

NACDD

Building Resilient Inclusive Communities (BRIC)
Community Selection Model and State Profile

December 2020



Outline

Executive Summary



Model Overview



State Profile



Next Steps





SECTION 1



Executive Summary

This Project

Our work supported NACDD and the CDC in identifying high potential DNPAO Ambassador states for funding and will support existing State Physical Activity and Nutrition (SPAN) states in identifying priority communities for improving health among high-risk and vulnerable populations, as well as providing additional support and resources **to increase nutrition security, access to safe physical activity, and social connectedness** in the COVID-19 environment.

Phase 1: Selection of 4 DNPAO Ambassador States for Additional Funding

- Developed an approach to select four (4) DNPAO Ambassador states to receive additional funding, using criteria to both identify need and determine capacity to implement programs, while considering COVID-19 burden and vulnerability.

Phase 2: State Profile to Support State Selection of Communities

- Developed state-specific profiles for sixteen (16) SPAN states and four (4) DNPAO Ambassador states to support identification of priority communities. State profiles will provide a holistic picture of state need in the COVID-19 context and insights around partner selection.

Phase 3: State Technical Assistance and Funding Implementation

- The National Technical Assistance Partnership (NTAP) will provide technical assistance to support states in understanding their data, further assessing community health, and directing funding to communities with need and existing public health initiatives.



