Using Analytics to Generate Revenue and Improve Decision Making

CSMFO Annual Conference
March 2016

LEAGUE PARTNER
MUNISERVICES
Discover. Recover. Prosper.

The **discovery** and **communication** of meaningful **patterns** in data.

Agenda

Past, Present & Predictive Analytics

Tales of Success

Community Engagement & Transparency
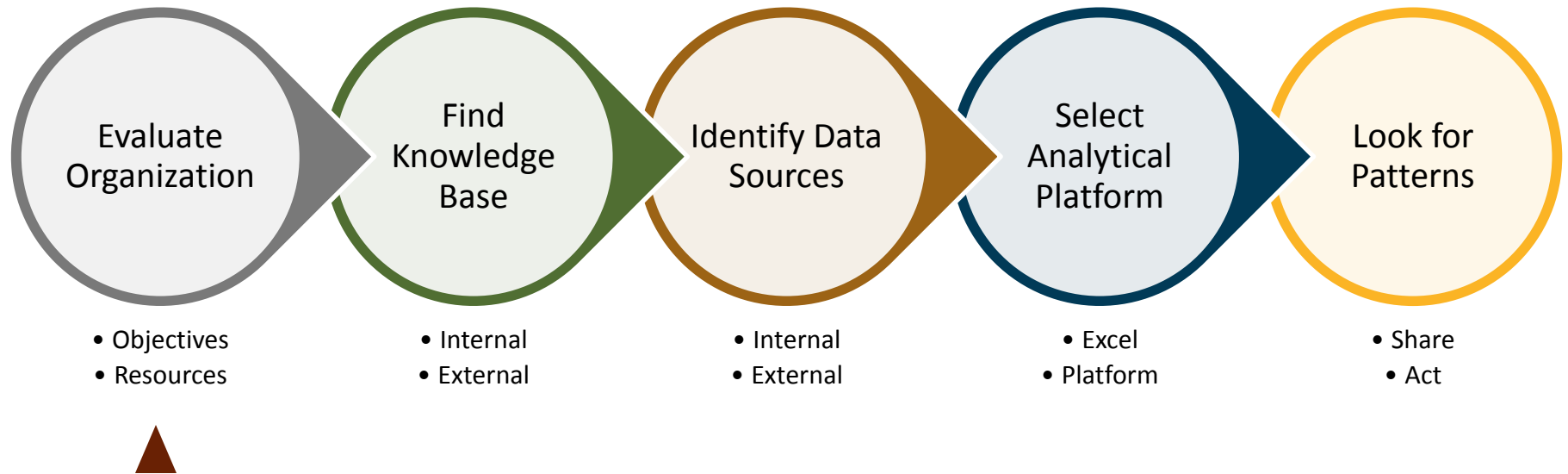
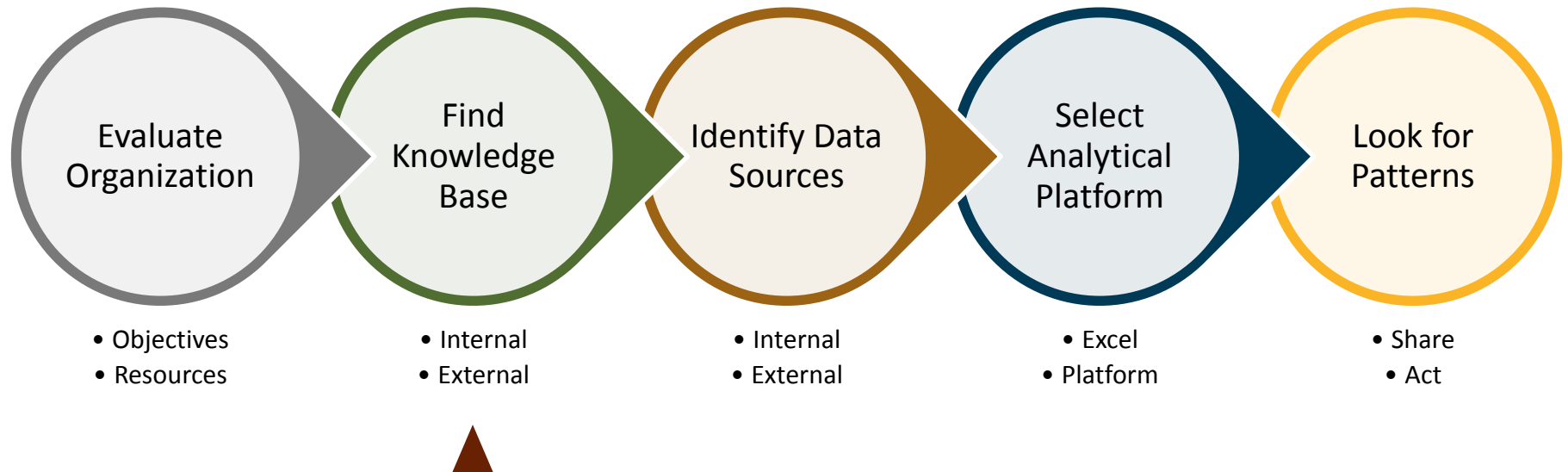**Some Cautions**

