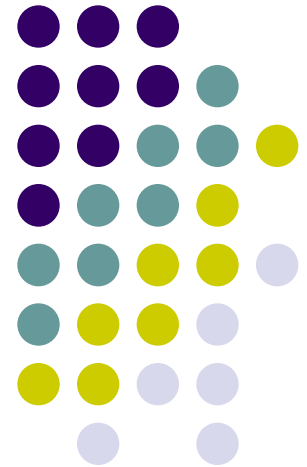


Logic Model Design

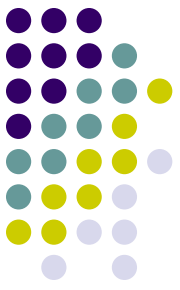
Heidi Herinckx
Assistant Director
Regional Research Institute
Portland State University





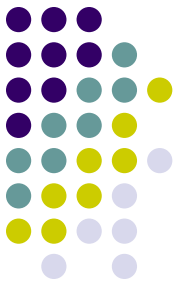
What is a Logic Model

- A logic model is a systematic and visual way to present and share your understanding of the relationships among the resources you have to operate your program, the activities you plan, and the changes or results you hope to achieve.

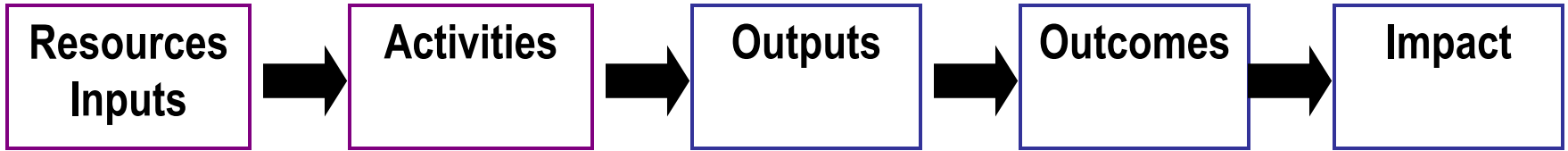


What is a Logic Model

- A picture that represents a thorough understanding of a program: what resources it has to work with, what it is doing, what it hopes to achieve, for whom, and when.
- Visual representation of logical connections between elements of a program showing the intended relationships between investments, activity and results.
- A series of “if-then” relationships connect the components of the logic model: if sufficient resources are available and if program activities are implemented successfully, then certain outputs and outcomes can be expected.



GENERAL LOGIC MODEL FRAMEWORK



YOUR PLANNED WORK



YOUR INTENDED RESULTS

Components of a Logic Model



- Goal: *What is the overall purpose of your program?
What need does your program address?*
- Resources: *What do you have to work with?*
- Activities: *What are the key activities your program will perform (how will you use these resources)?*
- Outputs: *What are the tangible products of your activities?*
- Outcomes: *What changes do you expect to occur as a result of your work?*

Goal



- What are you trying to accomplish over the life of the program?
- Goals serve as a frame for all elements of the logic model that follow. They reflect organizational priorities and help you steer a clear direction for future action.
- Goals may be synonymous with the Impact statement.
- **Goals should:**
 - Include the intended results—in general terms—of the program or initiative.
 - Specify the target population you intend to serve.

Sample Goal Statements

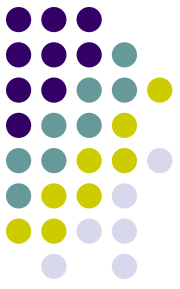


- The goal of the Bridges to Success project is to reduce chronic homelessness for adults with severe and persistent mental illness and co-occurring substance abuse disorders by providing supported housing and integrated evidence based Strengths case management and Matrix drug treatment.

Sample Goal Statements

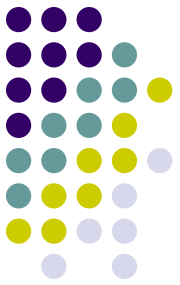


- Methamphetamine treatment study:
 - **Goal 1 (Participant Level):** Assist participants to establish a clean and sober lifestyle, to improve the quality of their lives, to increase employment and financial resources, and to reduce episodes of criminality, homelessness, and psychiatric crisis.
 - **Goal 2 (Treatment Level):** Increase the capacity for targeted culturally competent and gender-specific methamphetamine treatment and to develop provider capacity to effectively serve this population.
 - **Goal 3 (Community Level):** Increased client outcomes will be associated with increased community safety and reduced economic and social costs associated with meth use.



