Community Risk Reduction
Bringing Data to Life
City of Rancho Cucamonga

- City Boundary = 39.5 square miles
- Fire District = 50 square miles
- 168,000 residents
Fireworks Enforcement Case Study

Background

1989 – All fireworks illegal in RC
Use of fireworks continued to increase
2007 – Year of Enforcement

- Community awareness prior to July 4\textsuperscript{th}
- Multi-agency representatives in EOC
- Teams of FD/PD personnel patrol (OT $)
2007 – Data Driven Effort

- Previous years incidents logged on spreadsheets
- GIS produces heat maps for FD
2007 – Outreach Efforts

Direct Mail – 2,500

Newspaper Ads
4 days

15 banners placed throughout the City
2007 - Outcome

- Patrols used Heat Maps
- 94 calls of fireworks usage – highest on record
- Large quantities of fireworks confiscated
- FD issued many Administrative Citations
- PD issued Criminal Citations, 1 arrest
2008 – Success!

• Continued efforts
  • Community outreach w/ GIS help
  • Patrols (OT $)

• Achieved results
  • Fewer citations
  • Reports of Fireworks significantly decline
2009 and Beyond

• Community outreach with GIS support

• Utilized social media

• July 4th patrol – 1 (No OT $)

• Very few calls reporting Fireworks
Partnership with GIS
Community Risk Reduction
Strategic Objective of the Fire District
Program Objectives

• Successful Program Implementation
• “Provide Premier Emergency and Non-Emergency Services”
• Reduce the Need for Emergency Responses
• Improve Quality of Life
• Increase Our Value
• Desired Achievements
  • Data-Driven Decision Making
  • Analytics Guiding Program Development
Pilot Program Objectives

REFINED OBJECTIVE

To develop a tool that provides predictive analytics
Predictive Analysis Tool
Tapestry

For ZIP Code 91730

Top Tapestry™ Segments

21% Enterprising Professionals

14% Young and Restless

12% American Dreamers

Want to know more? Esri’s Tapestry™ Lifestyle Segmentation classifies the US population into 67 market segments and provides comprehensive lifestyle details.

More about Tapestry  Contact Us
Predictive Analytics
Danger of Assumptions
Using actual data increases organizational value by becoming prevention focused.
Design and implement programs based on data-derived trends, community values, and preventive needs.
Other Uses for Technology

- Website
- Community Information Cards
- QR Codes
- Tablets and iPads
- Social Media
Feedback/Community Engagement
What’s Next?

**Historic Data**
Analyze historical data for hidden trends and needs.

**Current Data**
Continue to analyze current data to find short-term trends and immediate needs.

**Establish Thresholds**
Determine risk thresholds and implement tool with push notifications.

**Internal Deployment**
Share tool throughout the department to explore new opportunities for community engagement.

**Share Externally**
Share this tool with external agencies to help others analyze their data in a dynamic fashion.
Culture Shift
Time For QUESTIONS?