Confirm rights to see, use or share data

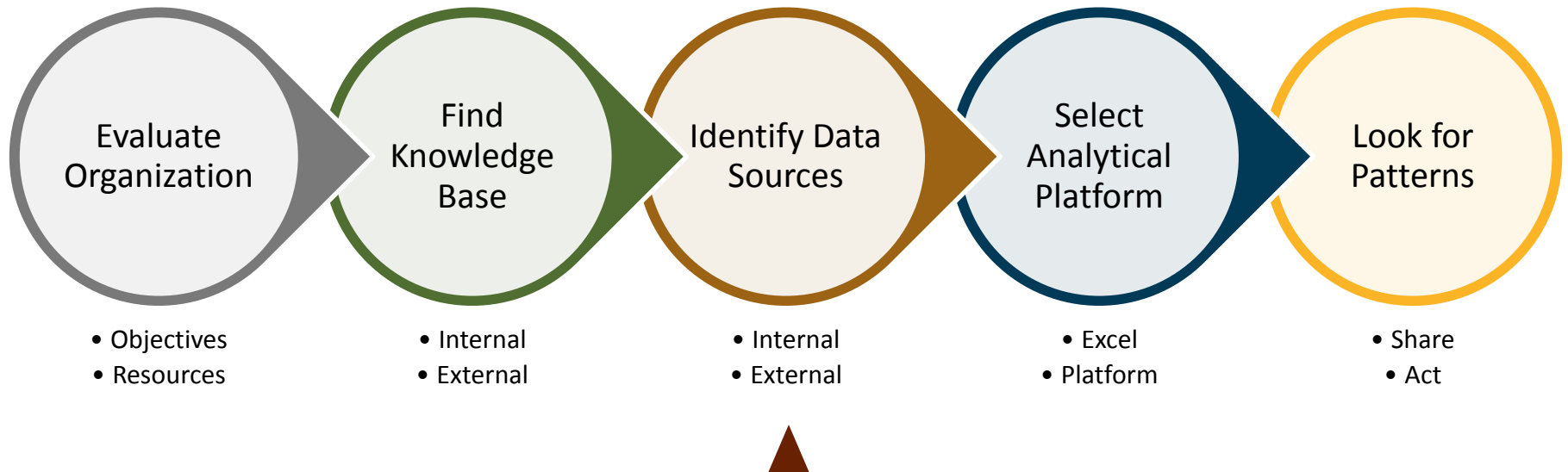Confirm rights to use or share images

Encouragement

Have fun with it!

Find something new every day!

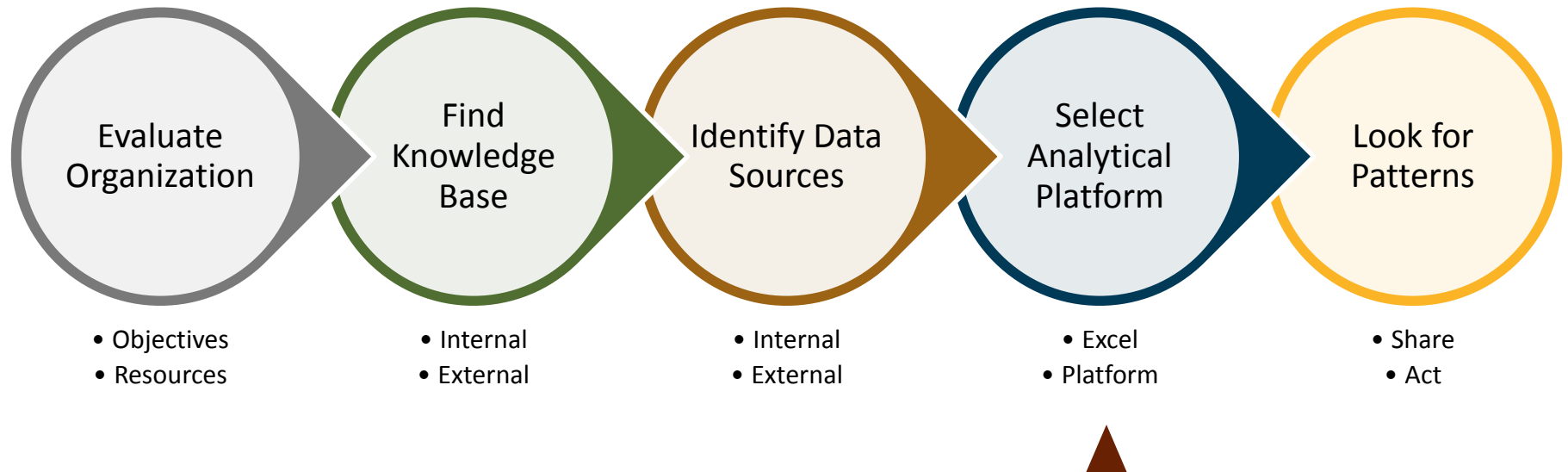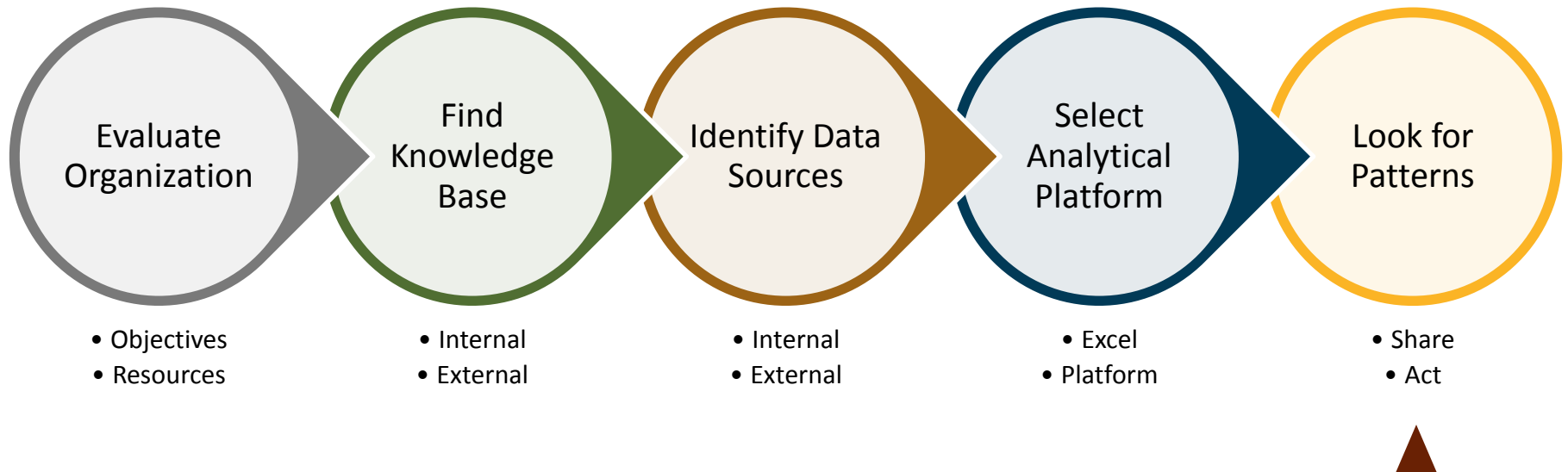Evaluate Organization
- Objectives
- Resources

Find Knowledge Base
- Internal
- External

Identify Data Sources
- Internal
- External

Select Analytical Platform
- Excel
- Platform

Look for Patterns
- Share
- Act

Recommend multi-disciplinary team

Process Flow

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A great opportunity for staff development

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Tax revenues, website, demographics, etc.

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Excel for starters or data visualization platform for sophistication

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Share what you learn. Act with confidence.