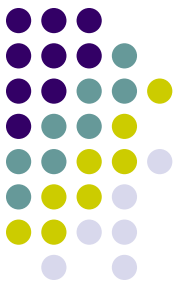
Target Population

- **TARGET POPULATION(s)** Describe the population to be served. Specify the following components:
 - Age group of program targets
 - Description of population (i.e. gender, race, disability, etc)
 - Unique characteristics of the target population (i.e. needs, risk factors, barriers, etc.)
 - Geographic location or community of focus of program targets



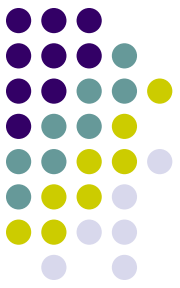
Target Population Example

- Homeless adults age 18-64 with severe and persistent mental illness and co-occurring substance abuse disorder living in Josephine County Oregon.



Resources and Inputs

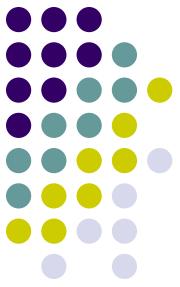
- Identify the available resources for your program
- Identify what you “have” and what you “need” to successfully operate your program or carry out your intervention
- For a grant application, the resources asked for in the grant need to be specified and activities in the logic model tied specifically to these resources.



Types of Resources

- **Human resources:** Full- and part-time staff, consultants (e.g., content experts, technical support, strategic planning, communications), and volunteers
- **Financial resources:** Operating costs, and other monetary resources
- **Space:** Office and other facilities
- **Technology:** Computer hardware & software, communications infrastructure (email, website)
- **Other Equipment:** Office machinery (printers, copiers) and equipment specific to the program
- **Materials/Other:** Office supplies, program materials (training materials), insurance, etc.

Activities/Strategies



- Activities are the actions that are needed to implement your program—what you will do with program resources in order to achieve program outcomes and, ultimately, your goal(s).
- Strategies are the activities, processes or events key to producing desired outcomes. They are the services a program provides for its participants to fulfill its purpose.
- Activities utilize the inputs/resources to produce desired outcomes.

Common Types of Activities



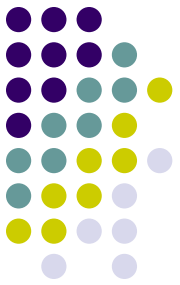
Common activities are:

- Developing products (e.g., promotional materials and educational curricula)
- Providing services (e.g., education and training, counseling or health screening)
- Engaging in policy advocacy (e.g., issuing policy statements, building consensus)
- Building infrastructure (e.g., strengthening governance and management structures, relationships, and capacity)

Outputs



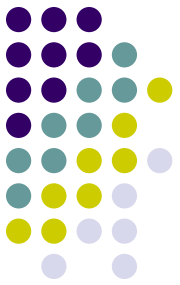
- Outputs are the measurable, tangible, and direct products or results of program activities. They lead to desired outcomes—benefits for participants, families, communities, or organizations—but are not themselves the changes you expect the program will produce. They do help you assess how well you are implementing the program.



Examples of Outputs

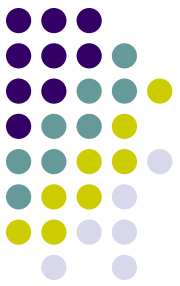
Include **numbers and descriptions** of:

- Classes taught or meetings held
- Materials developed or distributed
- Number of participants served
- Hours of service provided
- Partnerships or coalitions formed
- Focus groups held
- Policy briefings conducted
- Curriculum/curricula developed



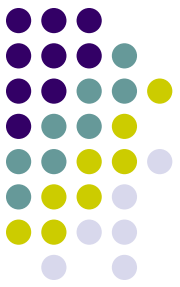
Outcomes

- Outcomes are the changes that occur or the difference that is made for individuals, groups, families, organizations, systems, or communities during or after the program.
- Outcomes express the results that your program intends to achieve if implemented as planned.



Outcomes

- Represent the results or impacts that occur because of program activities and services
- Should be a logical direct result of the program and occur within the timeframe you specify
- Be generally accepted as valid by various stakeholders of the program (i.e. evidence-based, shown to be true in previous research or studies, based on organizational experience or expertise)
- Be phrased in terms of **change**
- Be **measurable** (It may take work to translate them into measurable indicators.)



