



A Regional Commission White Paper

Building on Hope:

*A Report of the Impact of COVID-19
on Addiction and Recovery in the Roanoke Valley*

Roanoke Valley Collective Response, Workgroups and staff

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Abstract

The COVID-19 pandemic exacerbated already dire trends of addiction in the Roanoke Valley. The shuttering of services, limited access to remaining services, employment loss, and isolation caused by lockdowns contributed to an increase in substance misuse, overdose, and related comorbidities such as mental health challenges and infection; indeed, overdoses alone rose by 92.8% in 2020 over 2019.

Though the community has seen many elements of social and economic life recover since the end of the pandemic, recovery-related services and resources have not been able to keep pace with the acceleration of the crisis. However, innovative programs as well as new funding opportunities, including funds flowing to localities through the Opioid Abatement Authority, offer hope.

This document updates the 2020 *Blueprint for Change* with data, program gaps, and addiction and recovery trends impacting the region as result of the pandemic, laying a foundation to access new resources and establish priorities for collective action in the years to come.

Localities included: Counties of Botetourt, Craig, Franklin, and Roanoke; Cities of Roanoke and Salem; Town of Vinton

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Introduction

In 2020, the Roanoke Valley Collective Response released the *Blueprint for Action*, a comprehensive action plan to address the growing crisis of substance use disorder in the Roanoke Metropolitan Statistical Area. As the three-year scope of work for that plan went into effect, the world was faced with another crisis – the COVID-19 pandemic. In addition to the illness and loss of life associated with the disease itself, which according to the New York Times has claimed more than 1 million lives in the United States as of the writing of this report, the pandemic had far-reaching social and economic impacts that exacerbated existing trends in substance use disorder by reducing overall service provision, limiting access to remaining services, and increasing key preconditions for addiction through the dislocation, isolation, and mental health challenges associated with the COVID-19 lockdowns. The resulting economic downturn further expanded the number of those in poverty, an additional common precondition for substance misuse.

Nearly three years later, while much of the community and the nation have in theory recovered in terms of economic activity, workforce participation, and general public health, a return to pre-pandemic service provision levels is insufficient to address the accelerated rates of addiction. From 1999 to 2019, the overdose death rate in the U.S. increased by more than 250%. While the overdose crisis has evolved, it is now largely characterized as one fueled by deaths involving illicitly manufactured synthetic opioids, including fentanyl, and resurgent stimulants such as methamphetamine. During the COVID-19 pandemic, the U.S. observed a 30% increase in overdose deaths in 2020 compared to 2019, and provisional estimates have indicated a continued increase in drug overdose deaths in 2021.

Building on Hope is intended to provide targeted updates to those strategies identified in the original *Blueprint for Action*. Each section of this report identifies a series of key priorities to be addressed in that area of work. However, as you will further read in the section entitled “A Systems Approach” below, the Roanoke Valley Collective Response recognizes there are many common needs and themes that are identified across several, if not all, of the seven workgroups of the RVCR. Below is listed the key, overarching priorities identified across this entire report:

Priority Needs:

1. Foster collaborative solutions for reducing overdose fatalities and strengthening access to treatment, leveraging cross-sector coordination and integration.
2. Re-engage core institutional partners in the Collective Response, including school systems, law enforcement, and EMS.

3. Invest in recovery housing, starting with a detailed study of existing and needed resources, with a focus on developing a range of housing types and locations to meet needs across the spectrum of recovery.
4. Address deficiencies in organizational staff and staff-related support services, including youth caregiving, recovery housing staff, and law enforcement officers; in particular, increase the number of Peer Recovery Specialists in the region and the services/organizations into which they are embedded.
5. Create and/or improve mechanisms for reentry during recovery, including workforce training, transitional housing, and technology access.
6. Use data to identify and target overdose-prone areas with sufficient resources, including harm-reduction strategies and Peer Specialists embedded in first responder efforts.

