

# Creating Better Programs Using Logic Models



# What We Will Cover



Logic Model Concepts:

- ❧ What?
- ❧ Why?
- ❧ How?
- ❧ Building a program framework
- ❧ Theory of change
- ❧ Implementation and evaluation
- ❧ Pitfalls
- ❧ Summing-up

# Focus is on Program Outcomes



∞ Results driven

∞ Performance

∞ Effectiveness

∞ Impact

∞ Accountability

## Accountability Era

- What gets measured gets done
- If you don't measure results, you can't tell success from failure
- If you can't see success, you can't reward it
- If you can't reward success, you're probably rewarding failure
- If you can't see success, you can't learn from it
- If you can demonstrate results, you can win public support

Osborne and Gaebler 1992

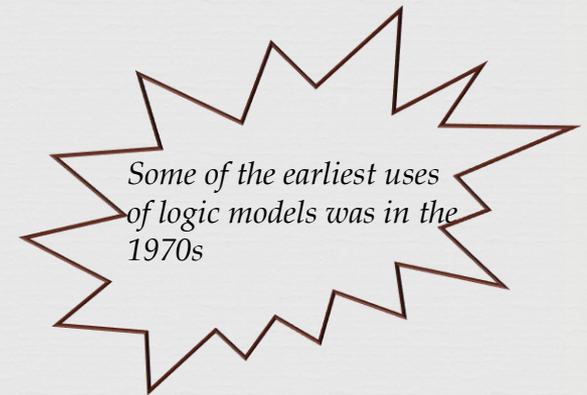
# WHAT: Program Logic Model



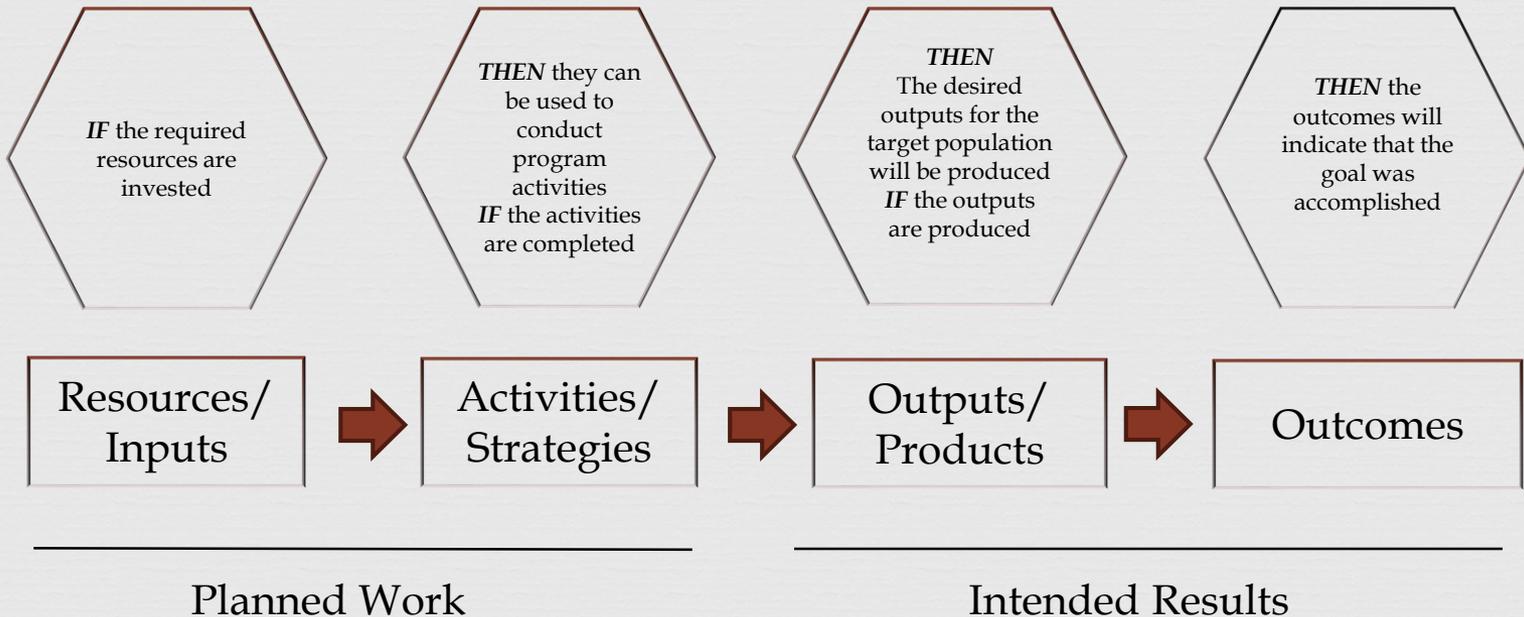
❧ A simplified picture of how your program will work and the relationships among program elements

❧ Program strategy:

- ❧ Where are you going
- ❧ How will you get there
- ❧ What will tell you that you have arrived



# “If...then...” Statements



# Also Called...



- ❧ Roadmap
- ❧ Theory of change
- ❧ Logical framework
- ❧ Program matrix
- ❧ Model of change
- ❧ Blueprint for change



# What it is not



- ❧ A strategic or fully developed plan for designing or managing a program or policy
- ❧ An evaluation design or method
- ❧ Reality - represents intention

# WHY: Program Logic Models



- ❧ Involve and engage stakeholders
- ❧ Shared understanding of program purpose
- ❧ Focus attention/resources on intended goals
- ❧ Performance measures are clearly defined
- ❧ Identify gaps in program logic and clarify assumptions
- ❧ Program fidelity

# How: Program Logic Models



- ❧ Strategic planning
- ❧ Improve communication
- ❧ Facilitate program:
  - ❧ Design/Planning
  - ❧ Implementation
  - ❧ Evaluation
- ❧ Grant proposals

