jeanne.Holm@lacity.org](mailto:Jeanne.Holm@lacity.org), if you have any questions or require additional information.

Respectfully submitted,



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General Manager

Honorable Members of the City Council

May 9, 2016

Page 4 of 4

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