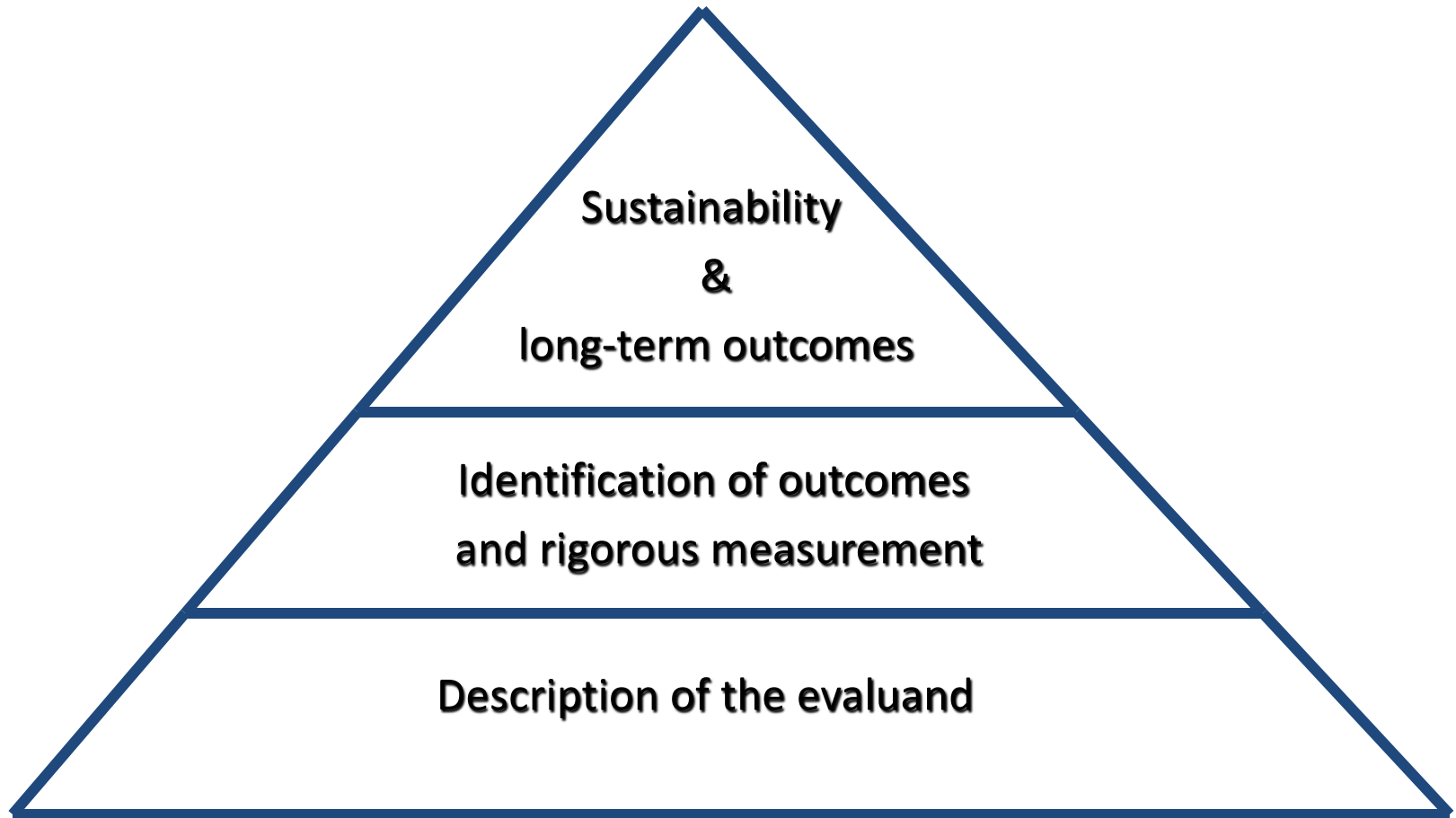


What if: exploring the counterfactual in impact evaluation

Professor Rick Cummings
Sir Walter Murdoch Graduate School of Public Policy and
International Affairs

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Three generic deliverables of an evaluation study



Counterfactual thinking

- **Based in social psychology**
 - what might have been?
- **Key element of Western critical thought**
 - Basis of much comparative analysis
 - Contributes to understanding of Western concept of causality
- Can be either:
 - Evaluative - comparing factual/possible counterfactuals
 - Reflective - experiential perceptions of what might have been

What if 9/11 had not happened?