About the Roanoke Valley Collective Response (RVCR): In 2018, leaders in healthcare and non-profit human services founded the Roanoke Valley Collective Response (RVCR), an all-volunteer, crossfunctional group committed to addressing the opioid and addiction crisis in the greater Roanoke Valley. The 2020 *Blueprint for Action* established the comprehensive plan for that group, identifying activities in the priority areas of prevention, treatment, crisis response, recovery, and child and family support. In 2021, the Roanoke Valley Collective Response became formalized as a program of the Roanoke Valley-Alleghany Regional Commission with American Recovery Plan Act funding from the City of Roanoke.

About this report: Consistent with the structure and intent of the Roanoke Valley Collective Response, the content of this report was developed through a collaborative effort of the seven stakeholder workgroups and Roanoke Valley Collective Response staff, under the leadership of the RVCR Collective's Advisory Committee (CAC). Each workgroup, in turn, is formed of practitioners across organizations whose work directly or indirectly touches on that subject area. In some cases, organizations may be involved in more than one workgroup, represented by several staff members.

As a result, each subject area chapter in this report reflects the particular voices and interests of the practitioners and organizations working in those fields. The reader may notice slight differences in voice, tone, and the way data is presented from subject area to subject area. This report, intended as it is to be an incremental update of the *Blueprint for Action*, hopes this reflects the spirit and function of the Roanoke Valley Collective Response: a variety of individuals and programs working individually but united together in the overarching goal of addressing substance use disorder and building an ecosystem of recovery in the Roanoke Valley.

This report updates key provisions of the 2020 *Blueprint for Action*, focusing on those areas most impacted by the COVID-19 pandemic and those service and resource gaps exacerbated by it.

A Systems Approach

The introduction of the *Blueprint for Hope* notes the following about the Roanoke Valley Collective Response:

[T]he [Roanoke Valley Collective Response] uses a multi-sector approach to the complex social problems around [opioid use disorder and substance use disorder] and misuse, with meaningful engagement of community members in new ways than previously tried. A hallmark of this model is eliminating effort duplication while enhancing impact through extensive networks of collaboration and high communication.... The RVCR provides a vehicle for individuals and organizations to work together to develop and adopt new solutions that best fit our community's needs.

From the beginning, the Roanoke Valley Collective Response has recognized that addressing the substance use crisis encompasses addressing a spectrum of services and strategies that stretch from early education and prevention efforts, all the way to recovery housing and workforce reentry programs. Such a spectrum is not only beyond the capacity of any one organization to address, but attempting to solve one particular piece of the puzzle without taking into account the entire picture is like attempting to diagnose a complex disease while examining only one symptom.

A key emergent lesson learned during the past three years is the importance of addressing addiction from a multi-sector perspective. While multiple domains in the strategic plan are summarized in this report, it is crucial to be cognizant of the important ways that they interface and depend on one another. Due to its breadth of engagement, the Roanoke Valley Collective Response is uniquely positioned to identify and facilitate collaborative cross-sector solutions for achieving a stronger recovery ecosystem. Cross-sector junctures offer opportunities for bridging gaps, impacting continuity of care, and providing holistic, family-oriented systems of care. Although summarized separately, the reader is urged to keep in mind that each facet of the addiction ecosystem is interdependent and is best conceived in relation to one another. Within each domain in this plan, examples are provided of opportunities for cross-sector integration. *Areas For Potential Cross-Sector Integration* are called out in italics and green text to emphasize these opportunities. These are not intended to be an exhaustive identification of these opportunities, but simply to highlight some critical priority areas to be considered along with each workgroup's priority needs.

It is further noted that the elements of a successful recovery ecosystem involve systems and services not wholly related to the treatment of substance use disorder. For example, this report discusses the need for affordable housing, a need not limited to those in recovery. Access to transportation is often another limitation for those who may have lost their license due to a SUD-related offense or inability to afford a vehicle, making effective public transportation part of a successful recovery ecosystem.

Given the need to address this complex issue systemically, this report hopes to confirm that the Roanoke Valley Collective Response, through its robust and active networks and shared vision of success, remains well-positioned to implement the following recommendations through the support of and in partnership with key healthcare organizations and local government leaders.

Supporting Tools

This report is intended to update those provisions of the *Blueprint for Action* that have been most impacted by the COVID-19 pandemic. Unless otherwise stated, data points and other findings of the original report not specifically addressed by this white paper are assumed to remain relevant.

