
ADDRESSING SUBSTANCE USE DISORDER WITH RECOVERY ECOSYSTEMS



RURAL HEALTH EQUITY
RESEARCH CENTER



Recovery Ecosystem Index

- Funded by HRSA and the Fletcher Group, the Rural Health Equity Research Center convened a Technical Expert Panel (TEP) to guide the development of the recovery ecosystem index
- Goals of the project:
 - Build a Recovery Ecosystem Index (REI) to measure the strength of county-level recovery ecosystems
 - Provide data to support community planning, programming, and technical assistance designed to strengthen recovery ecosystems throughout the United States
 - Build a mapping tool using the Recovery Ecosystem Index
 - Audience for the mapping tool may include local policymakers, treatment providers, community organizations, drug court professionals, and others



Selecting indicators for recovery ecosystem index:

- NORC/ETSU conducted a literature review on recovery ecosystems, identifying several concepts and potential indicators to include in the index
- During the first TEP meeting, we solicited input on key concepts for the index, including potential indicators
- Based on this information, NORC/ETSU compiled a list of over 100 potential indicators
- We investigated the data availability for these indicators and removed ones that lacked publicly available county-level data
- We then reviewed 36 indicators with the TEP to prioritize for inclusion in the index
- Final index includes 14 indicators



Final Recovery Ecosystem Index Measures

Component/ Domain	Indicator
SUD Treatment	Substance Use Treatment Facilities Per Capita
	Providers Licensed to Administer Buprenorphine Per Capita
	Average Distance to Nearest Medication-Assisted Treatment (MAT) Provider
	Mental Health Providers Per Capita
Continuum of SUD Support	Recovery Residences Per Capita
	Average Distance to Nearest Syringe-Service Program (SSP)
	Narcotics Anonymous (NA) or Self-Management and Recovery Training (SMART) Meetings per Capita
	Drug Court Presence
	Drug-Free Communities Coalition Presence
	Policy Environment Score
Infrastructure and Social Factors	Vehicle Availability
	Severe Housing Cost Burden
	Broadband Access
	Social Associations Per Capita



Overview of Mapping Tool – Methodology & Data Sources

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Methodology & Data Sources

SUD Treatment	Number of Providers Licensed to Administer Buprenorphine Per Capita	SAMHSA (N-SSATS Data) (As of February 2022)	Number of providers licensed to administer buprenorphine per 100,000 residents
	Average Distance to Nearest Medication-Assisted Treatment (MAT) Provider	am/AR (Based on N-SSATS Data) (2017)	Average number of miles between zip codes without a provider and the nearest zip code with a provider
	Number of Mental Health Providers Per Capita	County Health Rankings and Roadmaps (data from CMS, National Provider Identification)	Number of mental health providers per 100,000 residents. Mental health providers are defined as psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists, mental health providers that treat alcohol and other drug abuse, and advanced practice nurses specializing in mental health care.
Continuum of SUD Support	Number of Recovery Residences Per Capita	SAMHSA (N-SSATS Data) (As of February 2022)	Number of recovery residences per 100,000 residents
	Average Distance to Nearest Syringe-Service Program (SSP)	am/AR (Based on N-SSATS Data) (2018)	Average number of miles between zip codes without a facility and the nearest zip code with a facility
	Number of Narcotics Anonymous (NA) or Self-Management and Recovery Training (SMART) Meetings per Capita	NA Meeting Search SMART Meeting Search (As of May 2022)	Number of NA or SMART meetings per 100,000 residents
	Drug Court Presence	National Drug Court Resource Center (As of February 2022)	The value is 1 if there is at least one drug court in the county and 0 if there are no drug courts
	Drug Court Capacity	ONX211's list of FY 2021 Drug Court Capacity	The value is 1 if there is at least one Drug Court Capacity available for...