International Relations
Airline travel
Leadership

War in Iraq ?

High Security ?

Bush, Howard,
Harper, Mugabe ?

The counterfactual in evaluation

What would have happened **if**
the project or program had not been
implemented

*Posing of an alternative state of the world and comparing it with the
actual one to gauge the **impact** of a given project or program*

The logic of the counterfactual

- In the context of program evaluation, the counterfactual is defined as what might have occurred if the particular program being evaluated was not in place or an alternative program was conducted.
- Aims of the counterfactual in impact evaluation
 - To establish evidence of a causal relationship between a program and the outcomes the program seeks to influence;
 - To account for confounding factors, additional to the influence of a program, that might lead to measured change in outcomes; and
 - To provide estimates of the impact of a program.

Characteristics of a appropriate counterfactual

Individuals

Program context

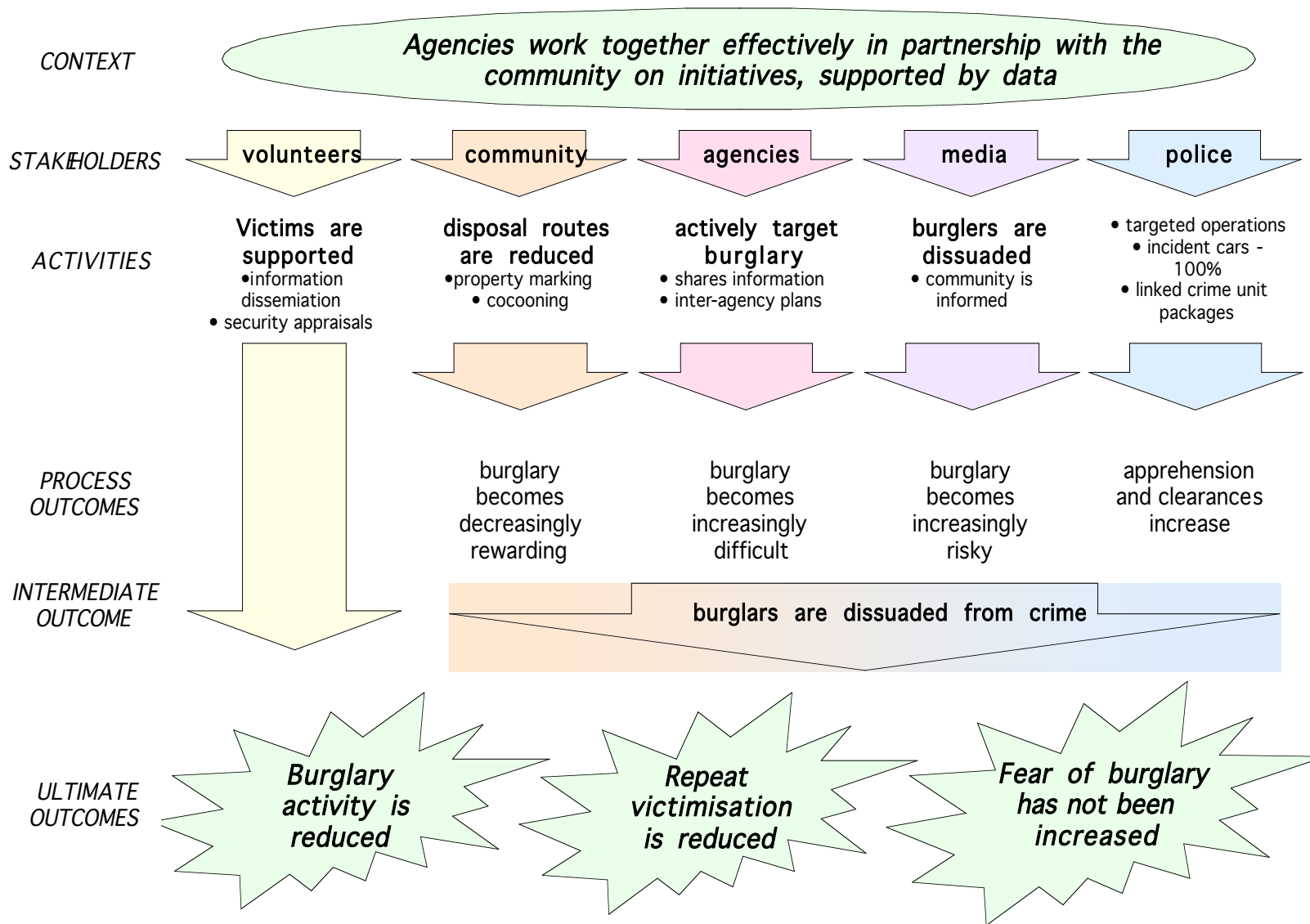
Program compliance

Program description

Availability and suitability of data

Operation Burglary Countdown

- Residential burglary campaign
- Pilots in 2 burglary hotspots in Perth
- Integrated community-based program
- Ongoing evaluation for the 12 month pilot



Focus of the evaluation

■ Program performance

- What is the value of agency partnerships?
- What do these initiatives cost and what is their value?
- Are the data collection and sharing process effective?

■ Victim action and response

- Are victims increasing level of security of their homes?
- Are rates of residential burglary reporting increasing?

• Overall outcomes

- Have community attitudes to residential burglary changes?
- Has residential burglary been displaced?
- Has repeat victimisation been reduced?
- Has residential burglary been reduced?

