

# Session 4A – Talk 3

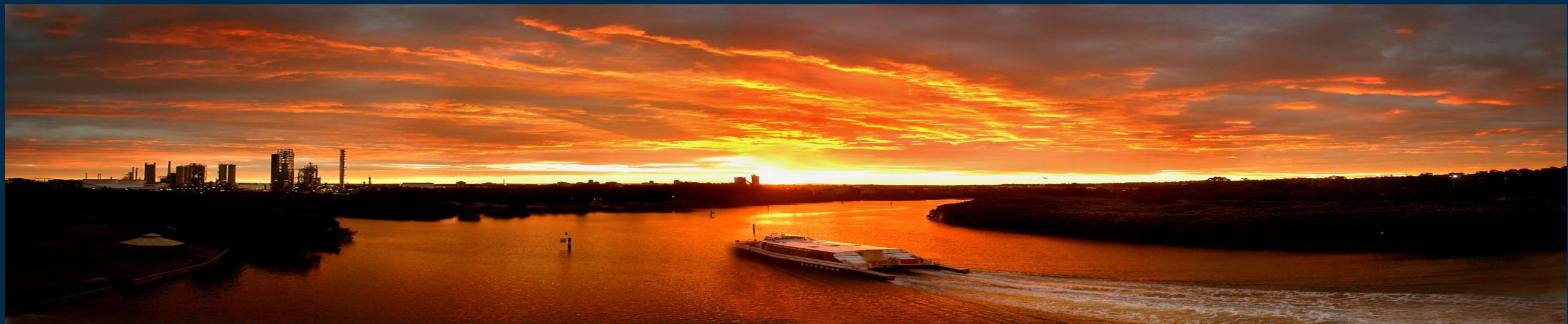
## Tech talks: Enhancing performance through technology and innovation implementation