The *Blueprint for Action* can be found at www.rvcollectiveresponse.org/resources.

Prevention & Education

The result of the increased need for mental health services has led the Prevention and Education Workgroup of the Roanoke Valley Collective Response to greater urgency in identifying, communicating, and educating the Roanoke Valley about available resources for residents. The goal in providing this information is to decrease mental health challenges that may lead to violence, increased substance abuse, and a decline in the quality of life for Roanoke Valley residents. The particular disruption in routine, access to services and safe spaces, and general uncertainty faced by students making a rapid transition to remote learning have created a keen focus on delivering prevention education to and addressing the mental health needs of younger citizens through initiatives facilitated by Peer Recovery Specialists.

Area For Potential Cross-Sector Integration: The importance of early intervention is one point where treatment and prevention intersect; the need for youth treatment services is paramount to reducing the development of adult addiction.

Priority Needs:

1. Engage school representatives from all area districts in the work of the Collective Response.

2. Increase the number of adult caregivers of children and youth, whether the caregiver is defined as a parent, grandparents, another family member, or other adults.
3. Create a way to share Youth Risk Behavior Survey data highlights from all community coalitions that are included in the coverage areas of the Collective Response.
4. Increased education and use of NARCAN in all parts of the community, including providing training at diverse community events and gatherings such as health events, festivals, farmers markets, etc.
5. Increase visibility and access to Peer Recovery Specialists for educational training within the public school system and general community.
6. Create easy access points for services thereby reducing the stigma associated with receiving mental health and/or substance use disorder support and treatment.

Mental Health

A comprehensive *Community Health Needs Assessment* conducted in 2021 by Carilion Clinic, and key partners in the Roanoke Valley identified several alarming increases in mental health statistics since the last report in 2018. The community health survey found that 58% of responders feel mental health is the most important issue to address in the community. This is followed by 45% of respondents in the Roanoke Valley reporting they have been told by a doctor that they have depression or anxiety, a 9% increase from the 36% reported in 2018. As noted in the section below, mental health diagnoses are increasing among students as well as a result of the pandemic lockdowns and the rapid transition to remote learning.

The adoption of remote communication tools to facilitate work and education also quickly changed the healthcare landscape, forcing both providers and funders to adapt to and approve the use of these tools to provide care during the lockdown. For example, the use of virtual counseling platforms increased and those services are now funded through third-party payors. As a result, counseling is generally more accessible to those who need it, both in terms of getting access to service providers, as well as reducing the stigma in seeking out services since they can now be accessed privately from home. It should be noted that, while the deployment of telehealth is broadly positive, that access still requires appropriate technology which many in the community do not possess, as well as adequate counseling staff, which remains a challenge locally and nationwide.

To address the technology gap, onsite counseling services are now available at three of the Roanoke Redevelopment and Housing Authority sites: Jamestown Place, the EnVision Center at Landsdowne Park, and Melrose Towers. Hunt Tower, Morningside Manor, Bluestone Park, Indian Rock Village, and the Villages at Lincoln do not have onsite services.

Area For Potential Cross-Sector Integration: It is currently recognized that Mental Health and Substance Use Disorder treatment can and often should be provided concurrently; new models of care incentivized by the ARTS Initiative of the Medicaid system support integrated, co-located mental health and SUD treatment services.

Students and Families

Social connectedness is a huge and critical protective factor for children, teens, and families. Specifically, the CDC notes that the connectedness and structure provided by the school environment can provide stability to help youth address all manner of adversity, but especially during times of disruption. School, supportive adults, safety, and providing opportunities for parents and families to engage in communities are necessary now more than ever.

As a result of the pandemic, Roanoke area schools were completely shut down for the second half of the 2020 school year. The 2021 school year opened with many challenges from online instruction to hybrid models and monthly to weekly changes for students, teachers, and families. The increased screen time, lack of peer connectedness, and stressful learning environment led to an array of emotional and physical health challenges – including caregiver abuse and limited or no access to food through the suspension of in-school meals (though it should be noted that many schools did provide meals via regular bus routes to remote-learning students). Data from the Youth Risk Behavior Survey (YRBS) valley-wide demonstrated extremely concerning statistics in the past two years specific to suicide, anxiety, and depression among students. In 2021 YRBS data from 10th- and 12th-grade students in Botetourt County, Craig County, Roanoke City, and Salem City reported over a 20% increase from 2019 that they had felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities in the past 12 months. In addition, Roanoke County YRBS compiled data post-COVID which found that over 20% of students reported a serious mental health concern or diagnosis within the past 2 years, and thoughts of self-harm increased by over 35%.