SECTION 2

Model Overview

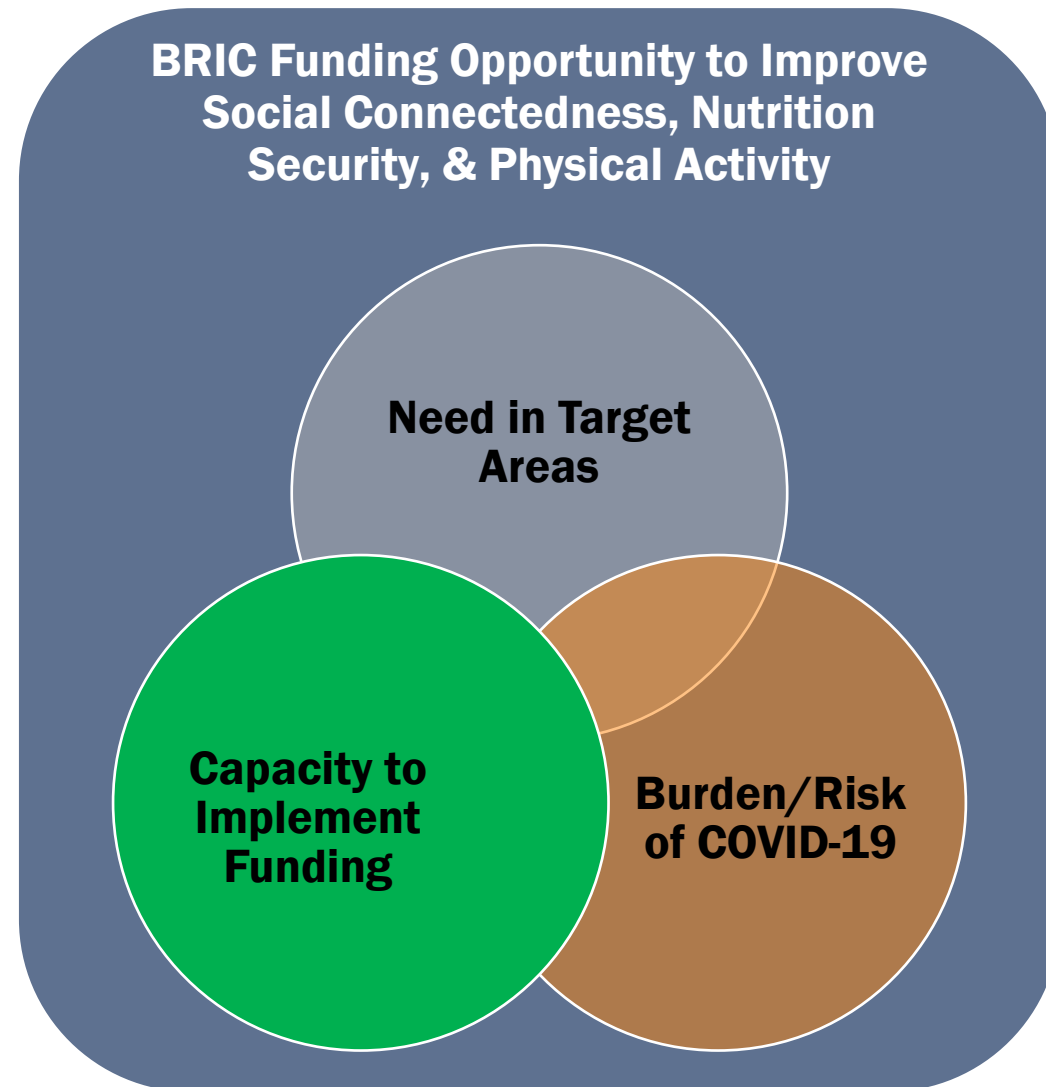


Prioritizing BRIC Funding Across States

To quickly and effectively deploy new BRIC funding to improve social connectedness, nutrition security, and physical activity in the time of COVID-19:

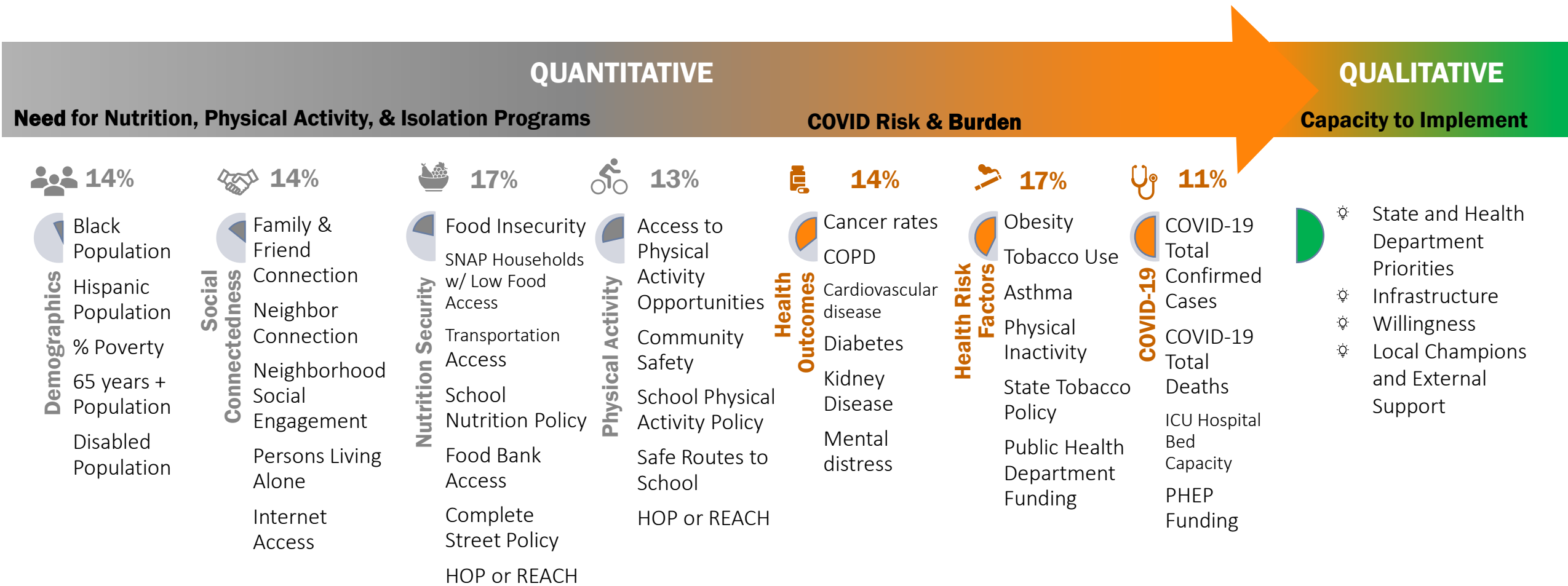
We created a model of state data to assess needs, burden (COVID-19 burden and chronic disease risk), and capacity to implement the funds among the four Ambassador states.