*Presented by*

**Geoff King**  
**Head of Future City**  
**City of Parramatta**

# Enhancing performance through technology and innovation implementation

Geoff King | Head of Future City



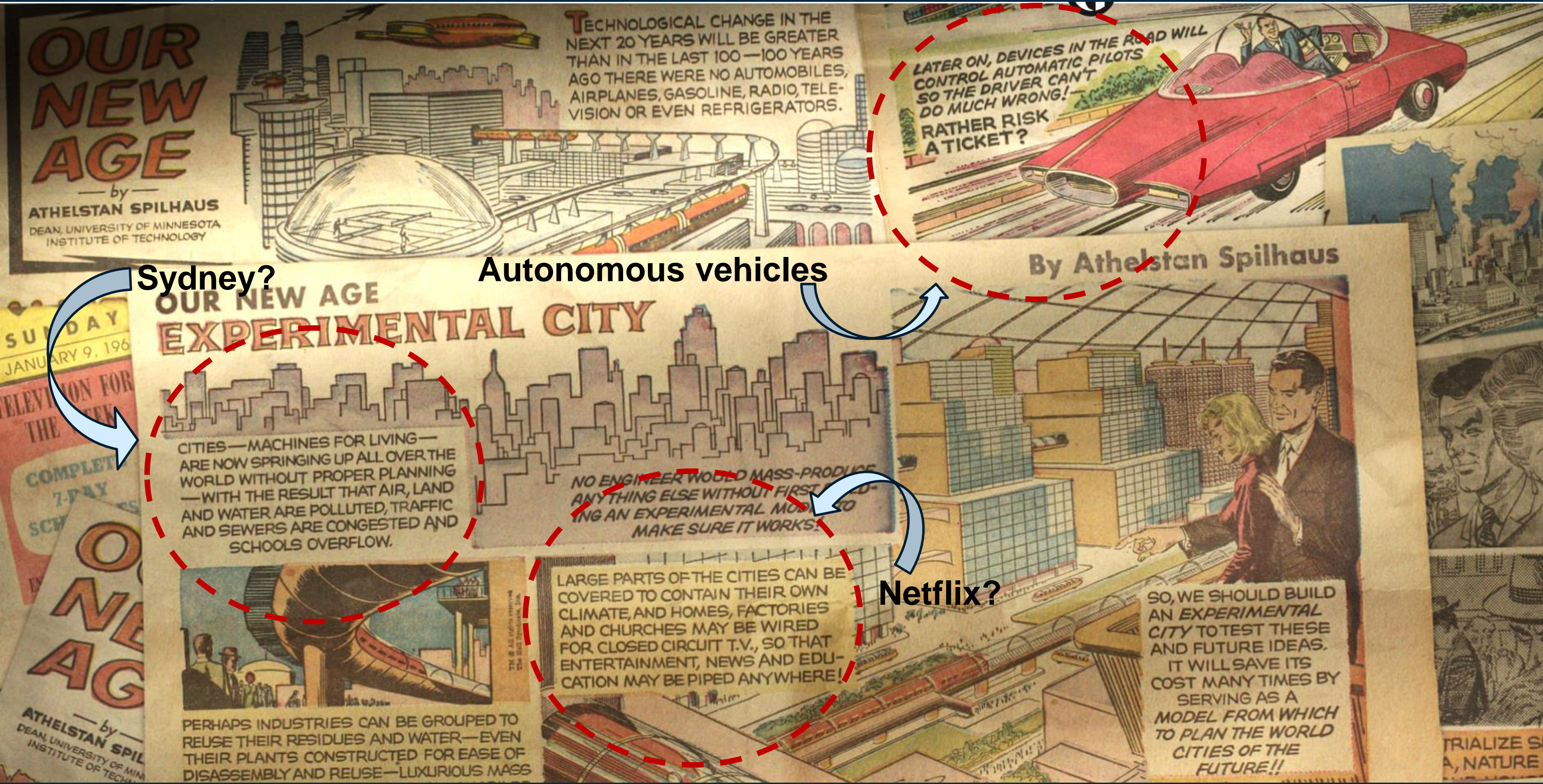






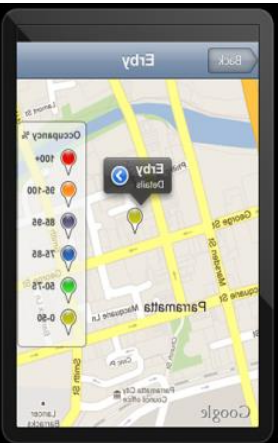
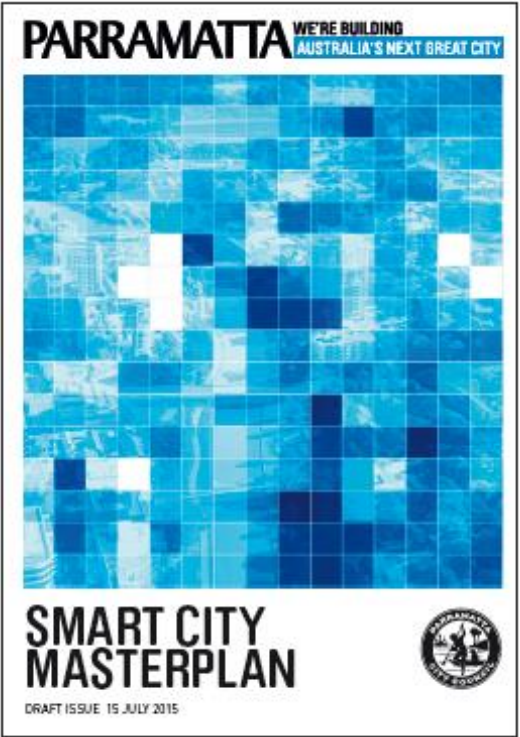
The future sometimes takes a long time to get here....