Further, as a result of the economic downturn during the pandemic, many youths lost access to full- or part-time employment, another stabilizing factor in their lives.

In several cases, school systems have responded positively to the challenges posed by the pandemic. Roanoke County schools included new questions in the 2022 Youth Risk Behavior Survey focused on anxiety and gauging student awareness of and access to school resources. Roanoke County has also implemented the use of Positive Behavioral Interventions and Supports (PBIS) that includes substance abuse misuse education as well as resiliency strategies.

Acknowledging that the impact of substance abuse extends to family members of those with substance use disorder, both city and county school systems are being trained in and using Adverse Childhood Experiences (ACES) to assist youth whose adult caregivers have substance use disorder and/or mental health diagnosis.

Area for Potential Cross-Sector Integration: Trauma-informed care is relevant across all domains.

Crisis Intervention

The COVID-19 pandemic has disrupted the lives of people who use drugs in ways that damaged their mental health and changed their drug use behaviors, increasing their risk for overdose. COVID-19 also demanded the attention of the region's public health and first responder partners, which delayed many of the efforts outlined in the original blueprint. While emergency responses to overdoses continued, coordination and planning efforts were distracted.

COVID-19 had a profound and lasting impact on overdoses. The isolation caused by a rapidly spreading infectious disease trapped persons who use drugs and using alone is a major risk factor for overdoses. First responders in public safety, public health, and healthcare also experienced the vicarious trauma and stress of the overdose increase.

Post-pandemic, the community's crisis response plan requires improving the rapid response to overdoses, strengthening the response with trauma-informed care, addressing health disparities, and tightening the referral network to other services to address social determinants of health.

Strengthening local emergency departments' *Bridge to Treatment* and *PACE to Recovery* programs with the addition of peer specialists and solidifying intervention team members will address the urgent need to rapidly link people who use drugs with evidence-based treatment. Furthermore, there is an increased urgency to address co-occurring disorders or health impairments in a holistic and comprehensive integrated care model. Examples of such care include medical care such as Hepatitis C/Infection/wound care, medications that effectively restore the biochemistry of the brain that has been hijacked by one's opioid use disorder, psychiatric care, trauma-based therapy, care coordination that addresses social determinants of health and peer support that vitally scaffolds individuals path to recovery.

Priority Needs: The burden of overdoses is felt the hardest by persons who use drugs, their friends and families, and the first responders and helpers. Each of the goals below highlights how these efforts impact those groups.

1. Provide a rapid response to overdoses and identify spikes utilizing the Overdose Detection Mapping Application Program (ODMAP), Framework for Addiction Analysis

- and Community Transformation (FAACT), and best-available data. Strive for consistent improvement to overdose response with data-informed decision-making.
2. Sharpen and improve responses to overdoses to reduce health disparities, increase trauma-informed response, and connect the community to healthcare, treatment, and harm reduction services. Increase access to naloxone through all partners.
 - a. *People who use drugs*: Receive timely resources to prevent overdoses and facilitate linkages to care. Strategies include fentanyl test strips, naloxone, safer-use kits and Never Use Alone resources.
 - b. *Friends and Family*: Expand community outreach, REVIVE! and naloxone distribution sites to reach friends and family with harm reduction, treatment, and wrap-around services.
 - c. *Service Providers*: Resist re-traumatizing patients and supporting staff's mental health with training, support, and well-connected referral resources to meet broad social determinants of health needs (case management, housing, healthcare, food).
 3. Increase referrals from EMS and emergency departments to comprehensive harm reduction and substance use disorders treatment programs. Build relationships across public health, first responders, harm reduction, coalitions, friends, family, peers, and people in active use to balance support and accountability, to create effective service delivery and referrals to prevent overdoses. Increase referrals from EMS and the emergency departments to comprehensive harm reduction programs. Invest in case managers, peers, and support staff to stabilize people who use drugs and connect them to treatment and other social services.
 - a. *People who use drugs*: Improve experiences with access to peer, harm reduction, treatment, and resources that address broad social determinants of health needs (housing, healthcare, food, case management).
 - b. *Friends and Family*: Support friends and families with resources and events such as overdose awareness day. Decrease stigma so that families and friends can access the services that they need.
 - c. *Service Providers*: Reduce burnout through better support and connection for responders and the communities they serve. EMS, first responders, harm reduction, and public health should become a bridge to further resources.
 4. Integration of Peer Recovery Specialists throughout the response and recovery systems to reduce compassion fatigue and ensure lives are saved by linking people with SUD or OUD to comprehensive care at crisis touchpoints and utilizing the window for treatment effectively.
 5. Advocacy and support for increased SUD treatment in local and regional jails, and connections to link individuals to treatment and other wraparound services upon return to the community. Assuring the continuum of care and support is critical to reducing repeated overdose and legal consequences related to SUD.