- The 16 SPAN states have existing public health initiatives, particularly with HOP and REACH programs.
- Among the 34 non-SPAN states, four were chosen that demonstrated capacity (evaluated qualitatively and quantitatively) to implement funding, as well as meeting criteria for needs and burden.



BRIC Opportunity Model & Domains

To best deploy BRIC funds and maximize the opportunity, Leavitt Partners developed a model and calculated a composite score using seven specific domains measuring aspects of need, burden, and capacity, weighted for appropriate influence.











Note: Proportional weights for each domain are listed as a percentage above each domain in the graphic (ex. Demographics represents 14% of the total composite score). Each variable is standardized to the national average.



BRIC Opportunity Geographic Ranking Model

The quantitative model used combinations of variables and weights for the relative importance of those variables to produce a Composite Opportunity Score illustrating a confluence of all factors of interest across all states, inclusive of SPAN and Ambassador states.

	Domain	Weights	Proportion Model Weight
	Nutrition Security	23	17%
	Health Risk Factors	22	17%
	At-Risk Demographics	18	14%
	Social Connectedness	19	14%
	Chronic Disease	19	14%
	Physical Activity	17	13%
	COVID-19 Burden	15	11%
	Full Model	133	100%



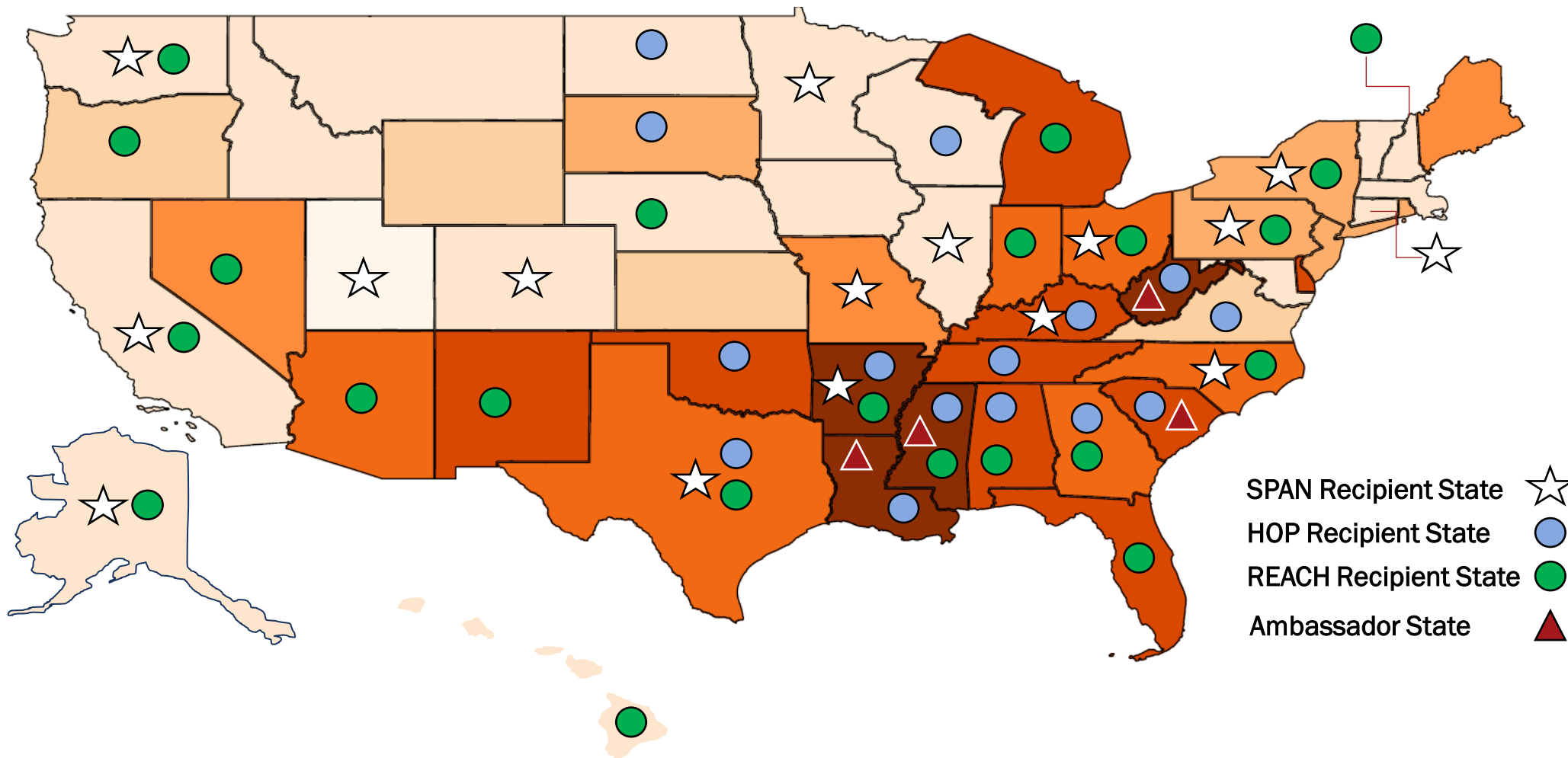
BRIC Opportunity Model Results: National View of All States