<https://www.theguardian.com/cities/2018/nov/05/minnesota-experimental-city-the-1960s-town-based-on-a-comic-strip>





# Parramatta's Smart City experience 2008-18





# FUTURE CITY

**The City of Parramatta is experiencing significant growth.** Increasing expectation for services is placing increasing demand on scarce resources. To meet these challenges, we need to build our digital capability (and service agility) to collect and use information to help solve City problems.

- ✓ To use interconnected data to better understand and manage the City's operations.
- ✓ To collaborate and share information to help improve the quality and efficiency of Council's services
- ✓ To develop innovative solutions to some of the complex and hard to solve problems the City is facing
- ✓ To identify the next major challenges and opportunities for the City.






*This links to Parramatta's Community Strategic Plan:*

*Strategic Objective: INNOVATIVE - We collaborate and employ new ideas to create a better future*

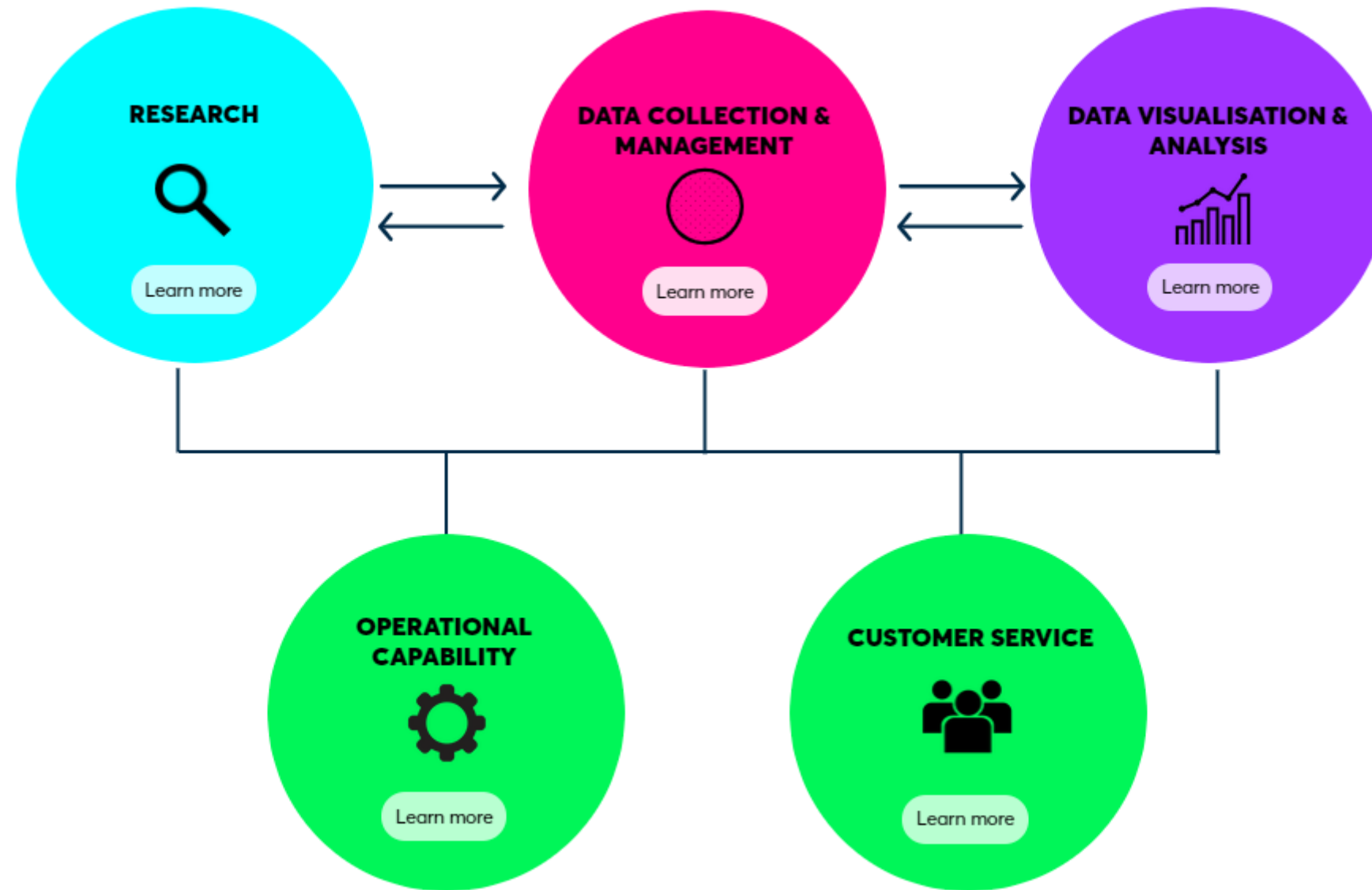
*Strategy: Embrace technology, creativity and innovation to solve complex problems and improve our City*