Outcomes for whom?

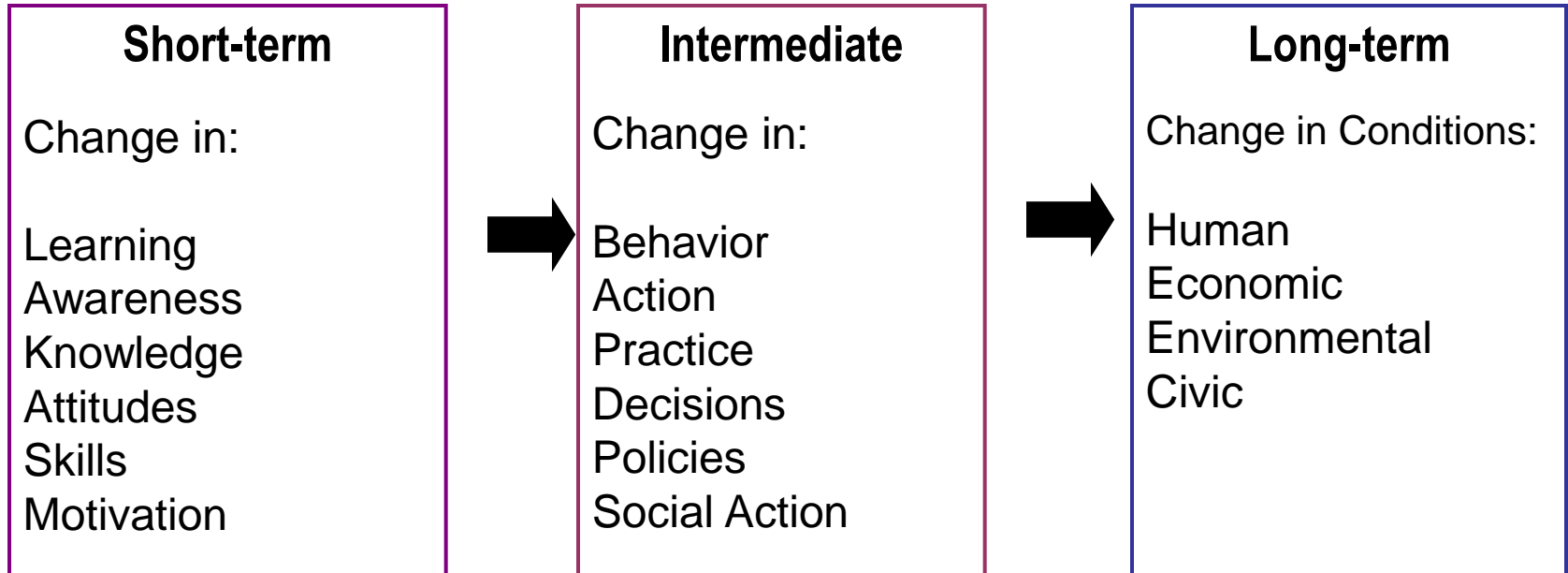
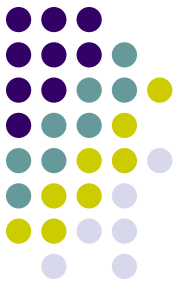
- Individual level
 - Children are better prepared to enter school (changed status/condition)
 - Participants show a reduction in substance use
- Family
 - Increased positive social interactions between parent and child
- Community
 - Community organizations increase involvement in environmental clean-up projects
- System
 - Greater service coordination among partners in a system
- Organizational
 - Increased effectiveness, decrease in staff turnover, increase in staff motivation

Temporal Ordering of Outcomes



- **Short-term Outcomes:** *What change do you **expect** to occur either immediately or in the near future?* Short-term outcomes are those that are the most direct result of a program's activities and outputs. They are generally achievable in one year. They are typically not ends in themselves, but are necessary steps toward desired ends (intermediate or long-term outcomes or goals).
- **Intermediate Outcomes:** *What change do you **want** to occur after that?* Intermediate outcomes are those outcomes that link a program's short-term outcomes to long-term outcomes.
- **Long-term Outcome:** *What change do you **hope** will occur over time?* Long-term outcomes are those that result from the achievement of your short- and intermediate-term outcomes, and often take a longer time to achieve. They are also generally outcomes over which your program has a less direct influence. Often long-term outcomes will occur beyond the timeframe you identified for your logic model.