Using the BRIC Composite Opportunity Score, we ranked states according to specific BRIC funding criteria. Overlaid below are indicators for HOP, REACH, SPAN, and the four new Ambassador states for reference.

Higher Score



Lower Score



- SPAN Recipient State ☆
- HOP Recipient State ●
- REACH Recipient State ●
- Ambassador State ▲



Adapting the BRIC Opportunity Model to Prioritize State Funding Using County Indicators

To help all 20 states prioritize funding to address need and burden within the state, we created a similar BRIC Composite Opportunity Score at the county level to identify preliminary targets; leveraging this score, states can then look at specific need and burden domains to refine choices for investment. Note that not all data from the BRIC Opportunity Model is available at the county level.

QUANTITATIVE

Need for Nutrition, Physical Activity, & Isolation Programs

COVID Risk & Burden

14%

Demographics

- Black Population
- Hispanic Population
- % Poverty
- 65 years + Population
- Disabled Population

14%

Social Connectedness

- Persons Living Alone
- Social Associations per 10,000 pop.
- % population receiving emotional support

17%

Nutrition Security

- Nutrition Security
- SNAP Households w/ Low Food Access
- REACH or HOP Recipient County

13%

Physical Activity

- Access to Physical Activity Opportunities
- Violent Crime
- REACH or HOP Recipient County

14%

Health Outcomes

- Diabetes
- Mental distress

17%

Health Risk Factors

- Obesity
- Tobacco Use
- Physical activity

11%

COVID-19

- COVID-19 Total Confirmed Cases
- COVID-19 Total Deaths
- ICU Hospital Bed Capacity

Indicators not available at a city/county level:

- School Physical Activity Policy
- Safe Routes to School
- Family & Friend Connection
- Neighborhood Social Engagement
- Internet Access
- PHEP Funding
- Public Health Department Funding
- Kidney Disease
- Cancer Rates
- COPD
- Transportation Access
- Food Bank Access
- Complete Street Policy
- State Tobacco Policy
- Cardiovascular Disease
- Asthma

*Percentages reflect weights by domain in the final composite score



State Profile Orientation: Using Model Results

Leavitt Partners State Profiles provide county level data from the BRIC Opportunity model inputs. To help all 20 states prioritize funding to address need and burden within the state, the Composite Opportunity Score by county allows us to find preliminary targets and look at specific need and burden domains to refine choices for investment.