Counterfactual analysis for Operation Burglary Countdown

Burglaries prevented = Actual Crime in Action Area (after) – Expected crime rate

where the expected crime rate =

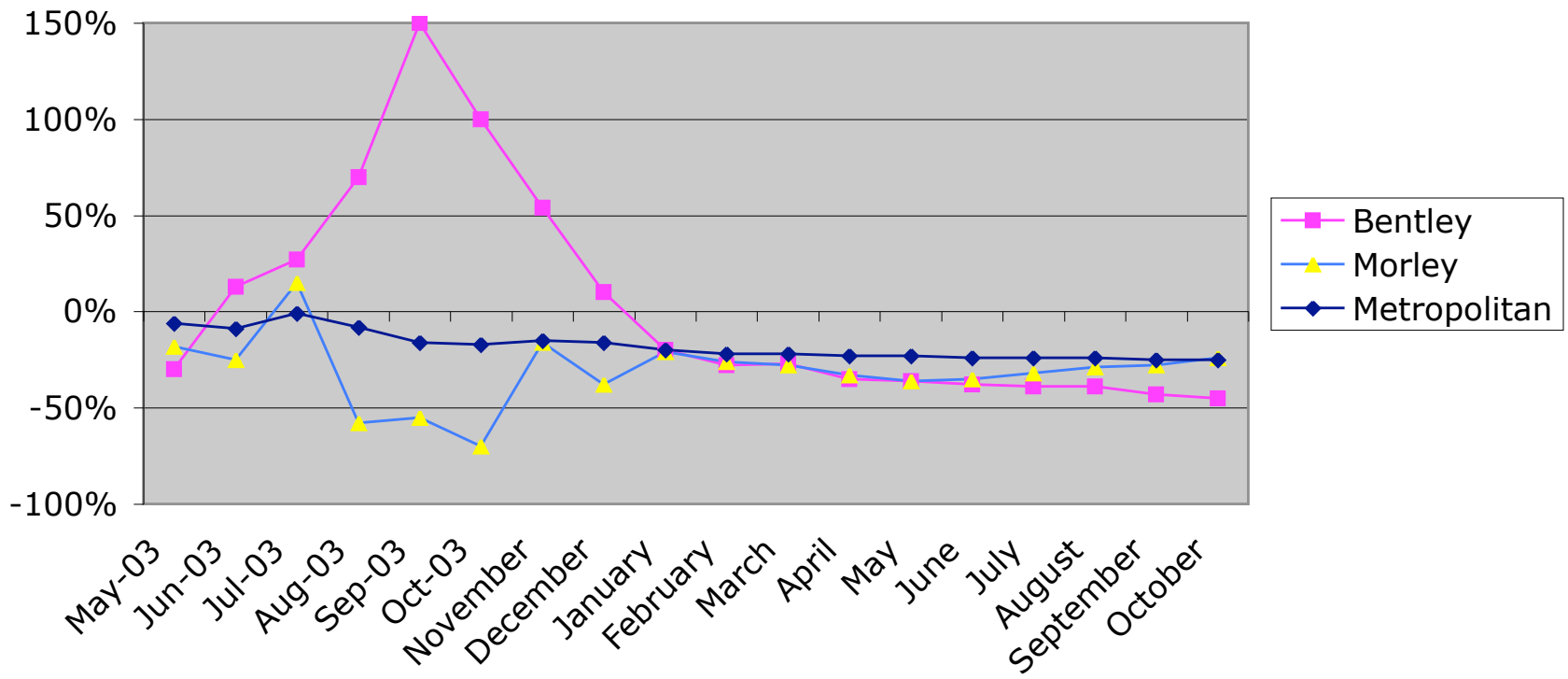
$$\text{Crime in Action Area (before)} \times \frac{\text{Crime in Comparison Area (after)}}{\text{Crime in Comparison Area (before)}}$$

Changes in burglaries reported

	Bentley	Bentley Surrounds	Morley	Morley Surrounds	Metro Perth
Previous year 2003	647	1556	364	1334	30,818
Program year 2004	355	1095	276	1136	22,897
Gross change	-292	-461	-88	-198	-7,922
Percent change	-45%	-30%	-24%	-15%	-26%

Operation Burglary Countdown

Percent Change in Burglary Numbers by Target Suburb and Metro Perth May 03 to Oct 04



Burglaries prevented and community savings

	Bentley	Bentley Surrounds	Morley	Morley Surrounds	Metro Perth
Previous year 2003	647	1556	364	1334	30,818
Program year 2004	355	1095	276	1136	22,897
Gross change	-292	-461	-88	-198	-7,922
Percent change	-45%	-30%	-24%	-15%	-26%
Predicted burglaries prevented	129	74	-1	-137	
Community savings	\$503,100	\$212,380	\$1900	\$397,300	\$316,280

Cost per residential burglary Bentley (\$3900) and Bentley Surrounds (\$2870) whereas in Morley (\$1900) and Morley Surrounds (\$2900)

Benefits

Provides a meaningful comparison for the audience

May allow measurement of the impact in other terms eg cost/benefit

Expands the horizon of alternatives

May assist in identifying attribution and/or causality

Pitfalls

The counterfactual case may be inappropriate

- eg strained counterfactual case, bad match of comparison case/group

The comparison analysis may be inappropriate

- making inaccurate assumptions about relationships

Unknown external factors may be more influential than the intervention

Evaluating the appropriateness of a counterfactual

- Become familiar with the program and the evaluation study
- Identify the intended program outcomes/impacts and those to be addressed in the evaluation study
- Identify the outcome/impact measure which is the basis of the counterfactual
- Work through the criteria of an appropriate counterfactual
- Identify the counterfactual and the selected research design
- Identify the strengths and weaknesses of the counterfactual
- Search for mitigating factors that may influence the counterfactual

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