## Future City Program

The Future City Program investigates data driven solutions and Smart City initiatives to help address the complex challenges facing the City of Parramatta. This includes real-time monitoring and analysis to understand the city's condition and projects to improve service delivery to our community.

	Current Works Programs		Proposed Works Programs		The Outcome
	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021	
 <b>RESEARCH</b>	<ul style="list-style-type: none"> <li>• Pilot data (temperature) loggers RAISE value uplift</li> <li>• Creature Installation</li> </ul>	<ul style="list-style-type: none"> <li>• Develop a Recreation Planning model to predict recreation needs using mobile data</li> <li>• RAISE (stage 2) value uplift</li> </ul>	<ul style="list-style-type: none"> <li>• TBD - responding to opportunity and university requests</li> </ul>	<ul style="list-style-type: none"> <li>• TBD - responding to opportunity and university requests</li> </ul>	Research: Develop models or test solutions in a controlled way before applying more broadly
 <b>DATA COLLECTION</b>	<ul style="list-style-type: none"> <li>• CCTV data analytics trial (people counters)</li> <li>• Temperature sensors, Bins &amp; FISH</li> </ul>	<ul style="list-style-type: none"> <li>• Develop a network of sensors to provide real-time environmental monitoring</li> <li>• Phillip St – smart st pilot</li> </ul>	<ul style="list-style-type: none"> <li>• Stage 2: network of sensors to provide real-time environmental monitoring</li> <li>• Parramatta Square, SOPA</li> </ul>	<ul style="list-style-type: none"> <li>• Stage 3: network of city-wide sensors to provide real-time environmental monitoring</li> </ul>	Data Collection: Collect data in real time to quantify the problem or the solution
 <b>DATA MANAGEMENT</b>	<ul style="list-style-type: none"> <li>• Data visualisation</li> <li>• (City Dashboard/ City Data Map)</li> <li>• Data sharing policy</li> </ul>	<ul style="list-style-type: none"> <li>• Develop a data management hub</li> <li>• Data Manager</li> <li>• Open data sharing</li> </ul>	<ul style="list-style-type: none"> <li>• Stage 2: Data management hub resources.</li> <li>• Open Data sets</li> </ul>	<ul style="list-style-type: none"> <li>• Data sets from across the business in a central location</li> </ul>	Data Management: Capture, store and analyse data centrally and produce information in useful formats
 <b>OPERATIONAL CAPABILITY</b>	<ul style="list-style-type: none"> <li>• Smart City Advisory Committee Digital Strategy</li> </ul>	<ul style="list-style-type: none"> <li>• Embed a suite of smart technologies (smart hub) in the design for Parramatta Square</li> </ul>	<ul style="list-style-type: none"> <li>• Roll out a suite of smart technologies (smart hub) in the build of Parramatta Square</li> </ul>	<ul style="list-style-type: none"> <li>• Parramatta Square public domain and buildings operate seamlessly.</li> <li>• Building capability in other locations</li> </ul>	Operational Capability: Use data to improve the efficiency of Council's operations
 <b>CUSTOMER SERVICE</b>	<ul style="list-style-type: none"> <li>• Safe school parking finder</li> <li>• Participate in Gov Hack</li> </ul>	<ul style="list-style-type: none"> <li>• Develop a smart Customer Service solution program (app)</li> </ul>	<ul style="list-style-type: none"> <li>• Refine and improve a Wayfinding solution</li> </ul>	<ul style="list-style-type: none"> <li>• A wide range of online services and information (including real time sensor data)</li> </ul>	Customer Service: Provide information tailored to meet customer needs