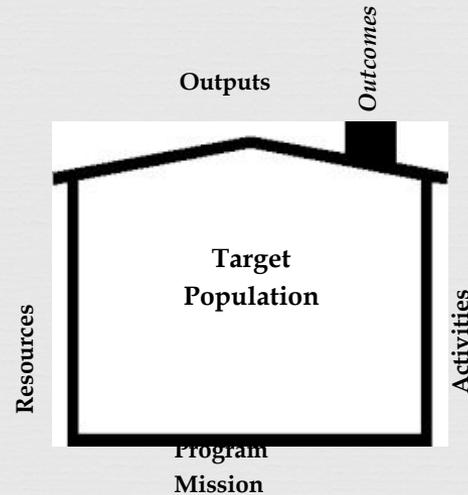


# Building a Program Framework



Logic model components:

- ❧ Problem Statement
- ❧ Mission/ goal(s)
- ❧ Target population
- ❧ Resources
- ❧ Activities
- ❧ Outputs
- ❧ Outcomes



# Problem Statement



❧ Broad measurable statement

❧ Expected long-term impact of the program

Consider:

- What is the problem or issue?
- Why is this a problem?
- For whom does this problem exist?
- Who has a stake in the problem?
- What is known about the problem, issue, or people who are involved?

# Mission/Goal



✧ Well-defined, specific, measurable

✧ Should always answer the question:  
**What** for **Whom** by **When**

Consider:

- Priorities
- Resources
- Mandates
- Collaborators
- **Intended outcomes**

# Planned Work



## ☞ Target Population:

- ☞ For whom?

## ☞ Resources/Inputs:

- ☞ Resources available to achieve objectives
- ☞ Directed towards activities
- ☞ Material and intangible

# Planned Work



## Activities:

- What the program does with its resources
- Interventions used to bring about change
- Have measurable outputs

### Consider:

- What is the appropriate sequence or order of activities?
- Are there certain activities that, taken together, add up to a kind of overall strategy?

# Intended Results

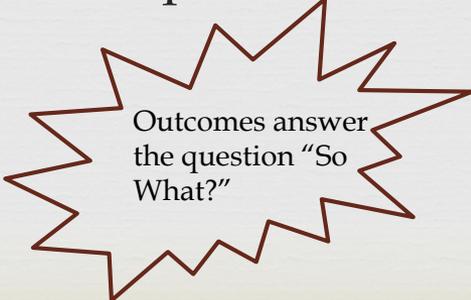


## ☞ Outputs:

- ☞ Direct and measurable products of a program's activities and services
- ☞ Often expressed in terms of units

## ☞ Outcomes:

- ☞ Specific changes in program participants behavior
- ☞ Directly related problem and mission/goal(s)
- ☞ May include intended or unintended consequences
  - Impact



Outcomes answer  
the question "So  
What?"

A starburst graphic with a jagged, multi-pointed border, containing the text "Outcomes answer the question 'So What?'".

# Outputs vs. Outcomes



## Output

- Provide 4 day care home provider trainings per year with on-site follow-up
- Provide services to 300+ homeless people in the city of Avon

## Outcome

- Participating day care home providers:
  - Increase knowledge of recommended practices
  - Implement recommended quality care practices within 6 months of program completion
- Homeless people receiving program services:
  - Develop a service/treatment plan
  - Increase their self-sufficiency

# Writing Outcome Statements



<b>Who/What (the target subject)</b>	<b>Change/Desired effect (action verb)</b>	<b>In what (expected results)</b>	<b>By when</b>
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## **Examples**

Teenage youth aged 13-17 years attending camp	improve	their leadership skills	by the end of camp
Low-income families participating in the program	increase	their use of community services	within three months after the program finishes
County management board	implements	waste management plan	within one year of program start- up

# Chain of Outcomes - Time



**SHORT**  
Changes in  
*Learning*

- Awareness
- Knowledge
- Attitudes
- Skills
- Opinion
- Aspirations
- Motivation
- Behavioral intent

“Expect to See”

**MEDIUM**  
Changes in  
*Action*

- Behavior
- Decision-making
- Policies
- Social action

“Want to See”

**LONG-TERM/IMPACT**  
Changes in  
*Conditions*

- Social well being
- Health
- Economic
- Civic
- Environment

“Hope to See”

# Chain of Outcomes: Example



## SHORT

Changes in  
*Learning*

Seniors increase knowledge of food contamination risks

Participants increase knowledge and skills in financial management

Community increases understanding of childcare needs

Empty inner city parking lot converted to community garden

## MEDIUM

Changes in  
*Action*

Practice safe cooling of food; food preparation guidelines

Establish financial goals, use spending plan

Residents and employers discuss options and implement a plan

Youth and adults learn gardening skills, nutrition, food preparation and mgt.

## LONG-TERM/IMPACT

Changes in  
*Conditions*

Lowered incidence of food borne illness

Reduces debt and increased savings

Child care needs are met

Money saved, nutrition improves, residents enjoy greater sense of community

# Standards of Quality



S.M.A.R.T Test:

- ❧ [S]pecific
- ❧ [M]easurable
- ❧ [A]ttainable or achievable
- ❧ [R]ealistic or relevant
- ❧ [T]ime specific

Consider:

- Are the outcomes important?
- Are the outcomes reasonable?
- Are the outcomes realistic given the nature of the problem and available resources and abilities?
- Are unintentional or possibly negative outcomes being attended to?

# Assumptions



- ❧ Beliefs about the program, the people involved and how the program will work
  
- ❧ Faulty logic can lead to ineffective and inefficient programs
  
- ❧ Examples:
  - ❧ Funding will be secured throughout the project's life
  - ❧ Staff will be recruited and hired with necessary skills and abilities

# External Factors



- ❧ Constraints, barriers, risks that influence program success over which we have little control
  
- ❧ Examples:
  - ❧ Budget
  - ❧ Changing policies and priorities
  - ❧ Political environment