Overview of Mapping Tool – REI Base Map

Recovery Ecosystem Index Map

County / State: Urban / Rural:

Filter by state: Add Map Overlay:

SEARCH LIST OF COUNTIES >

Reset Map

BASE MAP

Recovery Ecosystem Index ^

- Recovery Ecosystem Index score
- Substance Use Disorder (SUD) Treatment score
- Continuum of SUD Support score
- Infrastructure and Social Factors score

Drug Overdose Mortality v

OVERLAY

- Recovery Ecosystem Index v
- Drug Overdose Mortality v
- Socio-Demographic v
- Economic v

Recovery Ecosystem Index Score

1 2 3 4 5

1=strongest: 5=weakest

Zoom + -



Overview of Mapping Tool – REI Base Map

Recovery Ecosystem Index Map

SEARCH LIST OF COUNTIES >

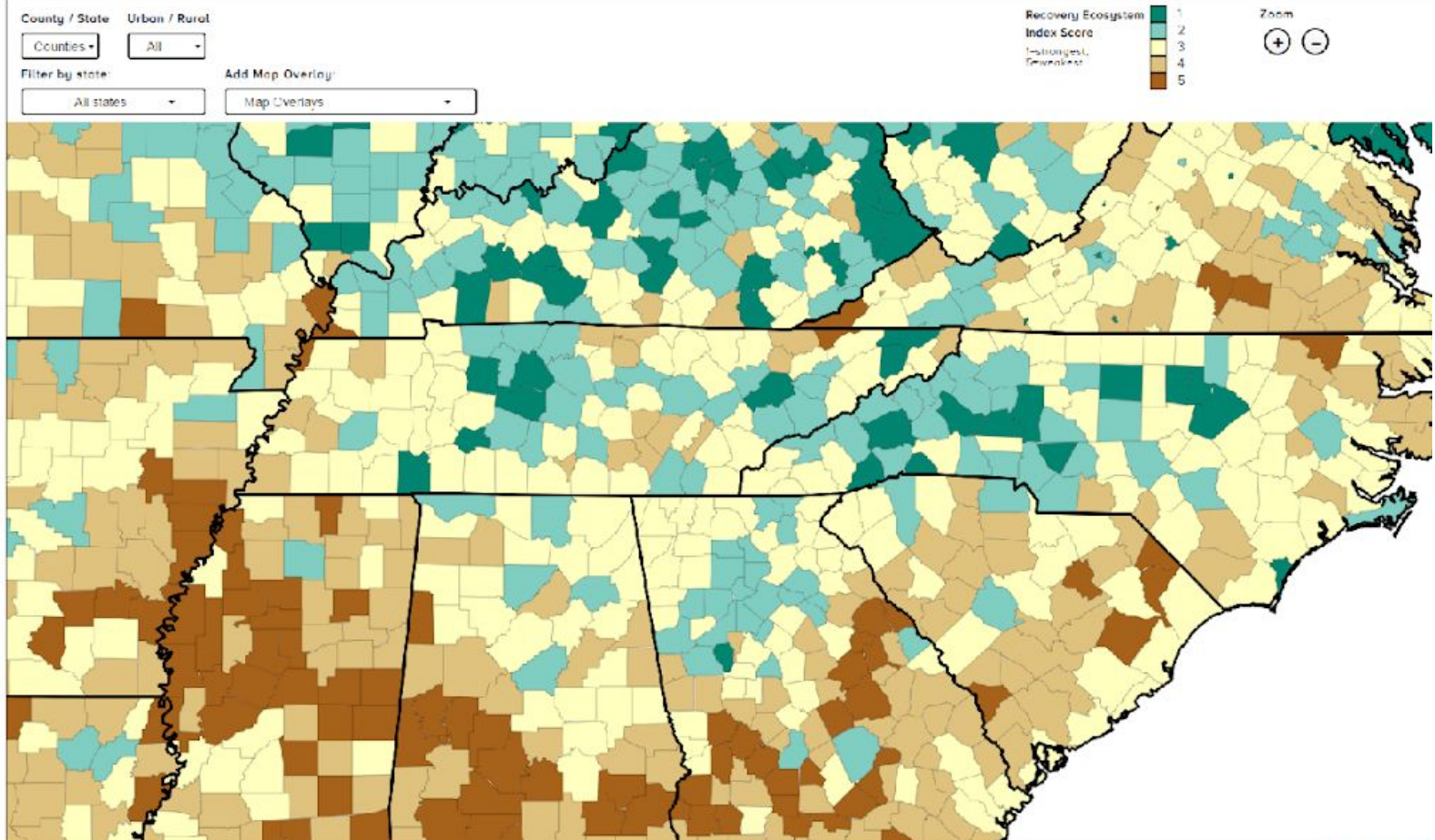
Reset Map

BASE MAP

- Recovery Ecosystem Index
- Drug Overdose Mortality

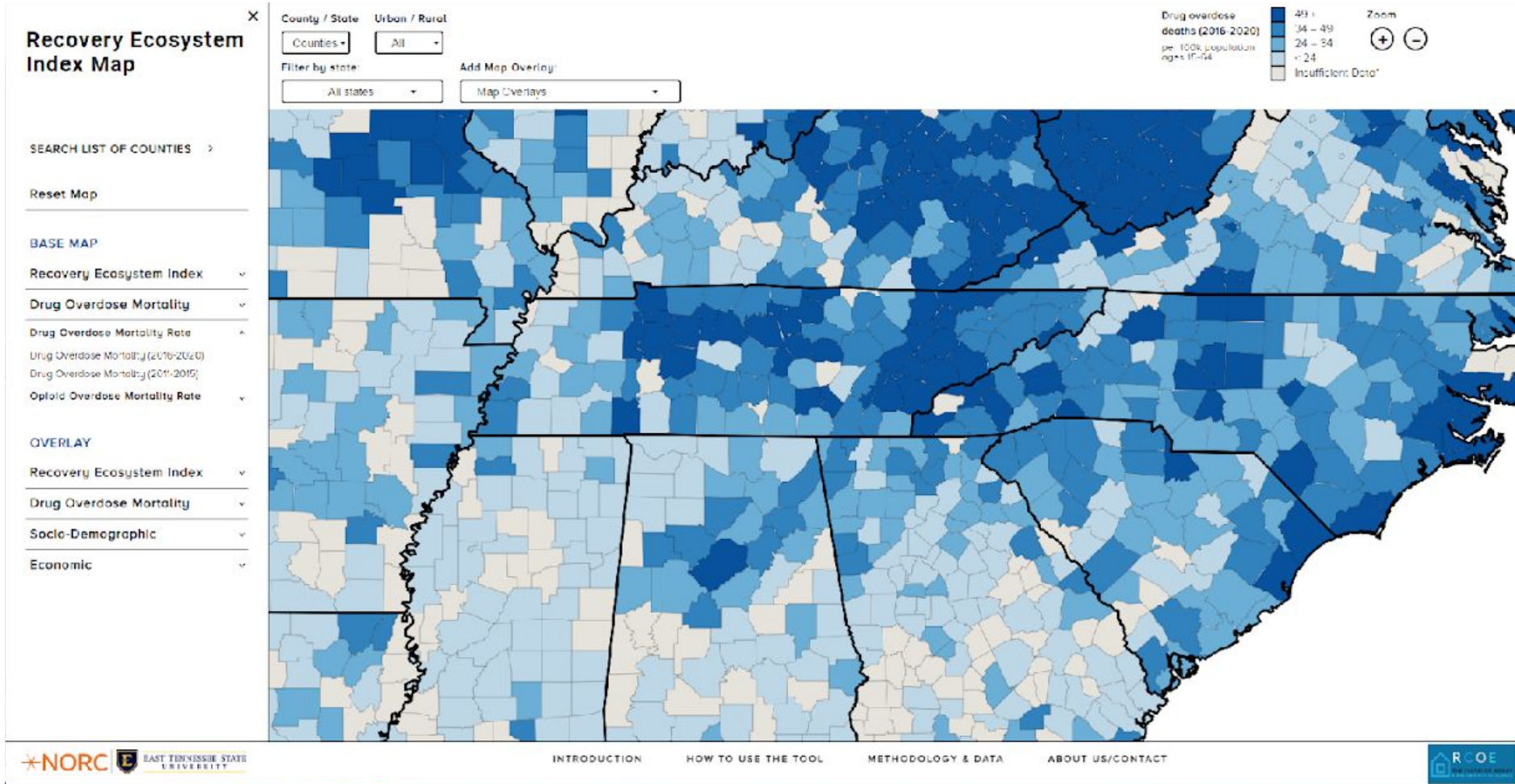
OVERLAY

- Recovery Ecosystem Index
- Drug Overdose Mortality
- Socio-Demographic
- Economic