The Cost and Challenge of Overdose

The COVID-19 pandemic damaged mental health and caused a notable spike in overdoses. The overdose rates are tracked through several key data surveillance systems from partners such as EMS, hospital emergency rooms, and the Office of the Chief Medical Examiner.

The rates of emergency department visits for drug overdoses were on a decline or stabilizing from 2017-2019. The stabilization and decline were due to the community mobilization to respond to the crisis with the development of the Collective Response, and the state, and the state implementation REVIVE! and naloxone distribution programs across the Virginia Department of Health, Department of Behavioral Health and Developmental Services, and partner programs. This hopeful trend was abruptly reversed in 2020 when COVID-19 hit and the subsequent impact of quarantine and isolation orders, fear, and uncertainty impacted the community's mental health and well-being. This was particularly impactful for populations of persons who use drugs, and as a result, emergency department visits for overdoses increased from 2019 to 2020 by 30%.

The rates of fatal overdoses were also on a stabilization or decline trend from 2017 to 2019. However, these trends also jumped by nearly 100% from 2019 to 2020 during the initial impact of the COVID-19 pandemic. Rates stayed high from 2020 into 2021 and were on track to be high into 2022. Notably, the percent increase in emergency room visits from 2019 to 2020 was 30%, but the percent increase in fatal overdoses was much higher at 49%. The isolation of the pandemic drove an increase in fatal overdoses. In 2020, 236 community members were lost to COVID-19, while 160 community members were lost to opioid overdose.

What's more, these figures only incorporate overdoses with first responder involvement. Harm reduction programs track client-administered overdose reversal not involving first responder services, which would account for higher overdose figures. The Virginia Harm Reduction Coalition reports that in 2021, over 2,000 overdoses were reversed by clients not necessarily involving EMS, which only further supports the necessity of Narcan distribution, accessibility, and education.

The tragedy of losing friends and family to overdoses magnifies the stress and trauma on persons who use drugs. Often, the very presence of drug use in a person's life disqualifies them from many of the community's resources and services. This isolation from employment, housing, healthcare, and other supports can accelerate a downward spiral towards overdose and often death.

Beyond the personal impact of the overdoses, the community also bears a cost. A 2017 CDC (Centers for Disease Control) study estimated the per capita cost of opioid use disorder and fatal overdose by state. For Virginia, this combined cost was \$3,337. With the

recognition that the incidence of opioid-related overdose and death has only worsened since 2017, applying this average cost to the greater Roanoke Valley population is estimated to exceed a billion dollars annually.

These overdoses affect people across income, neighborhood, gender, sexual orientation, and education levels. However, there are areas of the community that are hardest hit by overdoses. In the Roanoke Valley, the difference between the lowest rate of emergency department visits per 100,000 residents (in zip codes 24018 and 24019) and the highest (24016 and 24013) is nearly 500%.

Similarly, the difference between the zip code with the lowest rate of fatal overdoses per 100,00 residents (24153) and the highest (24016) is 738%. The highest rates for fatal overdoses are in 24016, followed by 24013, and then 24014 and 24012. Note that while zip codes 24179 (Vinton) and 24153 (Salem) have moderately high ED visits for overdoses, their rates of fatal overdoses are lower.