# What Type?

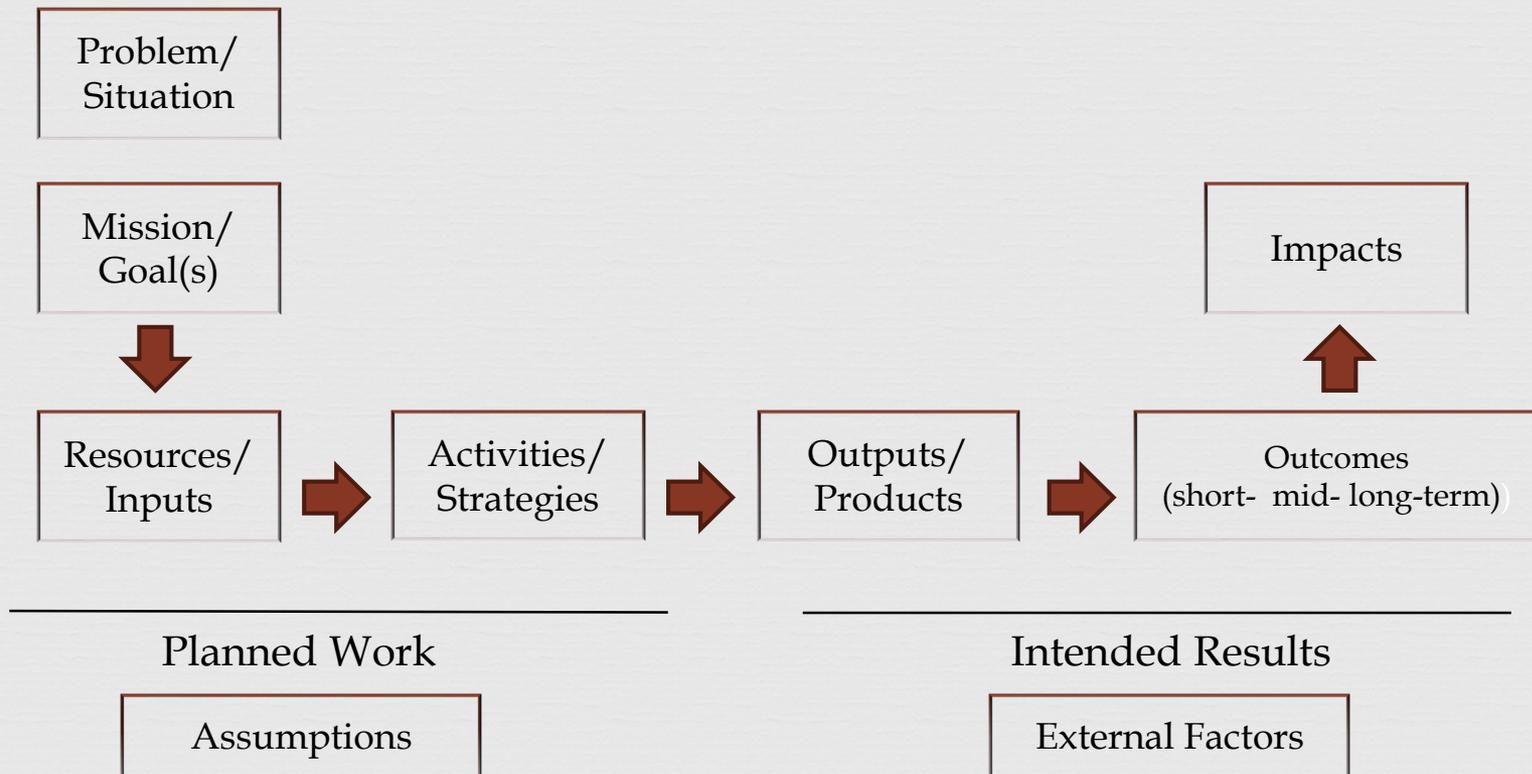
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- ❧ Vary widely
- ❧ Determined by the purpose they serve:
  - ❧ Program planning
  - ❧ Evaluation
- ❧ Tailored to fit the needs of your organization