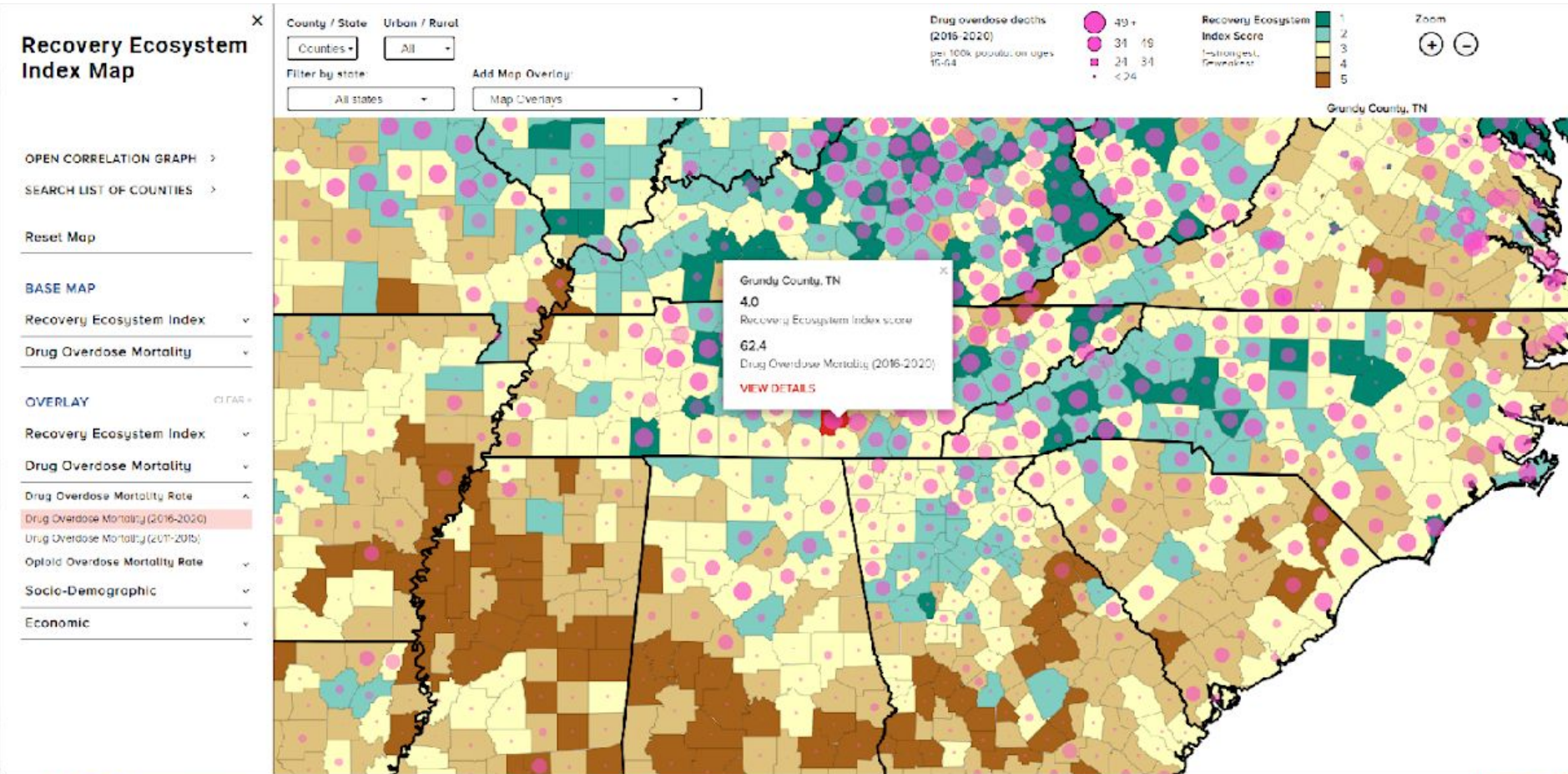


Overview of Mapping Tool – Overdose Base Map





Overview of Mapping Tool – View Details





Overview of Mapping Tool – County Fact Sheet

Grundy County, TN

Recovery Ecosystem Index Score

4.0 1=strongest; 5=weakest

13,371 Population (Rural)

Hover over a variable in the data table, and its definition will appear below.

CLOSE X

Print Data Tables

Select data table: Recovery Ecosystem Index

Component	Score	Sub-Component	Grundy County, TN	Tennessee	United States
SUD Treatment	4	Substance Use Treatment Facilities per 100k	0.0	4.3	4.3
		Buprenorphine Providers per 100k	0.0	12.0	16.2
		Average Distance to Nearest MAT Provider (miles)	17.0	N/A	N/A
		Mental Health Providers per 100k	44.9	171.2	234.4
Continuum of SUD Support	7	Recovery Residences per 100k	0.0	1.0	1.0
		Average Distance to Nearest SSP (miles)	73.0	N/A	N/A
		NA or SMART Meetings per 100k	0.0	6.9	8.1
		Is there a Drug-Free Communities Condition?	No	15.8%	15.6%
		Is there a Drug Court?	No	14.2%	48.2%
Infrastructure and Social	4	State SUD Policy Environment Score (10=highest; 0=lowest)	6.0	6.0	N/A
		One or More Vehicles	93.6%	94.5%	91.5%
		Rental-based Accommodations	70.7%	81.5%	81.2%
		Social Associations per 10k	6.0	10.0	8.7
		Severe Housing Cost Burden	0.0%	11.0%	13.0%



CLOSE X

Print Data Tables

Grundy County, TN

Recovery Ecosystem Index Score

4.0 1-strongest; 5-weakest

13,371 Population (Rural)

Hover over a variable in the data table, and its definition will appear below.

Select data table: **Drug Overdose Mortality**

Drug Overdose Mortality Data Table

Drug Overdose Mortality	Grundy County, TN	Tennessee	United States
Drug Overdose Mortality (2016-2020)	62.4	45.5	32.5
Drug Overdose Mortality (2011-2015)	45.3	27.3	20.6
Opioid Overdose Mortality (2016-2020)	34.1	14.8	7.4
Opioid Overdose Mortality (2011-2015)	31.0	18.6	12.1

State Policies:

Note: Some policy information may be outdated. Please review the Methodology & Data Sources page for more information on the source for each policy and the year the data were most recently updated.

