

# USING LOGIC MODELS TO ADDRESS THE SOCIAL DETERMINANTS OF HEALTH IN SUBSTANCE USE PREVENTION

Prevention logic models are visual tools that support states, tribes, and jurisdictions in telling a clear story about how they will address a specific problem and how they will evaluate the success of their activities. They do this by describing the relationship between the work they plan to do, how they plan to do it, how they plan to measure their progress, the outcomes they expect to see, and why they expect to see these changes.

In prevention work, logic models have typically been used to describe how initiatives will reduce the impact of *direct, proximal* factors associated with substance misuse, such as physical and mental health, family history of substance use, and access to opioids and other drugs.

However, more and more the prevention workforce and the agencies that support them are grappling with how to use logic models to additionally communicate actions and strategies that are necessary to address **social determinants of health (SDoH)** that contribute to substance use. SDoH refer to indirect or “big picture” environmental conditions that can have a broad impact on health, health equity and overall well-being, such as where people are born, live, learn, work, play, worship, and age.

## **What Are the Social Determinants of Health (SDoH)?**

The U.S. Department of Health and Human Services (HHS) defines SDoH as “the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.” These conditions can be organized into five core domains: **economic stability, education access and quality, health care access and quality, neighborhood and built environment, and social and community context.**

This resource is designed to help prevention planners incorporate SDoH into their logic models. It provides a hypothetical example of how prevention planners in fictional New Stanton incorporated one SDoH—economic stability—into its state logic model. In the example, New Stanton focused on housing access—a key contributor to economic stability. We chose this SDoH because of the known relationship between housing instability/inadequacy and substance misuse: housing instability can increase the risk of substance misuse, and substance misuse can contribute to housing instability.<sup>1,2</sup> However, the approach described below can be applied to any of the SDoH.

### Theories of Change

Before diving into the details of a logic model, practitioners need to articulate the connections between the problem(s) they seek to address, the proposed connections, and the outcomes. They need to articulate why they think that what they're doing will work. This is their theory of change (ToC).

Articulating the “why” is particularly important for SDoH, where the connections between such distal, upstream factors and substance misuse can feel nebulous. Practitioners can use a ToC to articulate the connection between the two.

## LOGIC MODELS: A QUICK REVIEW

While logic models can be organized in different ways, they typically include these components:

- **Goal statement.** This is a concise description of what the initiative is trying to accomplish, for whom, and within what time frame. For SDoH, this may describe factors such as the target populations an initiative seeks to serve or articulate the initiative's intended implementation time frame.
- **Context.** This describes the environment or conditions in which an agency or coalition is operating. In a logic model that seeks to address housing, environmental conditions may include factors such as the number of affordable housing units available in each county or availability of livable wage job opportunities in specific counties.

- **Inputs.** These are the resources a community needs to achieve stated goals. For SDoH, this is likely to include factors like the number of staff available to work on an initiative and the funding that will be used to support its implementation.
- **Activities.** These describe how the community will use these resources/inputs. For SDoH, activities might include staff trainings on the role housing plays in reducing substance misuse, or on identifying data and metrics that support outreach and engagement efforts to community-level partners.
- **Outputs.** These are the tangible, documentable results of the logic model's identified activities. They are the intermediary steps between what you do (the activity) and the change that occurs (outcomes). For example, if the activity was that staff trainings were developed and implemented, the output is that X number of people attended or were given materials. For a model focused on SDoH, outputs may include things like the number of housing trainings prevention staff will complete, the number of community-level partnerships will be identified, and/or how often community partners will be engaged over a specific time period.
- **Outcomes.** Outcomes describe how a population or sub-population will be changed as a result of the initiative. Logic models commonly distinguish between short, mid, and long-term outcomes to describe the chain of effect that is expected from an initiative's planned work.
  - Short-term outcomes focus on changes in learning, behavior and knowledge that can be expected within six months to a year of completing the model's identified activities and outputs.
  - Mid (or Intermediate)-term outcomes focus on expected changes in action and practice that can be expected within one to two years of completing the model's identified activities and outputs.
  - Long-term outcomes focus on expected changes in systems and institutions that can be expected within five years of completing the model's identified activities and outputs.