Platform Benefits

Excel

Statistical Functions

Charting

Scenarios

Process Control Charts

Capture & Leakage Analysis

Data Visualization Platform

Interactivity & Visualizations

Big Data Integration

Cluster & Factor Analysis

Mapping

Predictive Analytics

Leads to better economic development plans and reduces expenditure waste
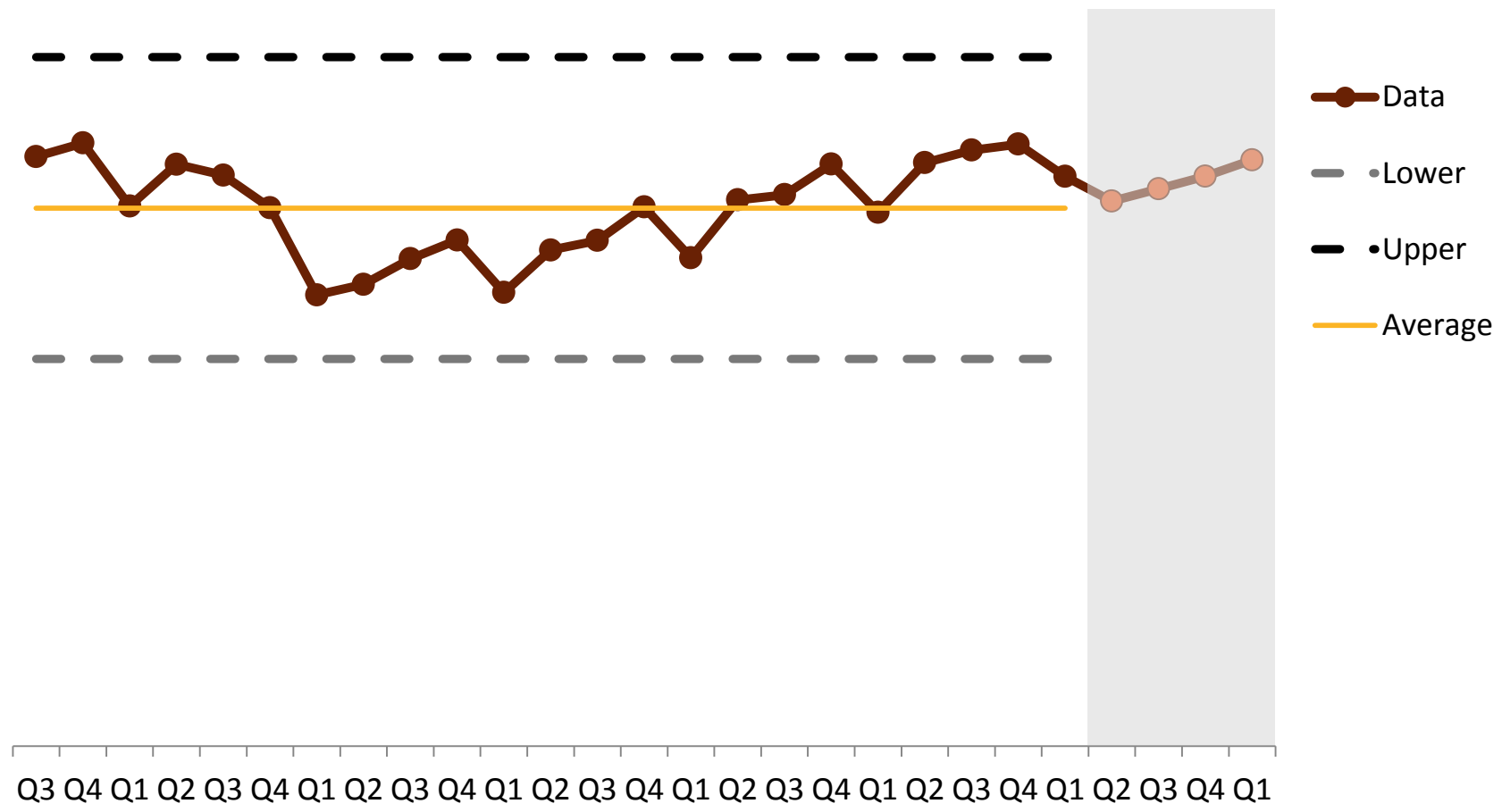
Recognizing changes and fundamental shifts

	Actual	Potential	Capture / (Leakage)	Rate
Transportation	**$2,139,985**	**$1,328,393**	**$811,592**	**161%**
Auto Parts/Repair	**$341,543**	**$139,045**	**$202,498**	**246%**
Auto Supply Stores	$205,123	$57,266	$147,857	358%
Vehicle Repair	$134,127	$62,631	$71,496	214%
Vehicle Parts Mfg	$2,293	$19,148	($16,855)	12%
Auto Sales - New	**$746,216**	**$668,677**	**$77,539**	**112%**
Auto Sales - Used	**$62,219**	**$52,906**	**$9,313**	**118%**
Service Stations	**$355,674**	**$416,226**	**($60,552)**	**85%**
Misc. Vehicle Sales	**$634,333**	**$51,539**	**$582,795**	**1231%**
Trailer & Supply	$592,975	$14,562	$578,413	4072%
Boat/Motorcycle	$41,358	$18,220	$23,138	227%
Aircraft & Supply	$0	$2,723	($2,723)	0%
Transportation Eqp	$0	$16,033	($16,033)	0%