Policy	Tennessee
Does the law provide protection from probation or parole violations?	Yes (Tenn. Code Sec. 63-1-156(h)) (Tenn. Code 63-1-156(h)(1)(2))
Does the jurisdiction have a drug overdose Good Samaritan Law?	Yes (Tenn. Code Sec. 63-1-156)
Is reporting an overdose considered a mitigating factor in sentencing?	Yes (Tenn. Code Sec. 63-1-1-(c)(1))
Does the state require commercial insurers to provide coverage for MOUD?	No
Does the state Medicaid plan include coverage for behavioral health supports for MOUD?	No
Does the state have an approved Medicaid State Plan Amendment to facilitate the provision of MOUD?	No
Are licensed SUD programs required to facilitate access to MOUD programs?	No
Does state law allow for the operation of syringe service programs (SSPs)?	Legal
Does state law allow for the possession of syringes by SSP participants?	Yes (Tenn. Rev. Stat. Sec. 39-17-425) (Tenn. Rev. Stat. 68-1-136)



Recovery Ecosystem Asset Mapping on a Regional Level

1. Created a matrix of recovery assets in Northeast Tennessee's 10 County Region, with geographic identifiers
2. Created definitions of each asset category expressed in the Recovery Ready Community Framework
3. Categorized each asset based on the Framework, with community partner input based on common definitions
4. Mapped all assets using ArcGIS created an app.

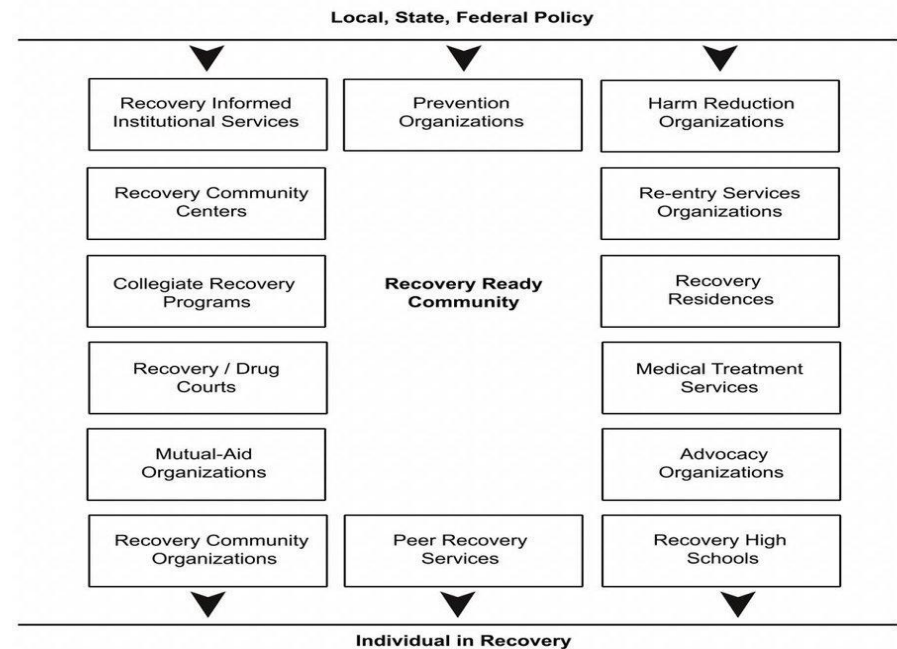


Figure 2 – Recovery Ready Community Framework

(Ashford, R. D., Brown, A. M., Ryding, R., & Curtis, B. (In Press). Building Recovery Ready Communities: The Recovery Ready Ecosystem Model and Community Framework. *Addiction Research & Theory*.)