- Impact.** Impact describes how the sum of the parts of the logic model (i.e., activities, outputs, outcomes) work to achieve an identified result of a specific initiative (e.g., greater access to housing for those who experience substance misuse). The impact component of a logic model can also describe how the results of a specific initiative (or constellation of initiatives) work together to address broader, longer-term social challenge (e.g., achieving health equity). In the latter instance, the identified impact represents a result that goes beyond what a single initiative can accomplish on its own.

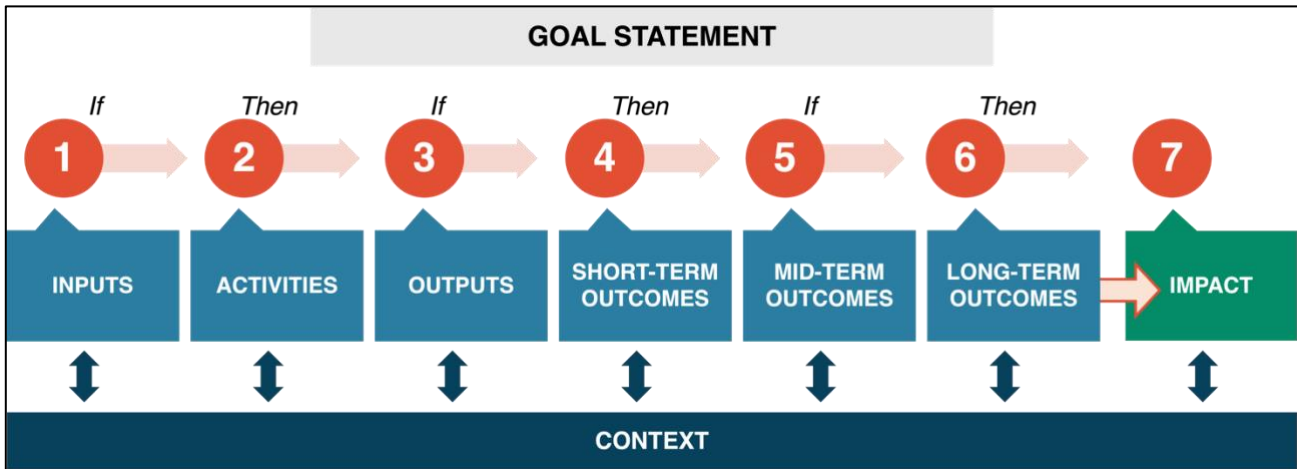


Figure 1. Logic Model Components

## ABOUT NEW STANTON

New Stanton is state with a population of 15 million people living in both urban cities and rural towns. In 2023, approximately 16% of New Stanton residents were estimated to be affected by substance misuse. While the rate of substance misuse has decreased over the last five years, New Stanton continues to see disproportionately high rates of use in its rural communities, as well as among its Veterans and formerly incarcerated populations.

New Stanton’s Office of Mental Health and Substance Abuse (NSOMHSA) spends more than \$80 million (approximately 10% of its total budget) annually for prevention and treatment services, delivered through a network of care providers across the state. Prevention services are multifaceted, but often converge around assessment, diagnosis, treatment, continuing care, and recovery for individuals experiencing substance misuse. These services and supports have seen varying rates of success.

As it begins developing a new strategic plan, New Stanton is looking to increase awareness of how the state’s current housing crisis is affecting patterns of substance misuse. Data from the

New Stanton Housing Authority (NSHA)'s most recent annual report shows that the state's Veterans, formerly incarcerated populations, and rural communities are disproportionately impacted by homelessness.

NSHA administers all of New Stanton's housing, including the allocation of funding to multiple community-level housing providers across the state that run Continuum of Care (CoC) and Housing Choice Voucher (HCV) programs that seek to move individuals and families from transitional housing to permanent or supportive housing options. Through their funding efforts, the NSHA also collaborates with a variety of other organizations that provide resources and supports to New Stanton residents that are unhoused including emergency shelters, private landlords, mobile health units, and community health centers.