Treatment

Treatment is defined as an array of services, along a continuum of care, provided by a diversity of service providers including peer recovery specialists. Social determinants (housing, employment, child welfare, transportation) are important for treatment, as are medical, mental health, spiritual, life skills/relapse prevention, and wellness services and opportunities. Access to services that match individual needs is crucial for all demographics, cultures, and populations within a community. Stigma toward the disease of addiction and substance use disorder treatment presents a serious barrier to care.

The devastating impact of the opioid epidemic and the addiction crisis is well established and demonstrably affects the Roanoke Valley and surrounding areas. Multiple sectors of the community are affected and are called to be part of the solution. Law enforcement, medical and mental health professionals, persons with lived experience, affected families, businesses, the faith community, and educators have met monthly in a Treatment Subgroup to identify current capacity and gaps, leading to a prioritization of treatment recommendations. Professional expertise and personal experience culminated in conclusions regarding the importance of early identification and intervention, harm reduction for those not yet in treatment, strengthening the continuum of care for all levels of disease severity and continuity of support during transitions in care, the benefits of cross-sector coordination and data sharing, and the understanding that one size does not fit all.

Despite advances in capacity in Virginia through the Addiction and Recovery Treatment Services (ARTS) Initiative and Medicaid expansion, gaps exist along the continuum of care. A map of local resources revealed that most identified treatment programs fall into the outpatient

category. Few residential treatment programs are available in the Roanoke Valley. Furthermore, most outpatient programs have waiting lists. Rapid access to treatment at each level of care is essential to reduce the devastating impact of untreated addiction.

Area For Potential Cross-Sector Integration: Bringing together public safety and public health sectors can reduce disruptions in care and foster better outcomes in both sectors through coordination of the medical treatment sector and the judicial and probation offices and the carceral system.

Priority Needs: The Treatment Subgroup supports combining: (1) evidence-based practices, (2) data-based decision-making, (3) science, and (4) narrative/qualitative input to recommend, develop, and implement regional multi-sector solutions.

1. Improve compatibility in data systems across the medical, planning, and emergency response sectors to enable more effective data sharing related to prescriptions and prior care.
 - a. Advocate for/facilitate participation in data-sharing systems.
 - b. Build on existing tools to develop a user-friendly searchable database of resources across the continuum of care which is accessible to the public and tied to a phonenumber for navigation help.
2. Increase interagency collaboration to ensure that best treatment practices are available and applied across the continuum of care.
 - a. Establish clear lines of communication with identified contact persons at each facility dedicated to cross-agency care coordination.
 - b. Continue to convene an interagency, cross-sector Treatment Subgroup.
3. Strengthen the continuum of care and transitions in care to reduce gaps and interruptions in treatment and barriers confronting special populations (releasees from incarceration, pregnant women, minority populations, youth).
 - a. Support and advocate increasing services at every level of care from harm reduction/early intervention to outpatient care to the various levels and types of residential treatment, especially prioritizing residential treatment availability for low-income individuals with medical complexity and sober living options
 - b. Strengthen communications/coordination among law enforcement/courts/jail/prison systems and the treatment sector to improve health outcomes for releasees and court-adjudicated individuals by establishing a Task Force to identify collaborative solutions.
4. Initiate quick-response treatment options.
 - a. Advocate for a “low threshold” clinic/urgent care center building on Carilion Clinic’s initiative at Community Care (A Family Medicine/Psychiatric/ED collaborative)

- b. Advocate for ED-initiated services like medication-assisted treatment and Narcan and rapid access to care building on the current Carilion ED Bridge to Treatment model.
5. Establish Family Resource Support Centers with help available to navigate access to care, obtain educational resources, and find support from someone else with a family member struggling with addiction.

The Treatment Landscape

The opioid crisis has been a stark reminder of the need for the integration of mental health, medical, and substance use disorder services across a continuum of care. A continuum of care involves guiding patients over a long period and through a comprehensive array of health services that span all levels and intensity of care. Care can range from harm reduction, to detox, to outpatient services. The community remains in need of an increase in every level of care.