## *Building Capability*



### Why

- Learning from others
- More accurate, usable, real data
- Greater understanding of problems

### Outcome

- Effective data sharing
- Real time management
- More efficient (and different) services
- More effective asset management
- Faster, improved customer services
- Leading change

## *Deliverables*

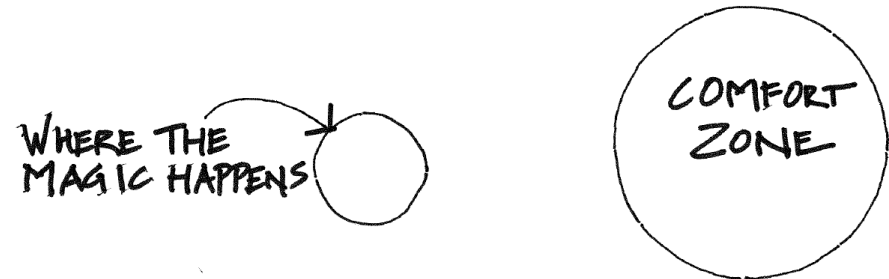
# FOMO vs Beta/VHS anxiety



Rush to “Smart City” by almost everyone in private industry... telcos, big 4 consulting firms, tech firms, software providers, card providers, startups etc...



# Change and Innovation in LG



Foundations  
*Boring*

vs

Ribbon cutting  
*Exciting*



Future City  
Background Factors



# Challenges

## External

- Limitations on traditional revenue sources
- Increasing density and population growth
- Resident and other customer expectations
- Rapidly advancing technologies

## Related internal challenges:

- Asset management: Service requests and timeframes - GIGO.
- Policy and awareness of challenges
- Speed of financial (and other) reporting – eventually expectations will be for real time data
- Automation... as a substitute for thinking