As the NSOMHSA considers the interconnectedness of substance misuse and housing instability, its long-term focus is on increasing the rate of stable housing for New Stantonians at greatest risk. They plan to do this by deepening inter-agency relationships and developing innovative opportunities to strengthen the existing network of community-level providers working to reduce substance misuse and housing instability. To achieve these goals, they will prioritize the following:

1. Awareness and education to increase knowledge and understanding of the interconnectedness of substance use and housing instability
2. Training and technical assistance to directors, managers, and coordinators in New Stanton's OMHSA and the NSHA to identify and utilize effective strategies for recruiting, engaging and serving prioritized populations
3. Coordination and collaboration of services and supports among the OMHSA and local housing organizations and housing programs
4. Dissemination of resources and data on access to stable and permanent housing for targeted populations at the county level
5. Advocacy to advance housing legislation that focuses on the development of sustainable programs for New Stantonians at greatest risk of substance use and misuse

NSOMHSA feels confident that **by interrupting the link between substance misuse and housing insecurity through new collaborations and connections to service, the state can not only**

**improve the health of those populations at greatest risk, but also advance health equity across the state.**

## DEVELOP A GOAL STATEMENT

Once New Stanton articulates *WHY* they think what they're doing will work (with their ToC), they can dive into *HOW* they will measure its success (with their logic model). The common first step in building a logic model is to develop a goal statement. Goal statements provide a working framework for what an initiative seeks to accomplish over a specific timeframe. A goal statement that focused on the interconnection between substance use and housing may include the following:

Reduce substance misuse risk and related consequences among select populations by strengthening interagency partnerships and community-level collaborations between the substance misuse and housing sectors by 2028.

## IDENTIFY INPUTS (RESOURCES)

A common first step in developing a logic model is to identify the types of resources needed to address an identified issue or challenge. A prevention logic model that includes a focus on housing instability for populations at risk of substance misuse might include these resources:

- **NSOMHSA staff:** Directors/administrators, regional managers, regional coordinators
- **Funding:** State
- **State-level partnerships:** NHTSA, state-supported Veteran's programs, state-supported re-entry programs
- **Community-level partnerships:** Non-profit housing organizations, Continuum of Care (COC) programs, local Housing First coalitions, Housing Choice Voucher programs, local Veteran's coalitions, local re-entry assistance programs
- **Data:** Annual NHTSA Emergency Housing Report, county-level affordable housing analyses
- **Training/Technical Assistance:** COC training, Housing First 101 training, Simple Screening Instrument for Alcohol and Other Drugs (SSI-AOD)

- **Tools and Resources:** Vulnerability Index - Service Prioritization Decision Assistance Tool (VI-SPDAT)

## IDENTIFY ACTIVITIES (STRATEGIES)

Logic models also describe how available resources will be used to produce change. These are the activities, or strategies, will be used. A community that seeks to address housing access might implement the following activities:

- **Awareness and Education (for NSOMHSA staff):** COC Training, Housing First 101 Training
- **Awareness and Education (for community-level housing partners and state-funded Veterans and re-entry organizations):** Substance use screeners like the SSI-AOD
- **Coordination/Collaboration:** Identify and coordinate outreach and engagement efforts to re-entry organizations across the state; identify and facilitate participation in existing housing workgroups, advisory councils, and networks/coalition in priority focus areas/populations; identify and coordinate outreach and engagement efforts to COCs and other community-level partners that provide housing services to focus populations (e.g., emergency shelters, transitional housing, private landlords, mobile health units, community health centers)
- **Data/Reporting:** Identify key housing variables and metrics to support NSOMHSA in developing a collaboration map that identifies potential community-level partners (i.e., housing partners, Veteran, re-entry organizations) across each county; develop a state and community-level partner satisfaction survey to better understand the overall quality of collaborations focused on addressing housing and substance misuse

## IDENTIFY OUTPUTS

In a logic model, outputs include trackable and measurable products that result from the model's identified activities. A prevention logic model that seeks to address housing access might include the following outputs:

- **Awareness and Education (NSOMHSA staff):** 80% completion rate for four 2-hour COC training sessions, 80% completion rate for two 3-hour Housing First 101 training sessions (reach and dose)