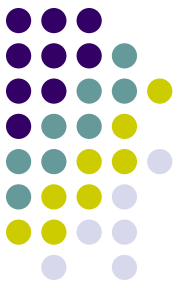
Short-term, Intermediate and Long-term Outcomes



Closer in Time
Easier to Measure
More Attributable to Program

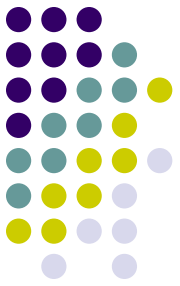
More Distant in Time
Harder to Measure
Less Attributable to Program

Outcome Example: Change in knowledge



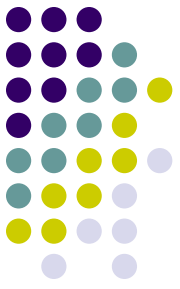
- *Changes in Learning:*
 - New knowledge
 - Increased skills
 - Changed attitudes, opinions, or values
 - Changed motivation or aspirations
- *For example:*
- Participants will increase their knowledge of safe sex practices.
- Participants will demonstrate increased empowerment and participation in designing their mental health treatment plan.

Outcome Example: Change in Action



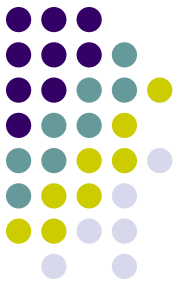
- *Changes in Action:*
 - Modified behavior or practice
 - Changed decisions
 - Changed policies
- *For example:*
- Participants will engage in a reduced number of risky sexual behaviors.
- Participants will show an increase in employment tenure.
- The program will have reduced staff turnover.

Outcome Example: Change in Condition



- *Changes in Condition:*
 - Human
 - Economic
 - Civic
 - Environment
- *For example:*
- There will be a reduction in number of homeless mentally ill people living in the streets in Washington County.
- There will be a decrease in the unemployment rate among women participating in the program.
- There will be an increase of baccalaureate trained nurses in Oregon.

Short-term, Intermediate and Long-term Outcomes: NATTT project example



Short-term

LEARNING:
Participants in the NATTT program will receive culturally specific HIV education and increase their knowledge of how HIV is transmitted and HIV prevention.



Intermediate

BEHAVIOR:
NATTT participants will show a reduction in risk behaviors associated with the spread of HIV.



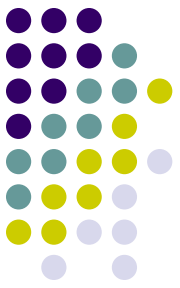
Long-term

CONDITION:
This program will help prevent the spread of HIV among African Americans in Oregon, and reduce the health disparity of African Americans living with HIV/AIDS.



Closer in Time
Easier to Measure
More Attributable to Program

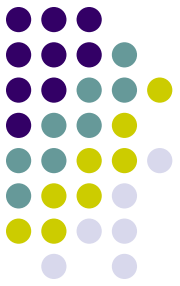
More Distant in Time
Harder to Measure
Less Attributable to Program



Outcomes versus Outputs

- **Outputs** are the direct and measurable **products** of a program's activities and services; they are often expressed in terms of volume or units delivered.
 - Outputs equivalent to amount of work
- **Outcomes** are the **results** or **impact** of the activities and services. Outcomes often represent the results of multiple outputs; each outcome usually corresponds to more than one output.
 - Outcomes equivalent to result of work

Examples of Outputs and Outcomes

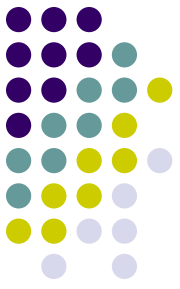


Output	Outcome
# of individuals who receive drug treatment	Participants show a reduction in substance use
# of brochures sent to participants regarding the causes of heart disease and importance of diet, exercise and health care	Target audiences are knowledgeable about the causes of heart disease, increase exercise, eat more fruits and vegetables and less red meat, and get regular health check-ups.
Action Plan developed to clean and monitor neighborhood play areas	Residents in Community X sign up to clear vacant lots and build playgrounds

Indicators



- Indicators are the measurement or evidence that you are achieving your outcomes
- Effective Indicators are SMART:
 - Specific
 - Measurable
 - Attainable
 - Relevant
 - Time-bound



Outcomes and Indicators

- Outcomes are: Benefits for participants due to their involvement with a program.
- Indicators are: The specific information collected to track a program's success on outcomes.
- **Examples: Outcome:** Participating students will be successful.
 - **Indicator 1:** 95% of OCNE nursing students will pass the NCLEX licensure exam the first time.
 - **Indicator 2:** 75% of nursing students who complete a two year nursing degree will go on to OHSU for a BS in nursing.