“A Data Tsunami” is coming



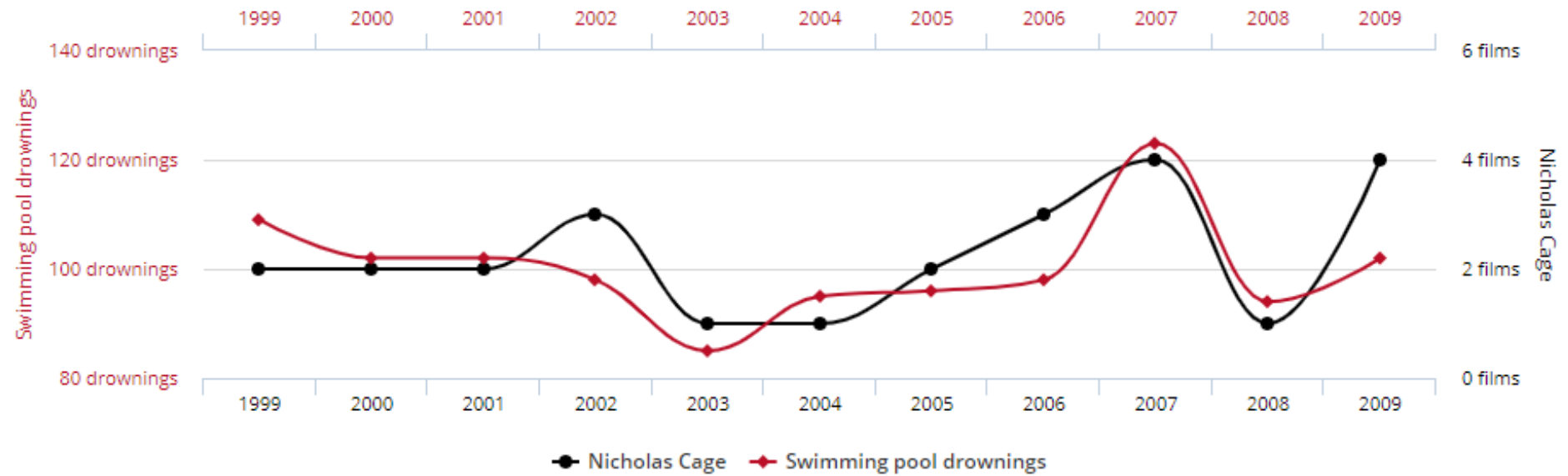


## Number of people who drowned by falling into a pool

correlates with

## Films Nicolas Cage appeared in

Correlation: 66.6% ( $r=0.666004$ )



Data sources: Centers for Disease Control & Prevention and Internet Movie Database

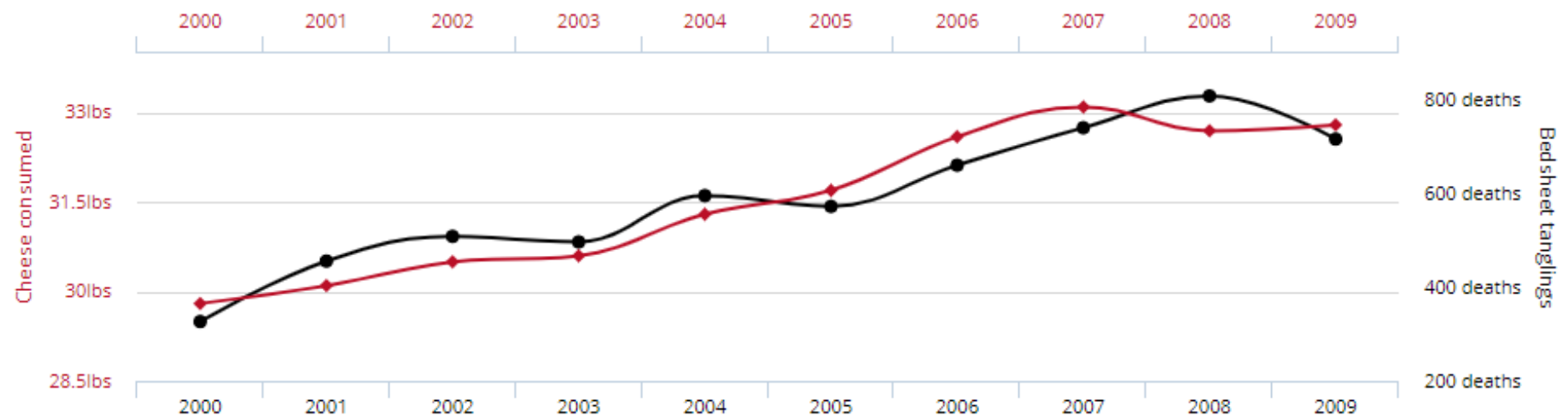
tylervigen.com

## Per capita cheese consumption

correlates with

## Number of people who died by becoming tangled in their bedsheets

Correlation: 94.71% ( $r=0.947091$ )