- **Awareness and Education (community-level partners):** 80% completion rate for community partners completing on one 2-hour training on the administration of SA screeners to Veterans, re-entry populations, and rural residents (reach and dose)
- **Coordination/Collaboration (NSOMHSA):** Develop partnerships with a minimum of five of the state’s 12 existing re-entry organizations annually; participate in a minimum of five housing workgroups and advisory councils annually; participate (quarterly) in a minimum of five network/coalition meetings in focus areas/populations; develop partnerships with a minimum of five out of the state’s eight rural housing coalitions; provide Substance Misuse 101 trainings to at least 10 state-funded Veterans, re-entry organizations, and community-level housing partner agencies such as emergency shelters, transitional housing, private landlords, mobile health units, and community health centers (progress)
- **Data/Reporting:** 80% of NSOMHSA managers and directors complete a 2-hour training focused on how to use collaboration mapping to support the identification of potential community-level partners; 80% of state and community-level partners will complete the partnership satisfaction survey (progress)

## IDENTIFY SHORT-TERM OUTCOMES

Short-term outcomes capture changes in learning, behavior, and knowledge. A prevention logic model that seeks to address housing access might include the following short-term outcomes:

### **Increased awareness and understanding of the interconnectedness of housing and substance misuse**

- By the end of FY26, NSOMHSA staff who completed the COC and Housing First 101 trainings will report an increase in knowledge about the connections between housing and substance misuse.
- By the end of FY26, NSOMHSA staff who completed COC and Housing First 101 trainings will report an increase in their capacity to communicate with partners the connections between housing and substance misuse.

### **Coordination/Collaboration**

- By the end of FY26, 80% of state-supported Veterans and re-entry organizations will be trained in and implementing the SSI-AOD.



- By the end of FY26, a minimum of 50 community-level housing partners (e.g., emergency shelters, transitional housing, private landlords, mobile health units, community health centers) will be trained in and implementing the SSI-AOD with focus populations.
- By the end of FY26, NSOMHA and NSHA will coordinate quarterly meetings to identify metrics to support data driven strategies and approaches to address housing needs in targeted populations.
- By the end of FY26, NSOMHA will coordinate quarterly meetings with state-funded partners to identify referral processes to increase housing attainment for Veterans and re-entry populations.
- By the end of FY26 NSOMHA coordinates quarterly meetings with community-level partners to identify referral processes to increase housing attainment for target populations.

### **Data/Reporting**

- By the end of FY26, 80% of NSOMHSA staff will be able to access and use data (key metrics and data sources) and mapping to prioritize outreach and engagement strategies to better meet the needs of target populations in each county.
- By the end of FY26, 80% of partners will find value in the inter-agency and cross-collaborative partnerships to address housing and substance misuse as assessed by annual satisfaction survey responses.

## **IDENTIFY MID-TERM OUTCOMES**

Logic models commonly communicate expected outcomes related to changes in actions and practices. They seek to describe how populations, groups, or communities will be changed by initiatives that have been implemented. A prevention logic model that focuses on addressing housing as an SDoH may consider the following:

### **Increased awareness and understanding of the interconnectedness of housing and substance misuse**

- Beginning in FY27, 80% of NSOMHSA staff can use data and information obtained through training to facilitate more collaboration with external partners as assessed by annual increases in the number of state and community-level housing partners.

### **Improved access to housing services for target populations as evidenced by**

- From FY26 through FY28, NSOMHSA staff will make a minimum of 100 referrals to housing agencies each quarter for focus populations.
- From FY26 to FY28, 20% of referrals will lead to placement in transitional, permanent or supportive housing.

### **Data/Reporting**

- By the end of FY27, NSOMHSA staff will develop and disseminate quarterly data reports to track changes in housing access for the targeted population.
- By the end of FY27, NSOMHSA will use annual partner satisfaction surveys to improve strategies and approaches to developing state and community-level partnerships that lead to improved housing outcomes for target populations.

## **IDENTIFY LONG-TERM OUTCOMES**

Long-term outcomes communicate expected changes to related institutions and systems. In this case, institutions and systems include NSOMHSA, NSHA, state funded-Veteran's organizations, and community-level partners. A prevention logic model that seeks to address housing access might include the following long-term outcomes:

### **Advocacy**

- By the end of FY28, NSOMHSA and NSHA will develop inter-agency roles that serve to standardize coordinated efforts to address housing needs for those populations at greatest risk of homelessness.

### **Coordination/Collaboration**

- By the end of FY28, housing access (transitional, permanent or supportive housing) for focus populations will have increased by 25%.

- By the end of FY28, partner organizations will have adopted universal substance use screening practices to identify and support populations at greatest risk.
- By the end of FY28, 80% of partnerships with community-level housing partners are sustained.