Combining the right internal and external databases to identify economic needs.
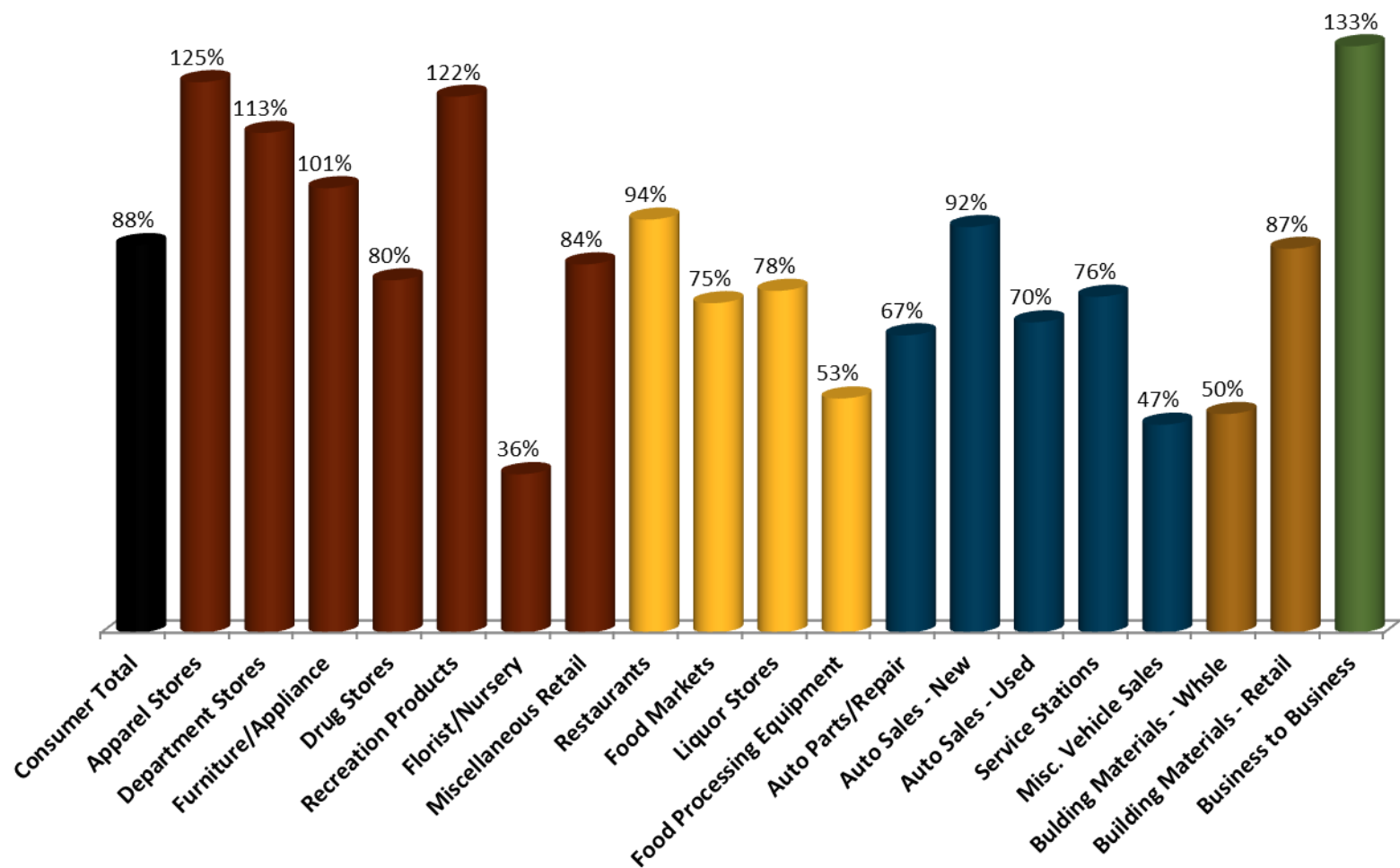
Building community profiles to match against expanding business list
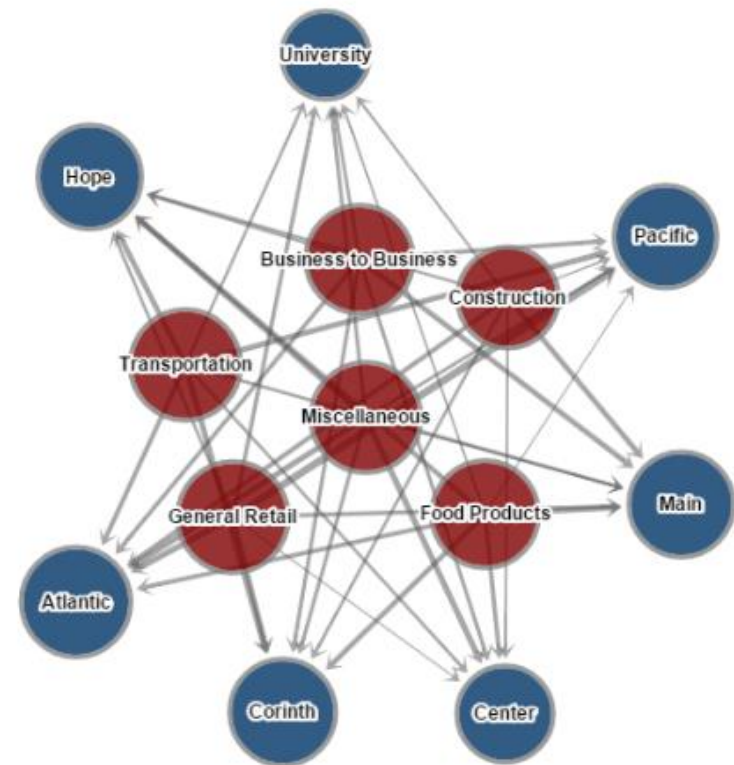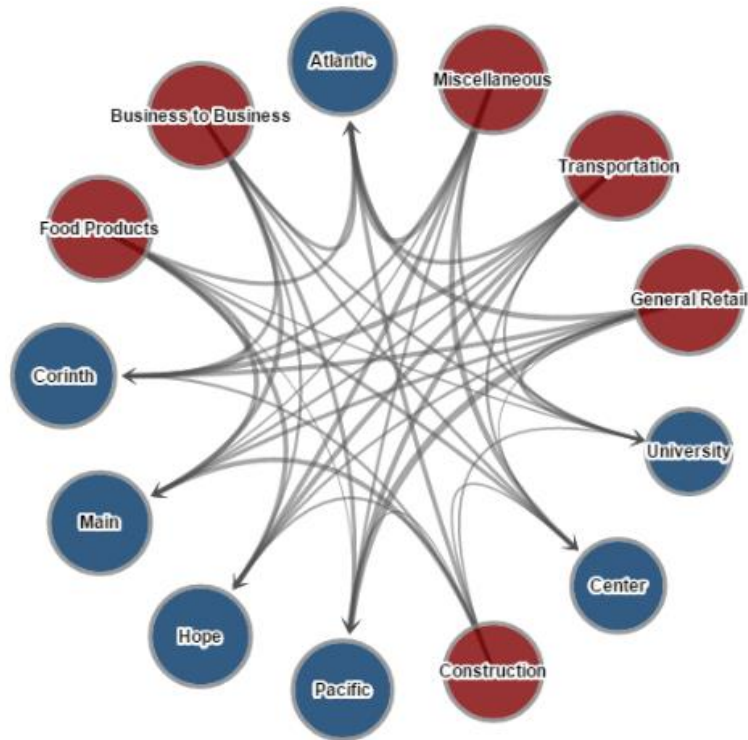
Visualize multi-variable relationships among datasets to recognize patterns and to make policy decisions.
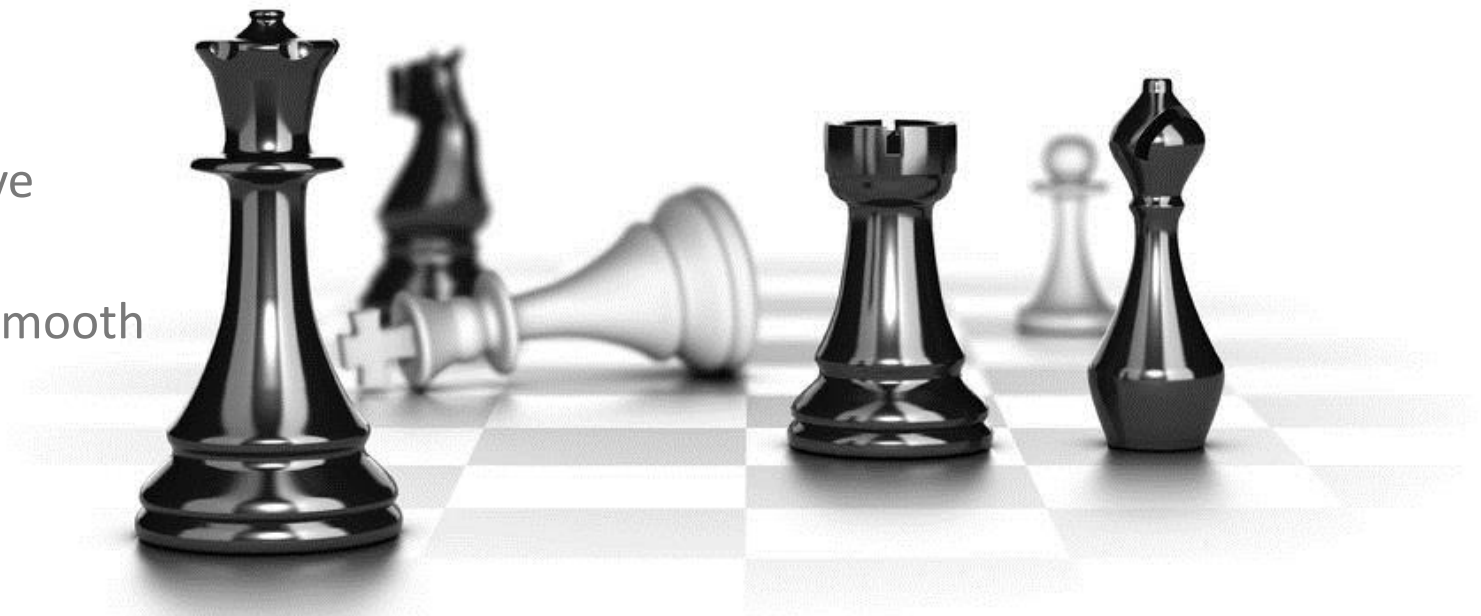
Champion-Challenger Model