Credit: <http://tylervigen.com/spurious-correlations>



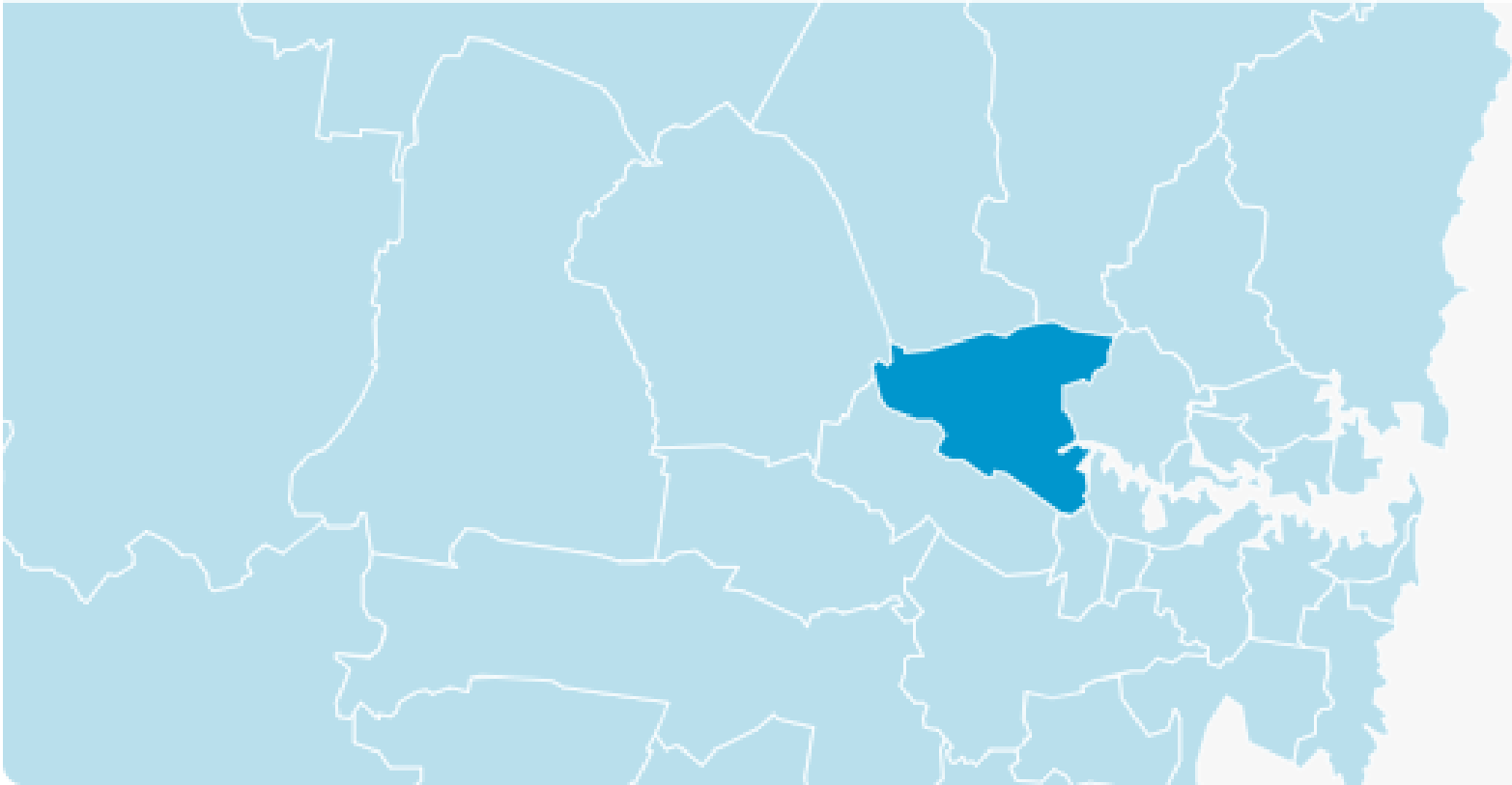
# City of Parramatta Council

 75.8K  
HOUSEHOLDS

 235K  
PEOPLE

 84KM<sup>2</sup>  
COUNCIL AREA


This demographic data was sourced from the [Australian Bureau of Statistics](#)



REVENUE \$352M ▼	EXPENSES \$274M ▼	OPERATING RESULT \$78.0M ▼	ASSETS \$3.0B ▼	LIABILITIES \$148M ▼	PERFORMANCE MEASURES ▼
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This data was sourced from the Council's financial statements with a reporting period from 13/5/16 to 30/6/17.





Thank you  
Questions?

GKing@cityofparramatta.nsw.gov.au