### **Data/Reporting**

- By the end of FY28, NSOMHSA has developed a real time data dashboard to identify changes in housing status and increasing rates of housing attainment for focus populations.
- By the end of FY28, NSOMHSA has created a process for quarterly dissemination of housing-related data to community-level partners to promote continued efforts to address homelessness among populations.

## **IDENTIFY POTENTIAL IMPACTS**

Logic models use short-, mid- and long-term outcomes to describe the expected results of a specific initiative. However, the anticipated impact of an initiative often refers to the achievement of a broader, pressing challenge that takes a much longer runway to achieve, and that typically beyond the scope of any one initiative to address on its own. This is especially the case for impacts related to changes in SDoH. New Stanton's commitment to housing will hopefully lead to eventual reductions in morbidity and mortality among its focus populations. However, achieving this impact will take time and the involvement of multiple partners.

## PUTTING IT ALL TOGETHER

New Stanton’s goal is to address the long-term health outcomes of populations and groups impacted by substance use by communicating the interconnectedness of substance misuse and housing instability. Table 1 presents each component of the model.

Table 1.

<b>Goal Statement:</b> Reduce substance misuse risk and related consequences of select populations by strengthening interagency partnerships and community-level collaborations between the substance misuse and housing sectors by 2028.						
<b>Focus Populations:</b> Formerly incarcerated individuals, Veterans, people living in rural counties/communities						
<b>Impact:</b> Reduce morbidity and mortality among incarcerated individuals, Veterans, people who are living in rural counties/communities by increasing access to stable housing						
Inputs (Resources)	Activities	Outputs	Short-Term Outcomes	Mid-Term Outcomes	Long-Term Outcomes	Impact
<p><b>NSOMHSA staff:</b> Directors/administrators, regional managers, regional coordinators</p> <p><b>Funding:</b> State</p> <p><b>State-level partnerships:</b> NSHA, state-supported Veteran’s programs, state-supported re-entry programs.</p> <p><b>Community-level partnerships:</b> Non-profit housing organizations, Continuum of Care (COC) programs, local Housing First coalitions, Housing Choice Voucher</p>	<p><b>Awareness and education (for NSOMHSA staff):</b> COC Training, Housing First 101 training</p> <p><b>Awareness and education (for community-level housing partners and state-funded Veterans and re-entry organizations):</b> Substance use screeners like the SSI-AOD.</p>	<p><b>Awareness and education (NSOMHSA staff):</b> 80% completion rate for four 2-hour COC training sessions, 80% completion rate for two 3-hour Housing First 101 training sessions (reach and dose).</p> <p><b>Awareness and education (community-level partners):</b> 80% completion rate for community partners completing on one</p>	<p><b>Increased awareness and understanding interconnected-ness of housing and substance misuse:</b> By the end of FY26, NSOMHSA staff who completed the COC and Housing First 101 trainings will report an increase in knowledge about the connections between housing and substance misuse.</p> <p>By the end of FY26,</p>	<p><b>Increased awareness and understanding interconnectedness of housing and substance misuse:</b> Beginning in FY27, 80% of NSOMHSA staff can use data and information obtained through training to facilitate more collaboration with external partners as assessed by annual increases in the number of state and</p>	<p><b>Advocacy:</b> By the end of FY28, NSOMHSA and NSHA will develop inter-agency roles that serve to standardize coordinated efforts to address housing needs for those populations at greatest risk of homelessness.</p> <p><b>Coordination/ Collaboration:</b> By the end of FY28, housing access (transitional,</p>	<p><b>Initiative specific impact:</b> Greater access to housing for those who experience substance misuse</p> <p><b>Broader, longer-term impact:</b> Advancing health</p>