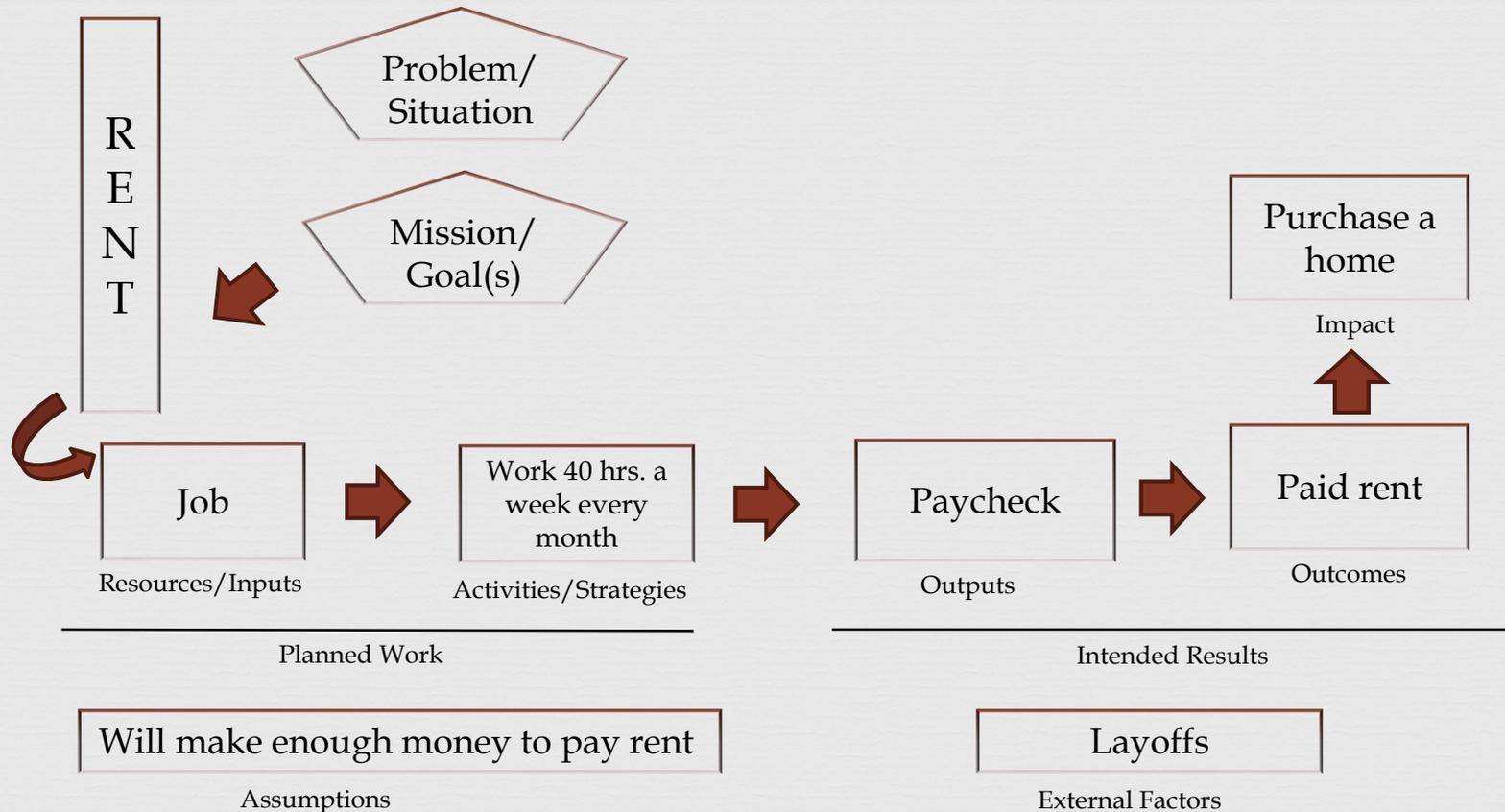
## 3 Box Logic Model



# Simple Logic Model

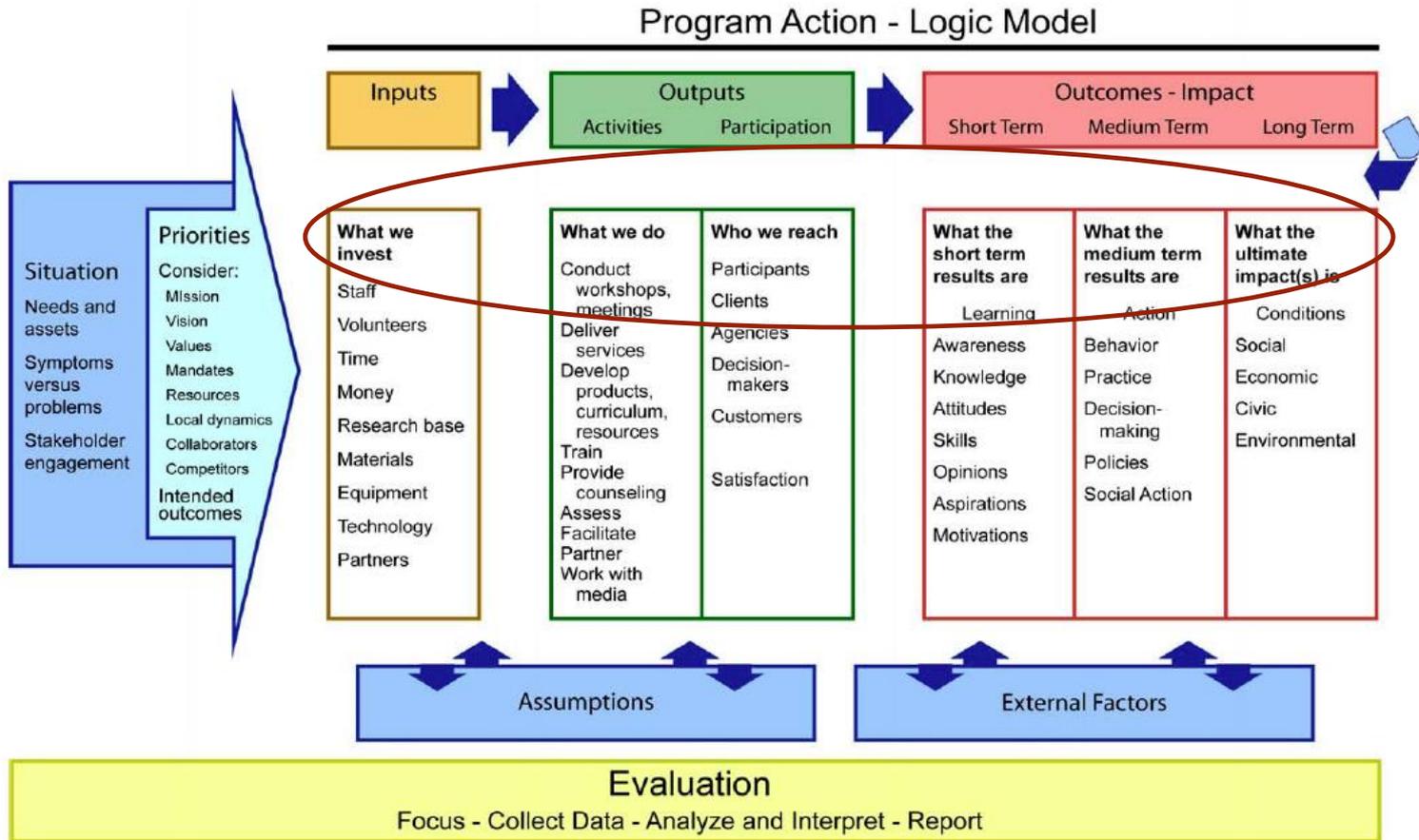


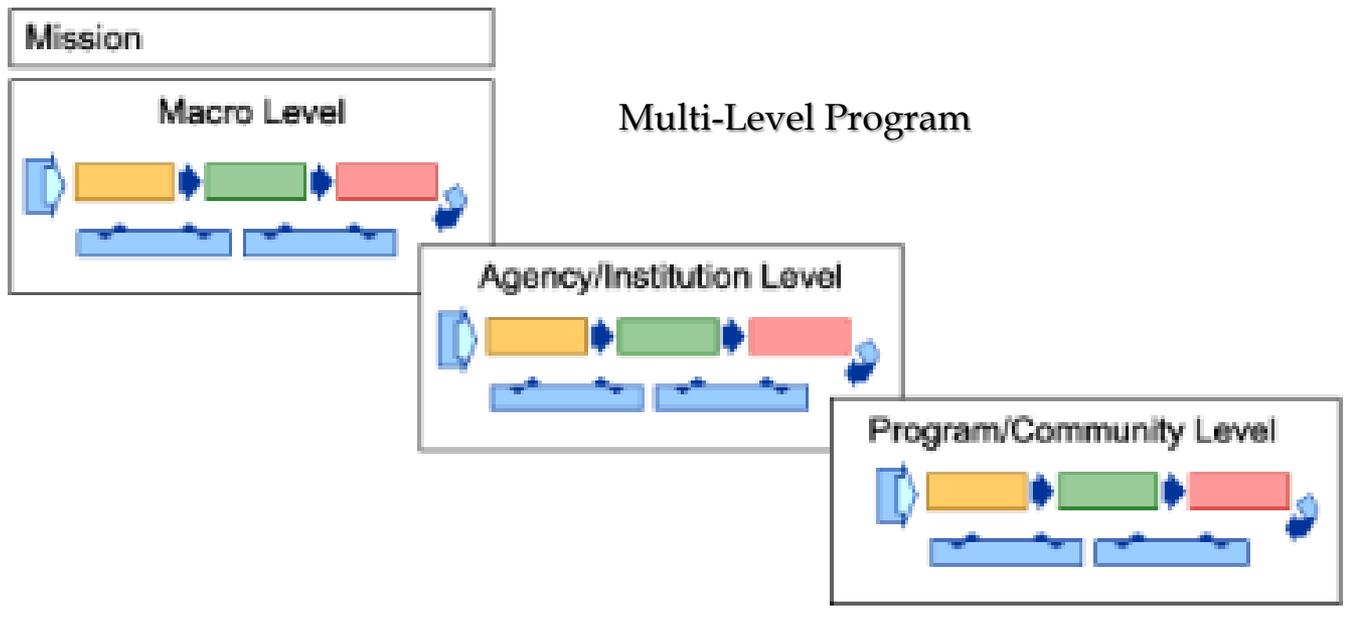
# Simple Logic Model: Example



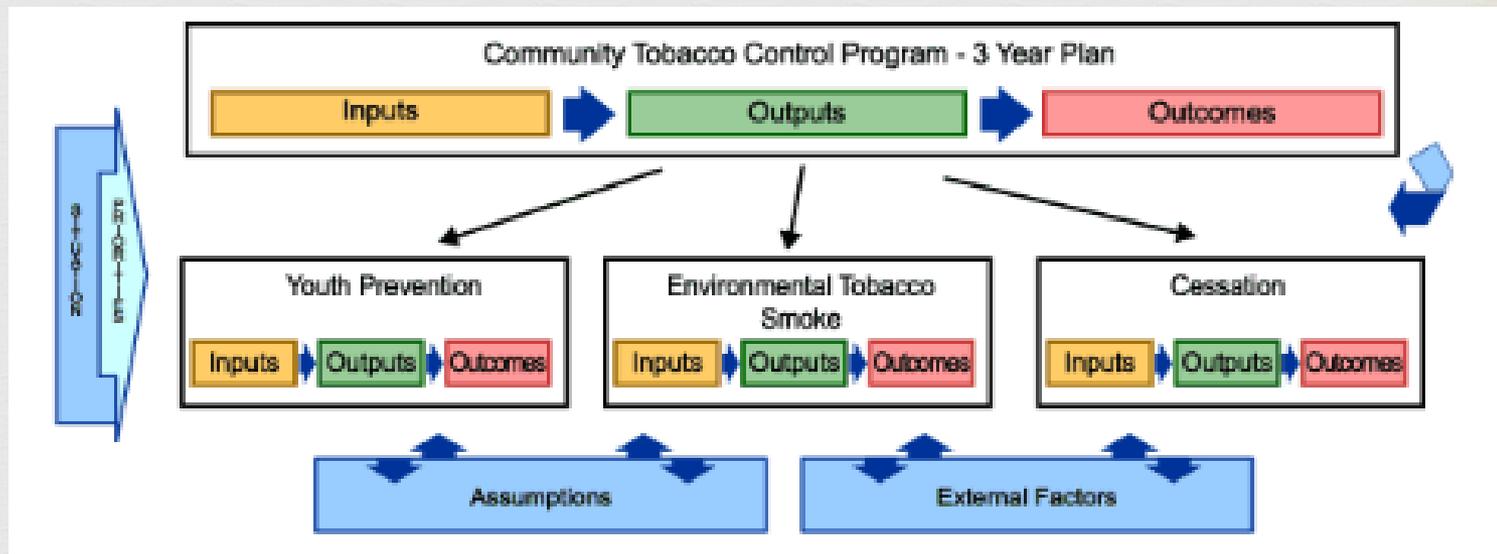
# PROGRAM DEVELOPMENT

Planning – Implementation – Evaluation





Multi-Component Program



# Theory of Change



“A theory of change is a description of how and why a set of activities – be they part of a highly focused program or a comprehensive initiative – are expected to lead to early, intermediate, and long-term outcomes over a specified period.”

(Anderson, 2000)

# Specify the Process Theory

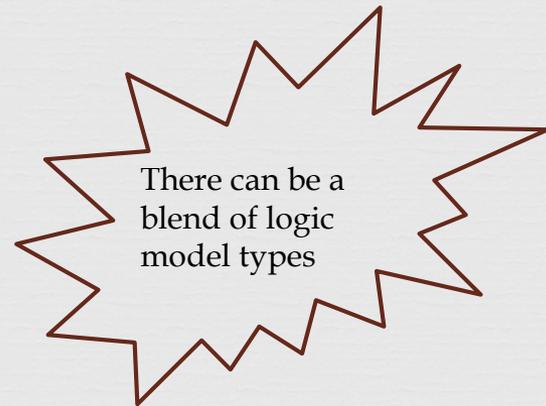


Three approaches:

☞ Theory approach

☞ Activities approach

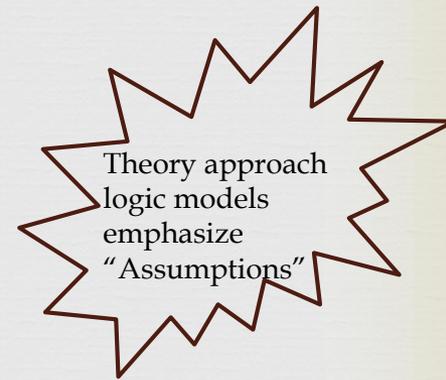
☞ Outcomes approach

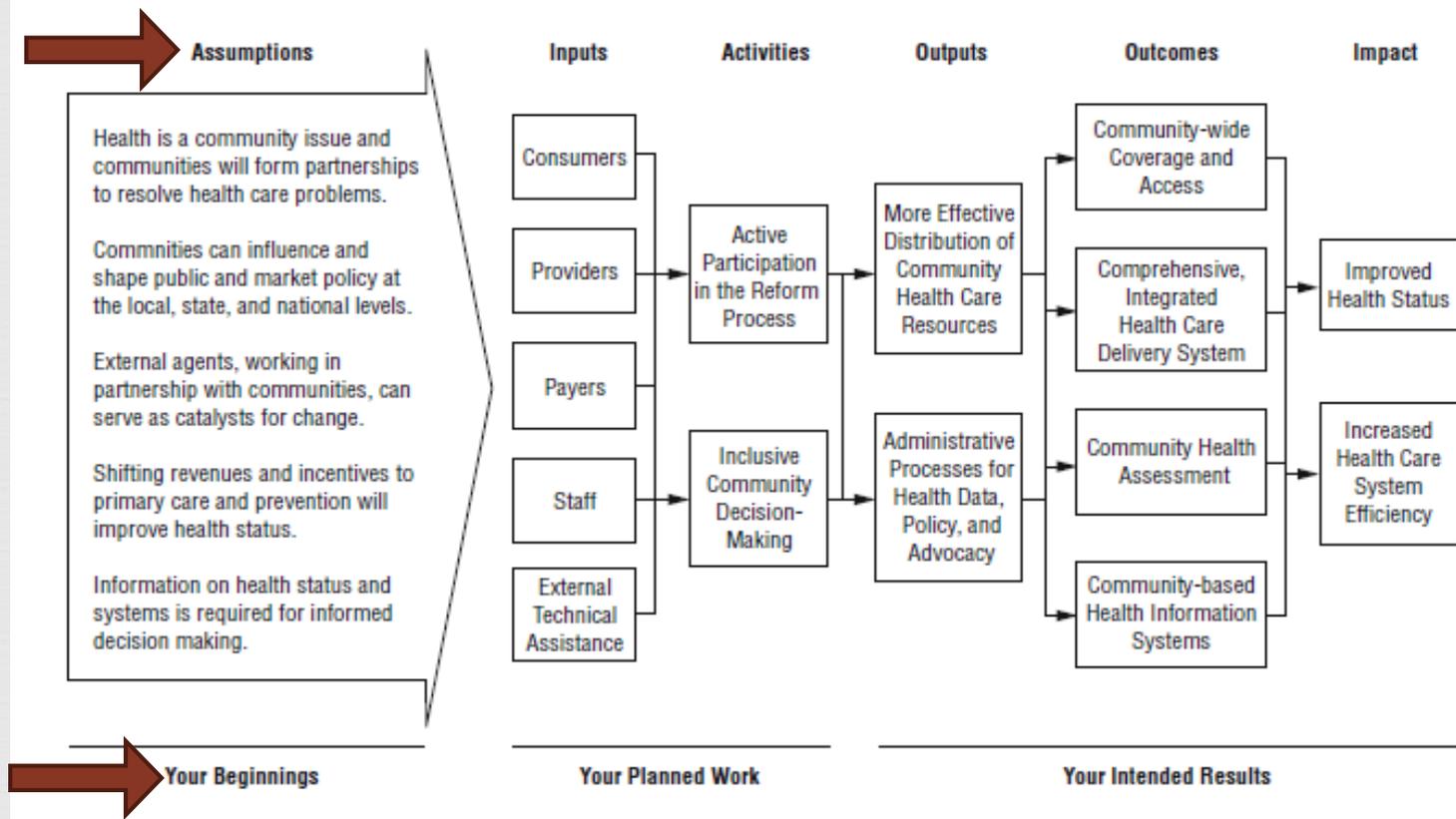


# Theory Approach



- ❧ Broad about “big ideas” not specific “nuts and bolts”
- ❧ Useful for the overall communication of the program
- ❧ Provides a clear description of why the developers believe the program will be effective in achieving goals
- ❧ A theory approach logic model links theoretical ideas together to explain underlying program *assumptions*



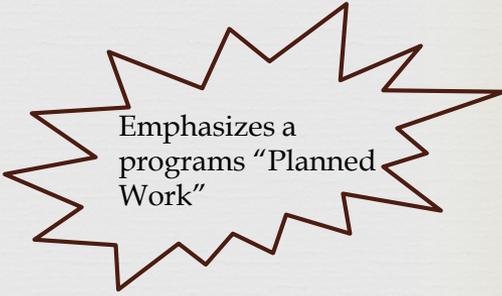


Example of a Theory Logic model (Adapted from WKKF's Comprehensive Community Health Models of Michigan).

# Activities Approach



- ❧ Focus on laying out specific strategies and activities
- ❧ Examines the relationship among activities
- ❧ Considers sequence and timing of implementation
- ❧ How activities link to outcomes
- ❧ Most useful in program implementation, monitoring, and management



Emphasizes a  
programs "Planned  
Work"

A starburst-shaped callout box with a jagged, multi-pointed border, containing text that highlights a key feature of the approach.

Insurance market issues are identified and documented.

Insurance market issues are prioritized based on potential for successful reform.

High priority issues are identified and examined.

Strategies to reform the high priority issues identified have been developed.

Change agents with sufficient capacity and resources to successfully execute insurance market reform are identified.

Change agents contracted to implement insurance market reform (minimum of 2).

Equitable access to community-wide coverage.

Activities to increase beneficiary enrollment and provider participation in Medicaid and other third party sponsored insurance and reimbursement plans (2P1)

*% decrease of people uninsured (201).*

*% decrease of new Medicaid eligible consumers achieving coverage before in the hospital (203).*

*% in Medicaid participating providers, using \$1000 threshold level (204).*

**Deliverable-6**  
The Purchasing Alliance will identify insurance market issues and strategies to reform those identified issues will be developed and implemented.