- The purpose of the state profile is to provide **actionable guidance** to prioritize funding between one and five communities in a state to help residents **improve their health** during the Coronavirus pandemic
- Our team has provided **state-specific** health burden and health outcome data for **seven key domains**
- Counties of greatest opportunity, as it pertains to **nutrition security, access to safe spaces for physical activity, and social connectedness**, are highlighted in this state profile



State Profile Charts

- Domain Analysis of States
- County Ranking by Composite Opportunity Score and Key Need Domains
- Top Five Counties Performance Across All Seven Domains
- Highest Need Counties by Key Need Domains



State Profile Companion Data

- All Indicators Used to Generate Domain Scores and BRIC Opportunity Score for Counties
- Detailed Description of Each Indicator, Source, and Year of Data
- Indicators Presented by Domain to Inform Understanding of Key Domain Composition



SECTION 3



Missouri State Profile

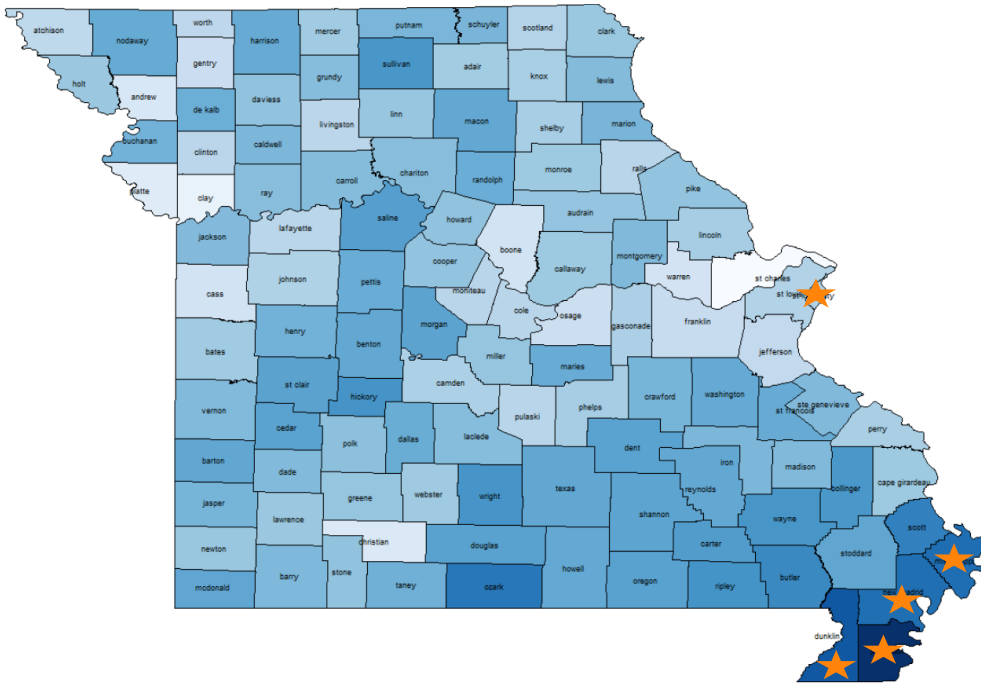


Missouri – Key Takeaways from Domains

Domain	Key Domain Indicators (relative to all 50 states)	Areas of Highest Risk/Burden
At-Risk Demographic	<ul style="list-style-type: none"> Missouri’s population is composed of a higher proportion of demographic groups at greater risk for complications of COVID-19 and chronic diseases. Missouri’s Black population represents approximately 12% of the population, 16.9% of the population is over the age of 65 years, and 15.3% live in poverty. Missouri reports a higher than average percentage of disabled persons (12.7%). These groups are disproportionately impacted by COVID-19. 	
Social Connectedness	<ul style="list-style-type: none"> While Missouri residents report frequent and meaningful connection with family, friends and neighbors, the state has above average rates of persons living alone (29%) and lower than average rates of internet access among households (80% of households). Missouri residents may disproportionately struggle to maintain meaningful connection with increased physical distancing resulting from COVID-19. 	
Physical Activity	<ul style="list-style-type: none"> Missouri residents report below average access to spaces for physical activity (76.7% access) and above average rates of violent crime, potentially further reducing resident’s likelihood of seeking opportunity for physical activity. While the state does have a mandate on school recess or general activity requirements, compared to other safe route to school policy states, Missouri ranked among the lowest in progress towards safe routes to school. 	