Simple Naive
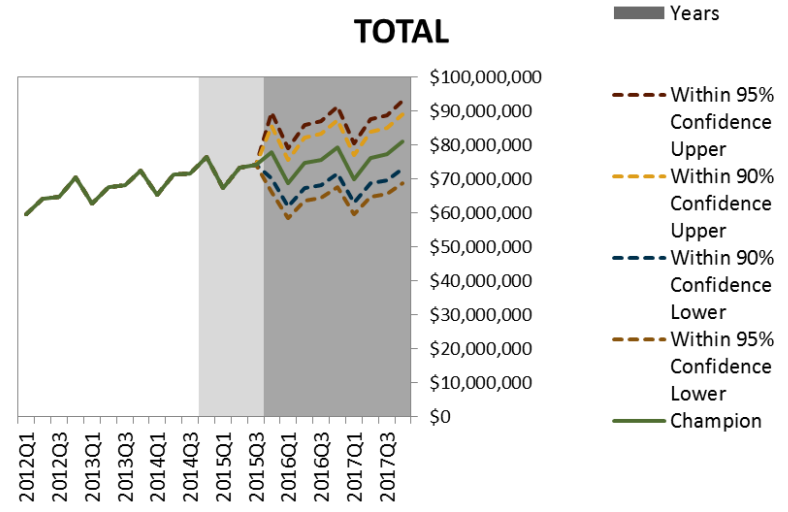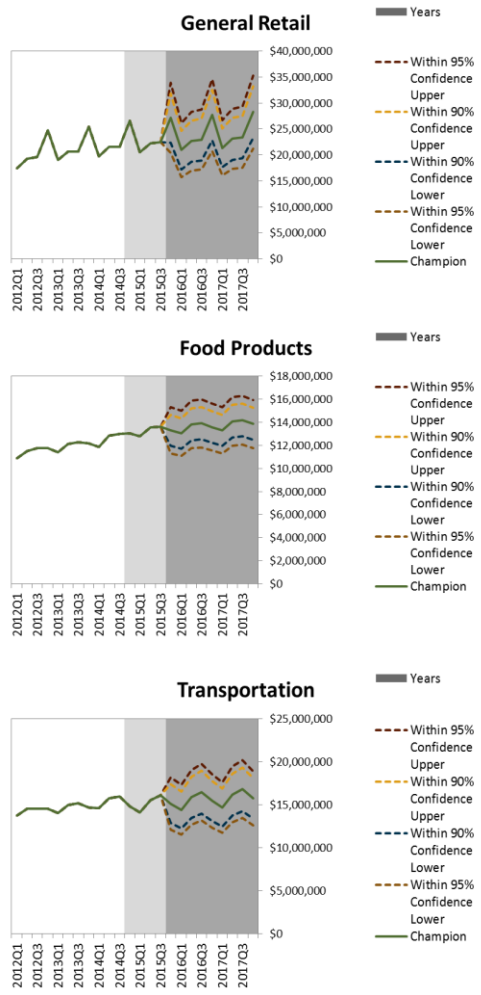
Seasonal Naive

