Big Data: Harnessing the Benefits of Data Powered Governance

Overview

SANDAG is evolving as a data-driven organization. Our plans are rooted in observed data and informed by outreach and market research. Various initiatives around the region, such as the Integrated Corridor Management System, have the region taking the lead in data-driven efforts that reduce congestion and improve travel times. In the future, data will play an even larger role in how we plan and manage the transportation system.

Action: **Information**
Big Data is becoming increasingly more important to effective planning, policy, service delivery, operations, and public engagement. An expert panel will explore key topics related to Big Data and the opportunities for government to harness its benefits.

Fiscal Impact:
None.

Schedule/Scope Impact:
None.

Key Considerations

An expert panel (Attachment 1) will explore the following key topics related to Big Data and government followed by a facilitated Question & Answer session:

Big Data – what is it and how is it used? People are directly and indirectly sharing large amounts of personal data as a result of technology. This Big Data is used in virtually every industry to understand customer needs and behavior, improve operations and services, inform strategic planning, and connect with customers and clients.

Using Big Data to make communities work better: Government agencies around the globe are using Big Data to improve planning, policy, operations, and public engagement. There is no question that the future of regional transportation will rely more on Big Data and analytics for better decision making, improved service delivery, and maximizing efficiency to ensure the public gets the most benefit from its investment.

Keeping Big Data private and secure: As technology has made personal information more accessible, security and privacy issues are a growing concern. Although access to data provides government with significant opportunities to solve problems and improve the lives of residents, there is a legitimate debate around access to—and use of—data. Proactively developing and implementing sound data privacy and security policies and programs is of utmost importance. With oversight and transparency, local governments and public entities have the opportunity to be public data stewards at a time when private corporations are not legally subject to disclosure and prior permissions.

Next Steps

This panel is part of a series of informational agenda items related to the 2021 Regional Plan. Future topics will include the regulatory requirements that guide Regional Plan development, transportation modeling, and environmental impact reports.

Hasan Ikhrata, Executive Director

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Attachment: 1.   Panelist Bios

Panelist Bios

Rajesh K. Gupta
Professor of Computer Science and director of the Halıcıoğlu Data Science Institute at UC San Diego.

Professor Gupta's research is in embedded and cyber-physical systems. He currently leads National Science Foundation project MetroInsight and is a co-PI on DARPA/SRC Center on Computing on Network Infrastructure (CONIX), with the goal to build a new generation of distributed cyber-physical systems that use city-scale sensing data for improved services and autonomy.

Professor Gupta received a B. Tech. in electrical engineering from IIT Kanpur, an MS in EECS from UC Berkeley, and a PhD in electrical engineering from Stanford. Professor Gupta holds the Qualcomm Endowed Chair in Embedded Microsystems at UC San Diego and the INRIA International Chair at the French international research institute in Rennes, Bretagne Atlantique. He is a Fellow of the IEEE, the ACM, and the American Association for the Advancement of Science.

Christina Drummond
Program Manager, Program on Data and Governance
Senior Analyst

Ms. Drummond's background combines over twenty years of technology policy and management experience across tech start-ups, not-for-profits, and academia. She serves on the MORPC Regional Data Advisory Committee's Data Policy Needs Survey and Toolkit Working Group, supports the development of Smart Columbus' Data Privacy Plan, and participates in the Civic Data Privacy Leaders Network. When not growing the Program on Data and Governance and its network of champions, she conducts applied research on the policy dimensions of data governance and innovation. Prior to joining Moritz, she directed strategic initiatives at the Educopia Institute and University of North Texas and founded the Technology and Civil Liberties project at the ACLU of Washington. She has also worked with the U.S. House of Representatives' Committee on Science, Internet2, the Legal Services Corporation's Technology Innovation Grant program, and Washington State's Sunshine Committee and Access to Justice Board. Ms. Drummond also carries a rich history of presenting at conferences and developing knowledge-sharing, collective impact networks.

Andrell Bower
Chief Data Officer, City of San Diego

Bower was appointed to the role of Chief Data Officer for the City of San Diego by Mayor Faulconer in 2019. She is responsible for identifying innovative solutions to streamline government efficiency, promoting data-informed decision-making, and expanding accessibility of municipal information for all San Diegans.

Andrell first joined the City in 2015 following a 10-year career as a newspaper data journalist and infographic artist. During her tenure, Andrell learned to appreciate the power of data and visualization to share information with the public. She was thrilled to join the team at City Hall and use her experience to make data more accessible by implementing the City's first-ever Open Data Policy. As part of the Performance & Analytics team, Andrell has helped build an award-winning data program. Highlights include an open-source data portal featuring hundreds of data files, automated methods for keeping data updated, web applications that visualize the data, and advanced analytics projects.