Nutrition Security	<ul style="list-style-type: none"> Missouri reports above average rates of food insecurity (16%). Among SNAP participants, Missouri reports a relatively higher proportion of SNAP participants with less access to grocers (1% of total state population). The state is near the national average in food banks per capita. 	
Health Outcomes	<ul style="list-style-type: none"> Missouri ranks among the top 15 states on four of six measures of chronic disease prevalence tracked at the state level (Cardiovascular disease, COPD, Kidney disease, and mental distress). 	
Health Behavior	<ul style="list-style-type: none"> Missouri ranks above average on rates of health risk factors. Missouri’s public health funding per capita is among the lowest in the nation (7th lowest among states). 	
COVID-19 Impact	<ul style="list-style-type: none"> Missouri is a state less impacted by COVID-19 in terms of total case count and deaths (as of November 1, 2020). Missouri reports above average ICU beds per capita and comparatively low Emergency Preparedness Funding per capita. 	

Missouri – Quantitative Model Results

A county-level composite score was developed using a similar weighting scheme as the state-wide assessment. The map to the left reflects the scores, with darker coloring signifying greater opportunity across all domains.



- HOP Recipient County
- REACH Recipient County
- ★ Top 5 County

1. Pemiscot County

- Highest percentage of the population within at-risk demographic groups driven by; Highest poverty rate (30.5%), 4th highest disability rate (26.5%), 2nd largest Black population (26%).
- Highest ranked for health risk factors: highest physical inactivity (39.4%), 2nd highest smoking rate (27%).
- Other: High food insecurity (24.6%), highest rate of mental distress (16%).

2. St. Louis City County

- Highest ranked for needed improvement in social connectedness: 44.7% of adults living alone, 27.4% of residents reported never or rarely receiving emotional support.
- Other: Ranked 1st in food insecurity (27.5%), Largest black population (46%).

3. Dunklin County

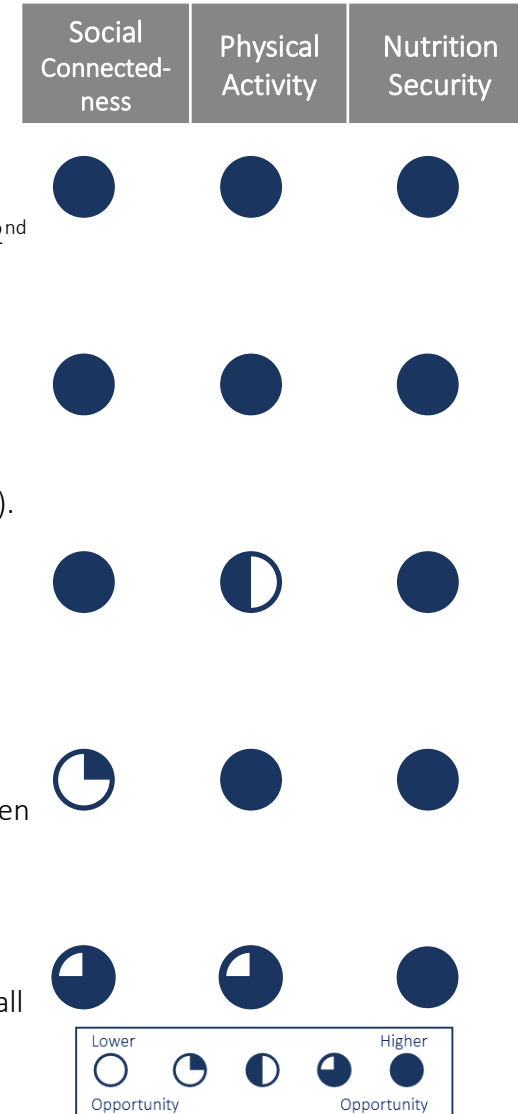
- Highly ranked in health risk factors: 2nd highest physical inactivity (37.3%), 26.2% of smoking rate amongst adults.
- Other: 4th highest food insecurity (20%), 2nd highest Diabetes prevalence (15%), and many citizens reporting never or rarely receiving emotional support (24.5%).