Exponential Smooth

ARIMA

Layers

By Category

By Segment

By Type

In Total

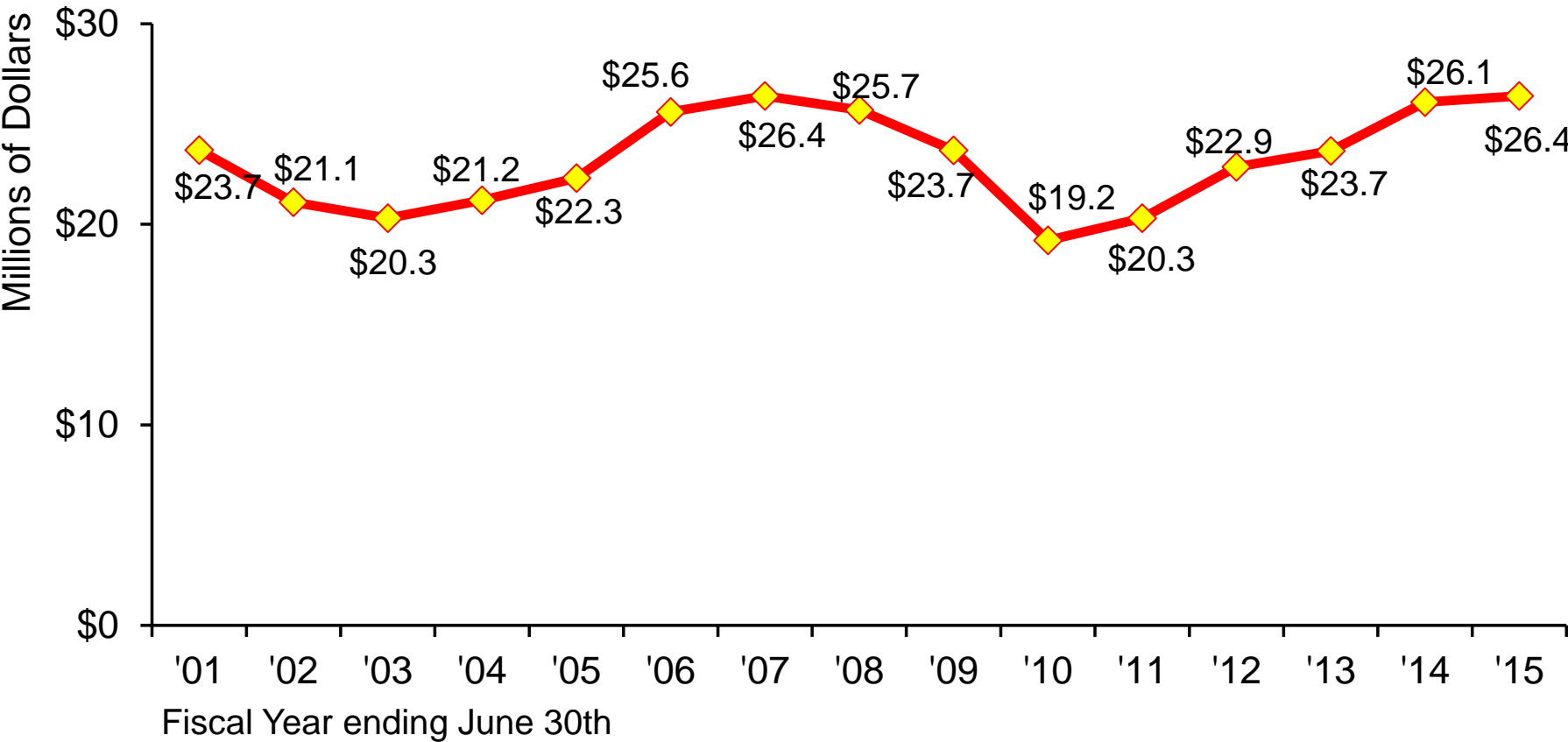**Data Analytics** → **Revenue Action Plan**

Using data to recognize opportunities to
Attract, **Retain** and **Expand** revenues.

City of Santa Fe Springs
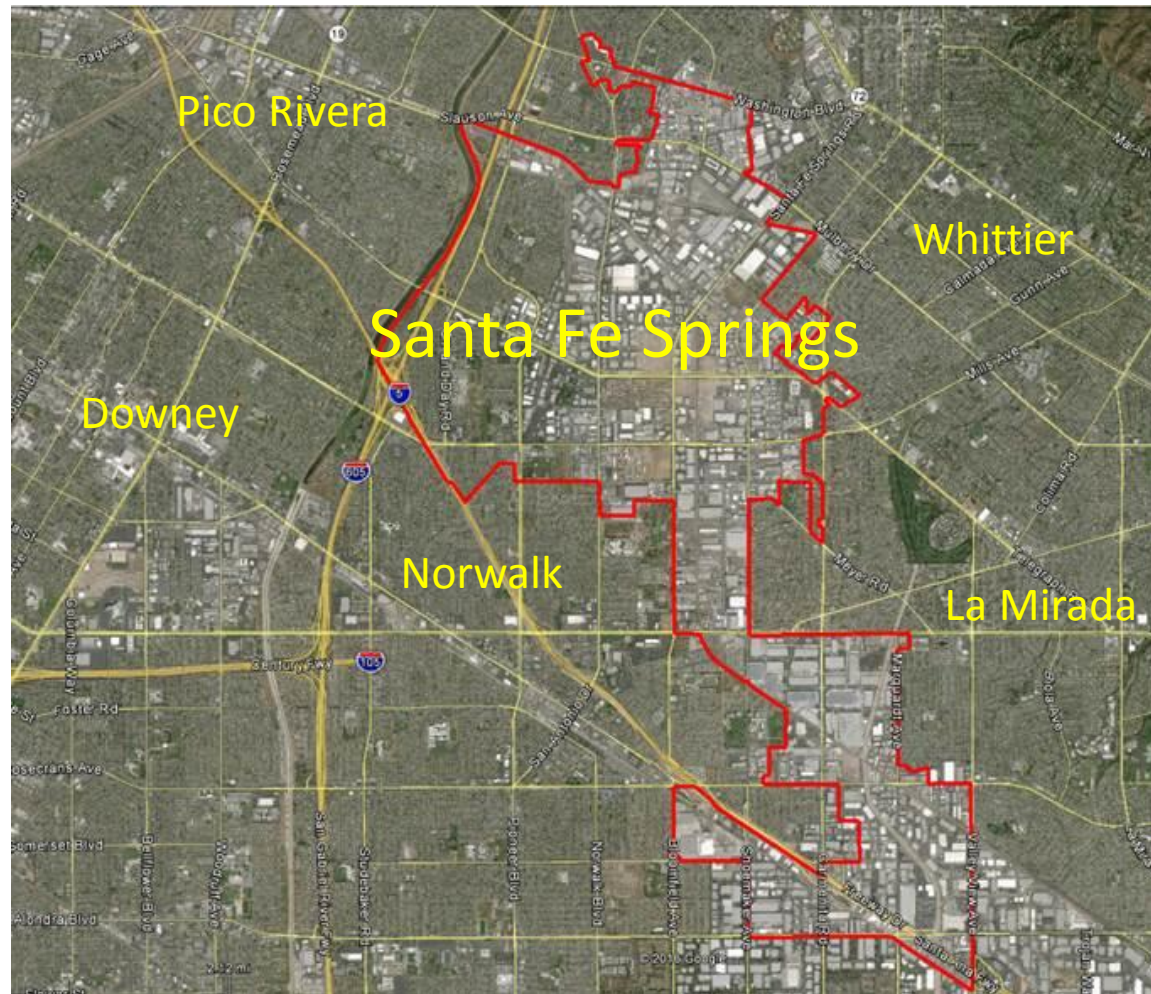
Approximately nine square miles, the City of Santa Fe Springs is located at the intersection of I-5 and I-605 in southeast Los Angeles County.