**Milestone Activities**

**Outputs**

**Outcomes**

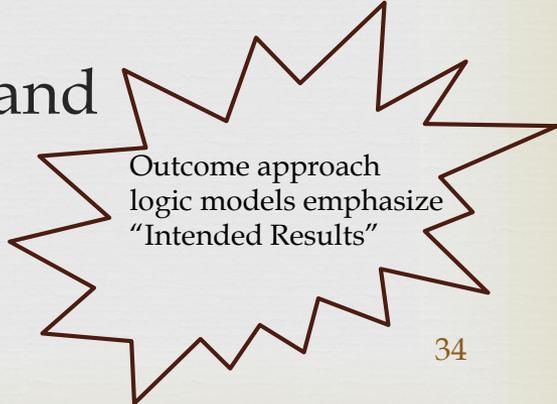
**Your Planned Work**

**Your Intended Results**

# Outcome Approach

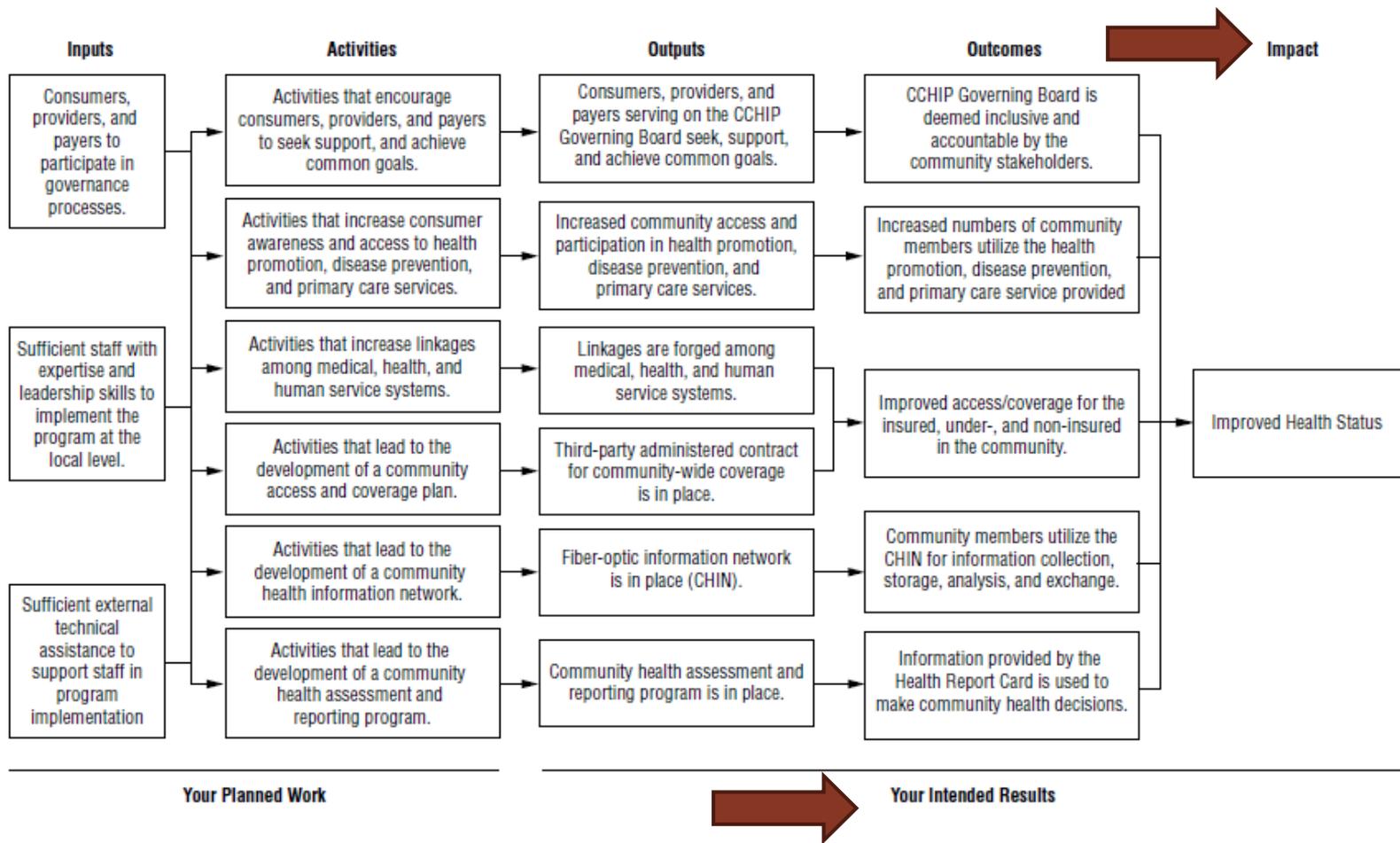


- ❧ Focus on early aspects of program planning
- ❧ Subdivide outcomes and impact over time
- ❧ Consider the strategies and activities as they
- ❧ relate to the desired results of a program
- ❧ Most useful for program evaluation and reporting



Outcome approach  
logic models emphasize  
"Intended Results"

A starburst graphic with a jagged, multi-pointed border, containing the text "Outcome approach logic models emphasize 'Intended Results'".



Example of an Outcome Approach model (example drawn from the Calhoun County Health Improvement Program, funded under the Comprehensive Community Health Models of Michigan initiative).