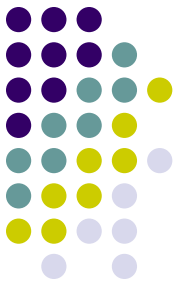
Sample Logic Model



Bridges to Success for Homeless Adults with Mental Illness and Co-occurring Addictions

Inputs/ Resources	Activities	Outputs	Outcomes		
			Initial	Intermediate	Long Term
<ul style="list-style-type: none"> ● <u>Strong, committed leadership</u> from community partners. ● Evidence-based <u>Strengths Case Management and Housing Support</u> ● <u>Experienced Providers</u> ● <u>Evaluation</u> services provided by the RRI 	<ul style="list-style-type: none"> ● Convene & maintain oversight committee of key stakeholders ● Hire and Train Bridges to Success staff in Strengths Case Management and provide services to fidelity ● Assess program fidelity and adjust program as needed to maintain optimum performance ● Conduct ongoing evaluation of client level & system level process measures and outcomes ● Develop and implement plan to sustain Bridges to Success beyond project period 	<ul style="list-style-type: none"> ● Provide SCM to 60 homeless adults each year (180 over three years) ● 12 case managers will be trained in evidence based practice ● Project will be sustained after funding ends ● Evaluation findings presented to oversight committee and stakeholders to create practice improvement feedback loop 	60 homeless adults will be placed in stable housing	90% of participants will remain in stable housing at 24 months	Reduce chronic homelessness among adults with mental illness in the county
			75% of clients with co-occurring addiction will complete drug treatment and remain drug free at six months	50% of clients with co-occurring addiction will remain drug free at 24 months	Reduce the adverse impacts of homelessness accompanied by substance abuse, serious mental illness
			Clients will have reduced psychiatric symptoms Psychiatric hospitalization will be reduced by 60%	Clients will show increase in employment status, level of functioning and community integration	Clients will show increased quality of life and overall well-being

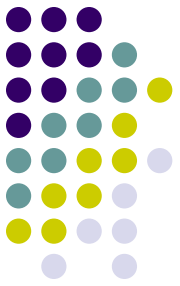
Theory of Change



A well-constructed program theory points toward a program's eventual effectiveness. The theory should:

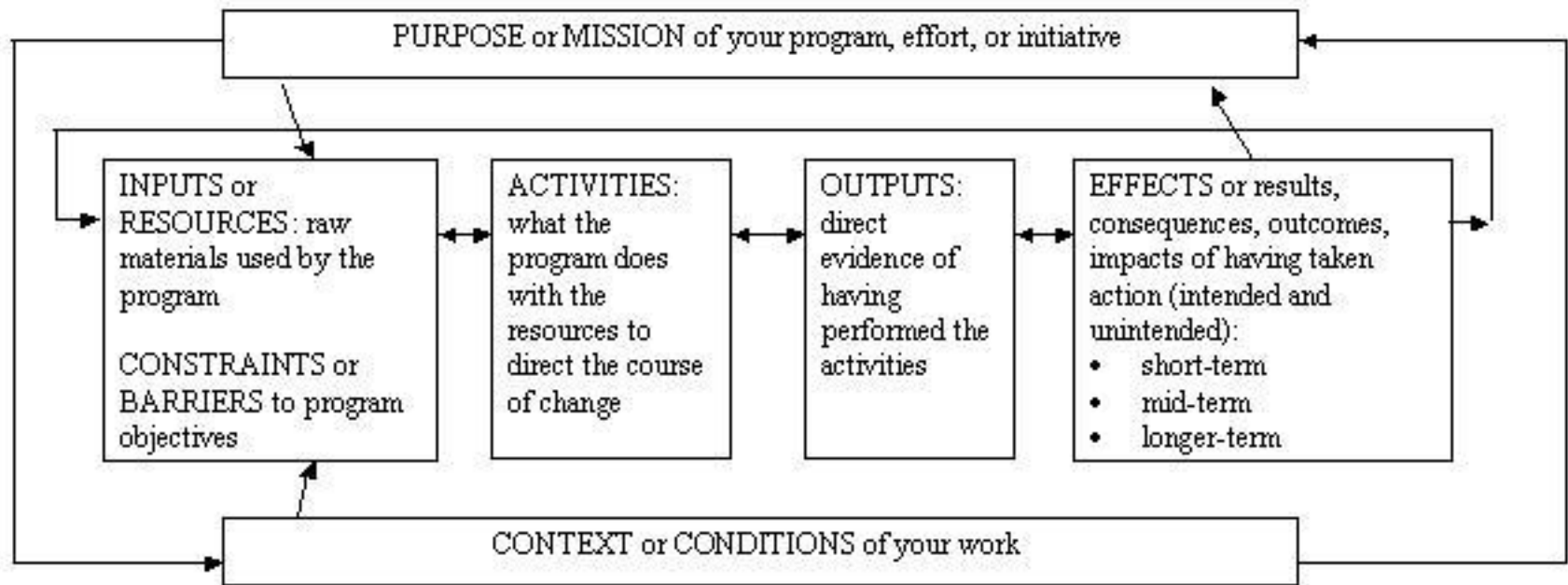
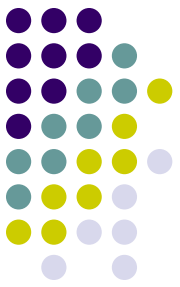
- Illustrate how the program will meet the assumptions of the theory
- Explain why the agency has chosen their particular strategies in working with their clients (why the services are needed)
- Clarify what the program expects to achieve
- Cite research that supports this theory

External Contextual Factors



- External and Contextual Factors: *What other influences on program results?*
 - *May include decrease in availability of specific services or funds to provide services, increased incidence of a disease or condition within a particular community, economic climate, favorable political conditions or collaboration opportunities, or potential barriers to success*

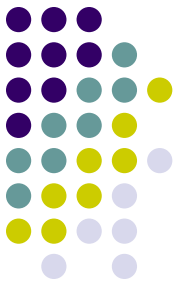
Logic Model Format with Purpose, Context



The Community Tool Box

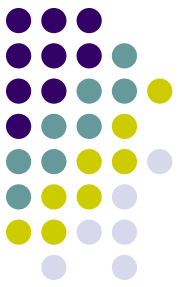
http://ctb.ku.edu/en/tablecontents/sub_section_main_1877.htm

OCNE logic model



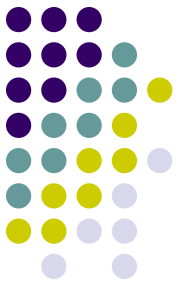
- Oregon Consortium of Nursing Education (OCNE)

Many Uses



- **Program Planning.** The logic model structure helps you think through your program strategy—to help clarify where you are and where you want to be.
- **Program Management.** Because it "connects the dots" between resources, activities, and outcomes, a logic model can be the basis for developing a more detailed management plan. Resource Allocation. Helps you track and monitor operations to better manage results. Program Improvement.
- **Communication.** A well-built logic model is a powerful communications tool. It can show stakeholders at a glance what a program is doing (activities) and what it is achieving (outcomes), emphasizing the link between the two.

Logic Model: Many Uses



- **Consensus-Building.** Developing a logic model builds common understanding and promotes buy-in among both internal and external stakeholders about what a program is, how it works, and what it is trying to achieve.
- **Fundraising.** A sound logic model demonstrates to funders that you have purposefully identified what your program will do, what it hopes to achieve, and what resources you will need to accomplish your work. It can also help structure and streamline grant writing.
- **Evaluation.** Logic model used to identify the underlying theory (assumptions, components); provide a framework for organizing process; determine readiness of project to be evaluated; provide a guide for outcome evaluation; provide structure for the fidelity measurement.

Internet resources for logic model development



- United Way Logic Model Handbook 2008
http://www.vsuw.org/file/logic_model_handbook_updated_2008.pdf
- Center for Disease Control links
<http://www.cdc.gov/eval/resources.htm#logic%20model>
- W.K. Kellogg Foundation Logic Model Development Guide
<http://www.wkkf.org/pubs/tools/evaluation/pub3669.pdf>