Sales Tax

Nearly Half of General Fund Revenues

Volatility

Demographics

Trends and Lags

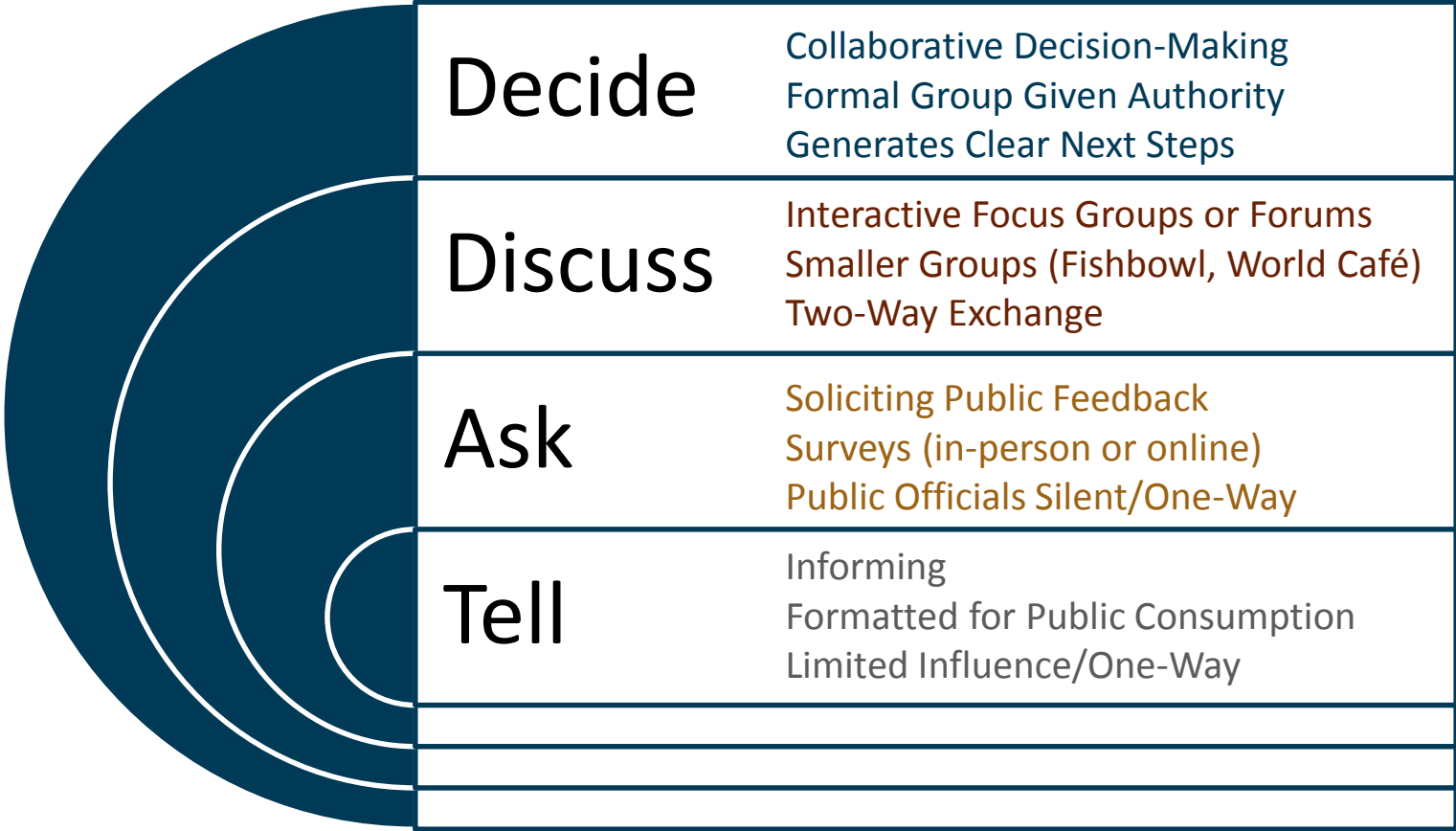Effect of Redevelopment Dissolution
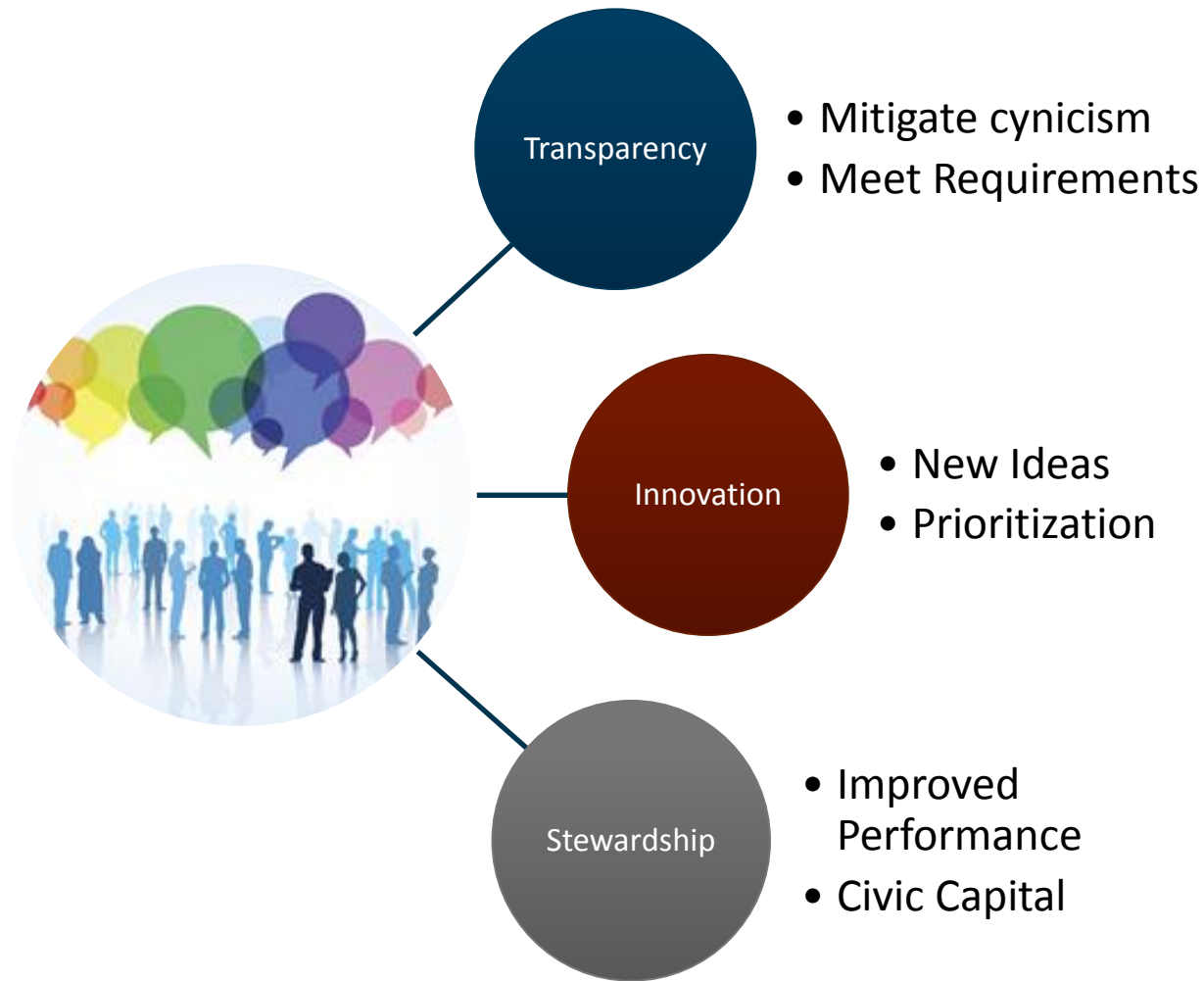
Impact