# Implementation Strategy



## Forward Logic:

- Moving forward from activities
- Driven by “if-then” thinking or “but why” questions

## Reverse Logic:

- Moving backward from the effects
- Plan with the end in mind
- Asks a series of “But how” questions

# Evaluation: Two Purposes



## Formative:

- Improve
  - Process
  - Implementation evaluations

## Summative:

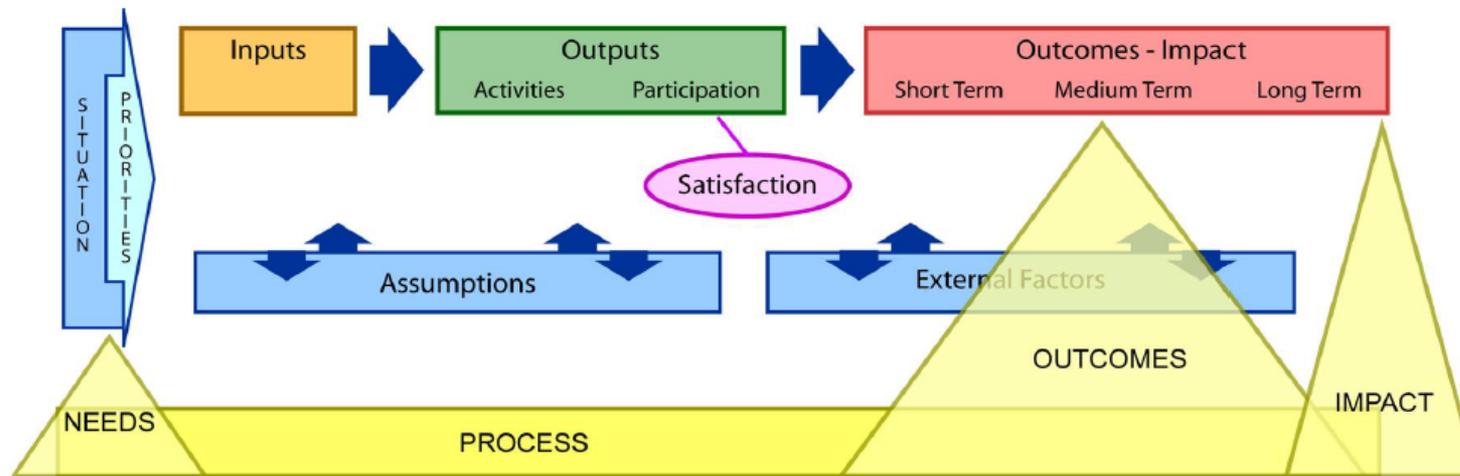
- Prove
  - Results
  - Outcome evaluations

# Evaluations: Four Types



- ❧ Needs assessment (formative):
  - ❧ Determines what is needed at onset
  - ❧ Helps set priorities
  
- ❧ Process Evaluation (formative):
  - ❧ What the program is, how it is working, whom is it reaching, and how
  
- ❧ Outcome (summative):
  - ❧ Determines the results from and the consequences of a program
  
- ❧ Impact (summative):
  - ❧ Effect of program past its immediate results

# LOGIC MODEL AND COMMON TYPES OF EVALUATION



## Types of evaluation

### Needs/asset assessment:

What are the characteristics, needs, priorities of target population?  
 What are potential barriers/facilitators?  
 What is most appropriate to do?

### Process evaluation:

How is program implemented?  
 Are activities delivered as intended? Fidelity of implementation?  
 Are participants being reached as intended?  
 What are participant reactions?

### Outcome evaluation:

To what extent are desired changes occurring? Goals met?  
 Who is benefiting/not benefiting? How?  
 What seems to work? Not work?  
 What are unintended outcomes?

### Impact evaluation:

To what extent can changes be attributed to the program?  
 What are the net effects?  
 What are final consequences?  
 Is program worth resources it costs?

## EVALUATION PLAN WORKSHEET

1. FOCUS What will we evaluate (which program or aspect of a program)?						
2. QUESTIONS What do you want to know?	3. INDICATORS-EVIDENCE How will we know it?	4. TIMING When should we collect data?	5. DATA COLLECTION			
			SOURCES Who will have this information?	METHODS How will we gather the information?	SAMPLE Who will we question?	INSTRUMENTS What tools shall we use?
1.	1. a b c					
2.	2. a b					
3.	3. a b c					
4.	4. a b c					
5.						

6. How will the data be analyzed?	7. How will the data be interpreted?	8. How will the results be communicated?	
		To Whom	When? Where? How?

# Check Your Logic Model



☞ Is it meaningful?

☞ Does it make sense?

☞ Is it doable?

☞ Can it be verified?



# Common Pitfalls



- ❧ Mission/Goal(s) are not measurable
- ❧ Links among elements are not clear
- ❧ Level of detail
- ❧ Viewing the logic model as a reality
- ❧ Focus on expected outcomes
- ❧ May stifle creativity and spontaneity

# Summing up



## Logic Models:

- ❧ Demonstrate accountability with focus on outcomes
- ❧ Logically link activities and results
- ❧ Integrate planning, implementation, and evaluation
- ❧ Provide a common language and reference point
- ❧ Increase understanding of program
- ❧ Should be living documents and should be amended as needed
- ❧ Are a way of thinking – not just a pretty graphic

# Logic Model Resources



- ❧ W.K.Kellogg Foundation Logic Model Guide <http://www.smartgivers.org/uploads/logicmodelguidepdf.pdf>
- ❧ Community Tool Box, Developing a Logic Model or Theory of Change <http://ctb.ku.edu/en/table-of-contents/overview/models-for-community-health-and-development/logic-model-development/main>
- ❧ Guide to Program Evaluation, Bureau of Justice Assistance center for Program Evaluation and Performance Measurement <https://www.bja.gov/evaluation/guide/index.htm>
- ❧ Introduction to the Logic Model University of Maryland Thessalenuere Hinnant-Bernard, Ph.D. <https://www.umes.edu/cms300uploadedFiles/Logic%20Model%20Training%20II.pdf>
- ❧ Program Development and Evaluation University of Wisconsin - Extension <http://www.uwex.edu/ces/pdande/evaluation/evallogicmodel.html>
- ❧ Welcome to Enhancing Program Performance with Logic Models <http://www.uwex.edu/ces/pdande/evaluation/pdf/lmcourseall.pdf>
- ❧ Logic Models for program design, implementation, and evaluation Workshop toolkit <http://files.eric.ed.gov/fulltext/ED556231.pdf>
- ❧ Logic Model Workshop, South Carolina State University Ellen Taylor-Powell Ph.D. Emeritus, University of Wisconsin-Cooperative Extension <http://www.scsu.edu/files/logicmodelworkshop.pdf>

# For Questions Contact:



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