Recovery Ecosystem Asset Mapping on a Regional Level

Steps in Progress

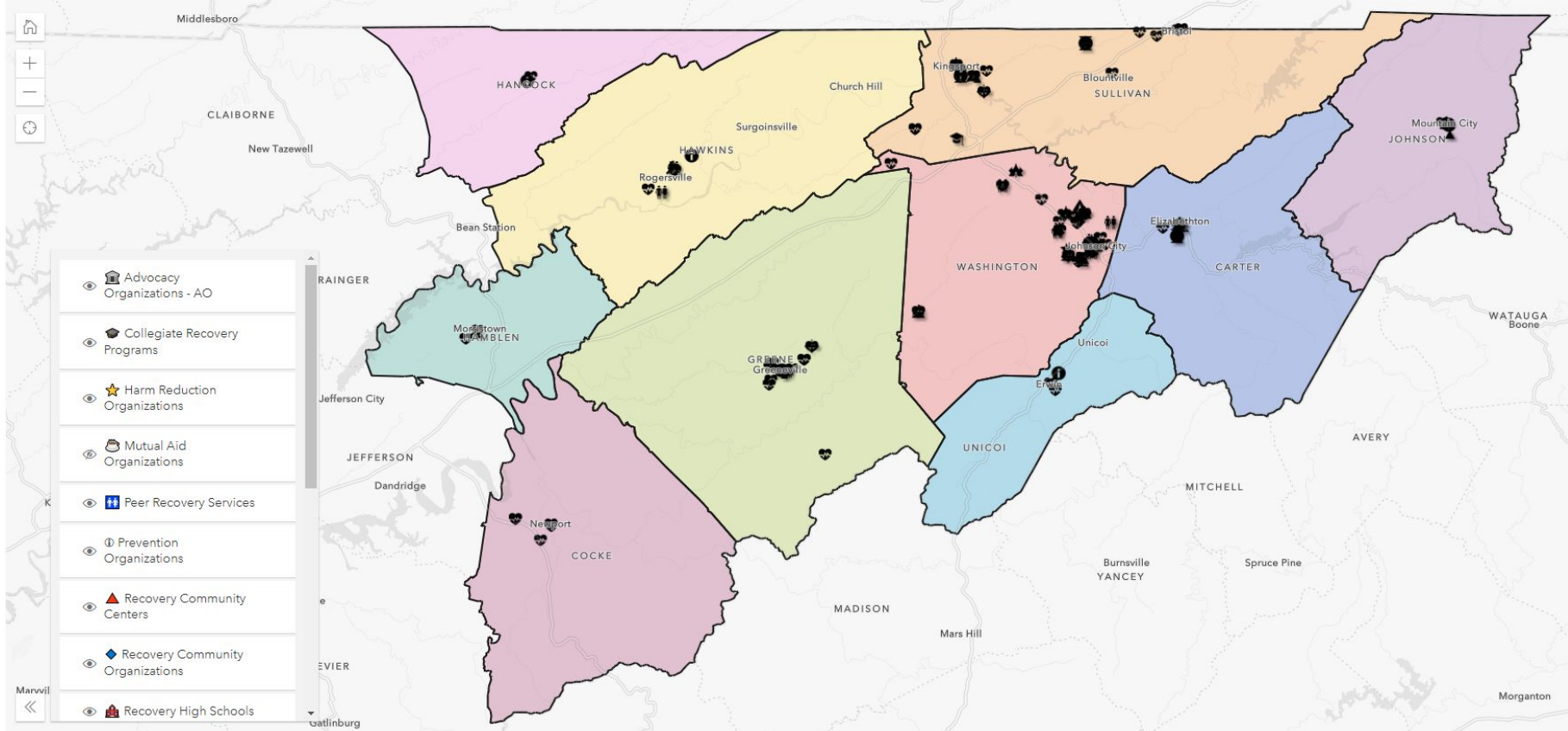
1. Finalizing app for publication
2. Adding additional layers for further analysis (i.e., population density, caring workplaces, local transit)
3. Conducting in-depth gap analysis for each county within the region
4. Identifying ways to measure the connectivity and utilization of recovery assets

Anticipated Next Steps

1. Potential expansion into additional counties, as many resources are shared between Northeast TN and Southwest VA
2. Publish the app for community partners and the public
3. Continue to update the app based on changes in assets over time



Recovery Ecosystem Assets in Northeast Tennessee



Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS | 2018 TIGER/Line Shapefiles. US Census Bureau, Tennessee State Data Center



- 10 Northeast TN Counties
- 255 assets currently mapped
- Interactive and allows for multi-layer analysis

For more information:

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