Land Use/Zoning

Business & Resident Outreach

The Chamber & LAEDC

Policies & Negotiations

Revenue Diversification

Decide	Collaborative Decision-Making
	Formal Group Given Authority
	Generates Clear Next Steps
Discuss	Interactive Focus Groups or Forums
	Smaller Groups (Fishbowl, World Café)
	Two-Way Exchange
Ask	Soliciting Public Feedback
	Surveys (in-person or online)
	Public Officials Silent/One-Way
Tell	Informing
	Formatted for Public Consumption
	Limited Influence/One-Way

Transparency
- Mitigate cynicism
- Meet Requirements

Innovation
- New Ideas
- Prioritization

Stewardship
- Improved Performance
- Civic Capital

*"Cities around the country have been employing various methods to increase transparency in their day-to-day practices for years now. From broad engines of information like city websites **to more focused tools that display a city's expenditures….",** - National League of Cities and the Public Technology Institute*
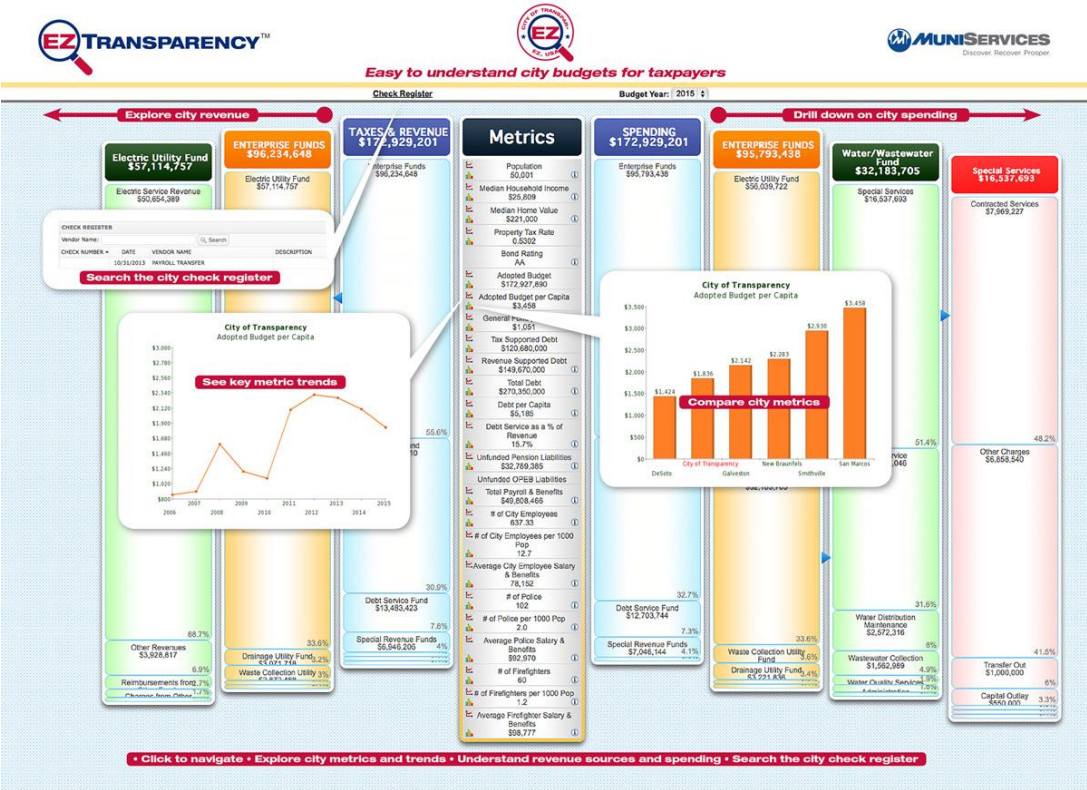
"The rapid emergence of the 'participative web' is reflected in the exponential proliferation of wikis, blogs….The tools and practices of the participative web can help improve policy making and service delivery by enriching government interactions with external stakeholders and enhancing internal knowledge management." - Organization of Economic Cooperation and Development, Studies on Public Engagement

City	Example
Vallejo, CA	Established the first citywide PB in the U.S., through a City Council Resolution. Through PB, the community decides how to spend $2.4 million of revenue from the city's Measure B Sales Tax. Vallejo residents propose spending ideas, develop project proposals, and vote on which to fund, then the list of winning projects is submitted to City Council for approval.
Boston, MA	The first youth PB initiative in the U.S., was launched in January 2014 as an initiative of the Mayor's office. The process lets the city's youth ages 12-25 decide how to spend $1 million of the capital budget.
San Francisco, CA	San Francisco's District 3 introduced a pilot PB program in 2013, empowering residents to directly decide how to spend $100,000 of discretionary funding for capital projects, programs and activities. The pilot program has since expanded to three districts.

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