<p>programs, local Veteran’s coalitions, local re-entry assistance programs.</p> <p><b>Data:</b> Annual NSHA Emergency Housing Report, county-level affordable housing analyses.</p> <p><b>Training/TA:</b> COC training, Housing First 101 training, Simple Screening Instrument for Alcohol and Other Drugs (SSI-AOD).</p> <p><b>Tools and Resources:</b> Vulnerability Index-Service Prioritization Decision Assistance Tool (VI-SPDAT).</p>	<p><b>Coordination/ Collaboration:</b> Identify and coordinate outreach and engagement efforts to re-entry organizations across the state; identify and facilitate participation in existing housing workgroups, advisory councils, and networks/coalition in priority focus areas/populations; identify and coordinate outreach and engagement efforts to COCs and other community-level partners that provide housing services to focus populations (e.g., emergency shelters, transitional housing, private landlords, mobile health units, community health centers).</p> <p><b>Data/Reporting:</b> Identify key housing variables and metrics to support NSOMHSA in</p>	<p>2-hour training on the administration of SA screeners to Veterans, re-entry populations, and rural residents (reach and dose).</p> <p><b>Coordination/ Collaboration (NSOMHSA):</b> Develop partnerships with a minimum of five of the state’s 12 existing re-entry organizations annually; participate in a minimum of five housing workgroups and advisory councils annually; participate (quarterly) in a minimum of five network/coalition meetings in focus areas/populations; develop partnerships with a minimum of five out of the state’s eight rural housing coalitions; provide Substance Misuse 101 trainings to at least 10 state-funded Veterans, re-</p>	<p>NSOMHSA staff who completed COC and Housing First 101 trainings will report an increase in their capacity to communicate with partners the connections between housing and substance misuse.</p> <p><b>Coordination/ Collaboration:</b> By the end of FY26, 80% of state-supported Veterans and re-entry organizations will be trained in and implementing the SSI-AOD.</p> <p>By the end of FY26, a minimum of 50 community-level housing partners (e.g., emergency shelters, transitional housing, private landlords, mobile health units, community health centers) will be trained in and implementing the SSI-AOD with focus</p>	<p>community-level housing partners.</p> <p><b>Improved access to housing services for target populations as evidenced by:</b></p> <p>From FY26 through FY28, NSOMHSA staff will make a minimum of 100 referrals to housing agencies each quarter for focus populations.</p> <p>From FY26 to FY28, 20% of referrals will lead to placement in transitional, permanent or supportive housing.</p> <p><b>Data/Reporting:</b> By the end of FY27, NSOMHSA staff will develop and disseminate quarterly data reports to track changes in housing access for the targeted population.</p> <p>By the end of FY27, NSOMHSA will use annual partner satisfaction surveys to improve strategies and</p>	<p>permanent or supportive housing) for focus populations will have increased by 25%.</p> <p>By the end of FY28, partner organizations will have adopted universal substance use screening practices to identify and support populations at greatest risk.</p> <p>By the end of FY28, 80% of partnerships with community-level housing partners are sustained.</p> <p><b>Data/Reporting:</b> By the end of FY28, NSOMHSA has developed a real time data dashboard to identify changes in housing status and increasing rates of housing attainment for focus populations.</p> <p>By the end of FY28, NSOMHSA has created a process</p>	<p>equity</p> <p>Reducing economic disparities</p>
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	<p>developing a collaboration map that identifies potential community-level partners (i.e., housing partners, Veteran, re-entry organizations) across each county; develop a state and community-level partner satisfaction survey to better understand the overall quality of collaborations focused on addressing housing and substance misuse.</p>	<p>entry organizations, and community-level housing partner agencies such as emergency shelters, transitional housing, private landlords, mobile health units, and community health centers (progress).</p> <p><b>Data/Reporting:</b> 80% of NSOMHSA managers and directors complete a 2-hour training focused on how to use collaboration mapping to support the identification of potential community-level partners; 80% of state and community-level partners will complete the partnership satisfaction survey (progress).</p>	<p>populations.</p> <p>By the end of FY26, NSOMHA and NSHA will coordinate quarterly meetings to identify metrics to support data driven strategies and approaches to address housing needs in targeted populations.</p> <p>By the end of FY26, NSOMHA will coordinate quarterly meetings with state-funded partners to identify referral processes to increase housing attainment for Veterans and re-entry populations.</p> <p>By the end of FY26 NSOMHA coordinates quarterly meetings with community-level partners to identify referral processes to increase housing attainment for target populations.</p>	<p>approaches to developing state and community-level partnerships that lead to improved housing outcomes for target population.</p>	<p>for quarterly dissemination of housing-related data to community-level partners to promote continued efforts to address homelessness among populations.</p>	
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## REFERENCES

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