4. Mississippi County

- High percentage of the population within at-risk demographic groups driven by; highest poverty rate (30.5%), 3rd largest black population (24.65%),
- Other: 3rd highest food insecurity (22.1%), 2nd highest frequent mental distress prevalence (16%).

5. New Madrid County

- 3rd highest ranked for health risk factors driven by above average scores in all domain variables.
- Other: systematically scored higher than average across all other variables.



Missouri – County Domain Results

The five notable counties from the model vary in performance across domains. The table displays how counties perform across the domains of interest – fuller ● reflects areas of higher opportunity.

Rank	Notable Counties	At-Risk Demographic	Social Connectedness	Physical Activity	Nutrition Security	Health Outcomes	Health Behaviors	COVID-19 Impact
1.	Pemiscot County	●	●	●	●	●	●	●
2.	St. Louis County	●	●	●	●	●	◐	◐
3.	Dunklin County	●	●	◐	●	●	●	◑
4.	Mississippi County	●	◑	●	●	●	●	●
5.	New Madrid County	●	◑	◑	●	●	●	●

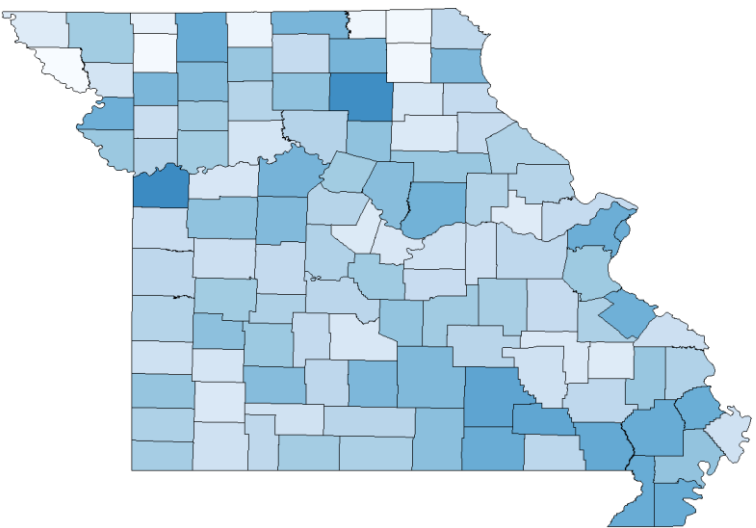
Notes: * identifies counties with population less than 5,000 persons. ** identifies counties with population less than 1,000 persons.

Lower Opportunity Higher Opportunity

○ ◑ ◐ ◑ ●

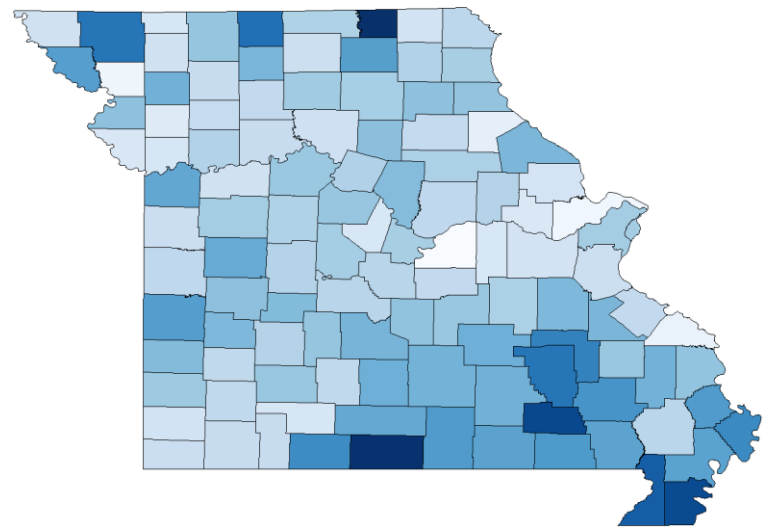
Missouri – Quantitative Model Results

A county-level domain score was developed using a similar weighting scheme as the state-wide assessment. The maps reflect the aggregate scores in each of the three priority funding areas (Social Connectedness, Nutrition Security, and Access to Safe Physical Activity). The darker coloring of a county signifies greater opportunity.



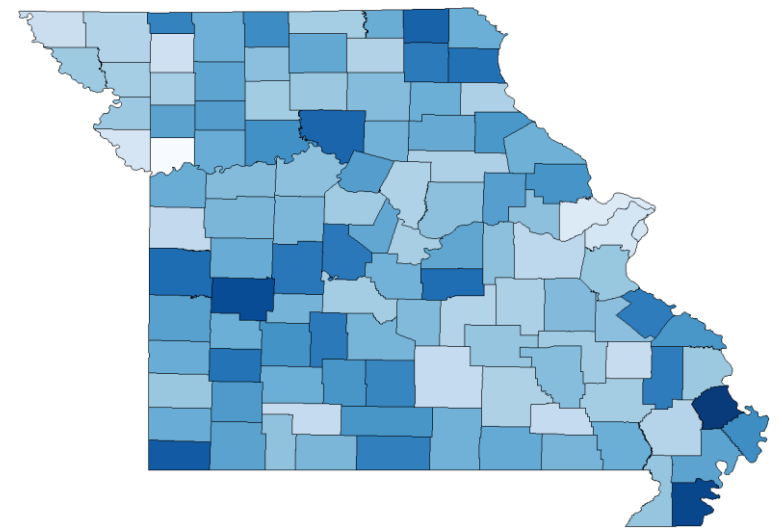
Social Connectedness Domain

1. St. Louis City County
2. Jackson County
3. Macon County
4. Shannon County
5. Carter County



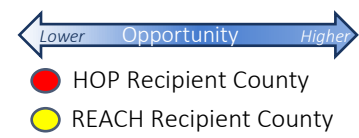
Nutrition Security Domain

1. Schuyler County*
2. Ozark County
3. St. Louis City County
4. Carter County
5. Pemiscot County



Physical Activity Domain

1. St. Louis City County
2. Scott County
3. Pemiscot County
4. St. Clair County
5. McDonald County



Notes: * identifies counties with population less than 5,000 persons. ** identifies counties with population less than 1,000 persons.



SECTION 4



Next Steps



Missouri – Technical Assistance Opportunities

The BRIC partners stand ready to help you make decisions and implement funding to address challenges in advancing nutrition security, physical activity and social connectedness in a COVID-19 context.

Leavitt Partners Technical Assistance

- Additional support to use model and data to direct and implement funding within specific communities and programs in your state:
 - Facilitate opportunities to participate in small group Q&A and gain additional quantitative insight
 - Support one-off inquiries and requests from states as it relates to the use of data and utilizing their state profile
 - Provide updates on COVID-19 data regional burden in Q2

Other Technical Assistance Partners and Resources

- Other BRIC Partners
 - Mental Health America
 - Equitable Cities
 - Association of State Public Health Nutritionists
 - Healthy Places by Design
 - Dr. Angela Odoms-Young/UIC/Feeding America
- Resources for More Local Data
 - City Health Dashboard
 - 500 Cities
 - CDC PLACES database