Integration of services starts with the capability and capacity to share information across sectors and sharing a wider range of local data. This data would inform a central directory of resources with offers across the continuum of care that is readily and easily accessible to patients, their families, and potential referring agencies/companies. It's essential this directory be updated with the most current and accurate information and is simple to navigate. A helpline may be included to address the needs of users as they arise. The directory will also improve matching patients to the appropriate level of care and managing transitions among the levels of care which increases the effectiveness of treatment and patient outcomes. Each individual seeking services has a unique set of needs and sharing Personal Health Information (PHI) across systems would improve the coordination of care, continuity of care, and appropriate connections. Communications across the various systems promote joint interdisciplinary treatment plans and aftercare/discharge planning, as well as spread best practices, which all continue to affect positive outcomes for patients and programs.

Beginning with a Quality Improvement study of service programs, data collected could be analyzed by researchers to determine which treatment services are most effective for whom and when. These studies can also inform policy decisions that, among other advantages, inform funding and nurture program diversity and accessibility. Shared data may aid with research, community awareness, and timely interventions.

Some specific expansions to treatment options to be made locally include bolstering residential treatment options. To strengthen residential treatment options, opportunities for individuals lacking commercial insurance and those struggling with co-morbid medical and psychiatric complications need to be established. For those individuals not requiring

hospitalization, immediate access to safe places with simple medical services to stay overnight is needed. Comprehensive programs would include discharge planning well in advance of the transition in care.

To support the continuum of care and recovery services, immediate access to a walk-in clinic medical setting is imperative. Here an individual can be evaluated clinically and comprehensively for both critical and longer-term needs and treated with compassion. This will expedite timely care with effective linkages to ongoing treatment, alleviating the burden on emergency departments, all while reducing stigma.

Area for Potential Cross-Sector Integration: Models of care that co-locate the relevant range of services integrate mental health, substance use disorder treatment, and medical and social services in one setting using a comprehensive, collaborative and interdisciplinary treatment plan.

Housing

The net effect of the pandemic created a landslide of serious issues along the entire spectrum of recovery that when combined with the opioid crisis, impeded and/or erased many of the gains enjoyed by RVRC's positive collaborations and affirmative action pre-pandemic. The shutdown of local businesses, loss of wages, and significant barriers to accessing treatment and housing worsened an already fragile system. The Virginia Tech Recovery Housing Task Force Report conclusions, explored below, emphasize a critical lack of affordable housing in general, and in specific recovery-oriented housing in particular. Considering that safe affordable housing is a major component to success along every stage of recovery, the outlook is precarious without immediate community action. The data released in the report reveals that the gaps are widening

Area for Potential Cross-Sector Integration: Sober living housing provides essential support for treatment outcomes and recovery.

Priority Needs: Key recommendations are summarized below based on outreach with relevant stakeholders ongoing literature and case study review, estimates of existing and needed recovery housing, and the goals identified by the task group.

1. Although there are some options for recovery housing, adequate affordable housing and recovery housing options remain limited in the Roanoke Valley and therefore need to be a target for future development.
 - a. The Roanoke Valley needs a distributed network of housing reflecting both a standard recovery housing model (as defined by NARR and ASAM) and the Housing First program model.

- b. More supportive housing vouchers and low-barrier shelters are needed.
 - c. More housing is needed that keeps families together with dependents while family members are engaged with treatment and recovery.
2. The Roanoke Valley would benefit from additional well-trained recovery housing staff. This should include certified peer recovery specialists who are adequately reimbursed to cover the needs of the target population in recovery housing settings at all levels of the continuum of care.
3. There is an opportunity for partnerships that create value and capacity across service providers, housing developers, and local and regional governments to expand the recovery housing options in the Roanoke Valley that both meet critical recovery housing needs and can be tied to economic development and broad-based community renewal.
4. Funding opportunities from public and private sources can be leveraged to develop innovative and financially viable recovery housing.
5. A more targeted and systematic study is recommended to determine specific bed and unit estimates of recovery housing that are needed for the Roanoke Valley. However, this study should not preclude immediate, incremental development of recovery housing units

Virginia Tech Recovery Housing Study

One of the insights gained during the creation of the *Blueprint for Action* was the overall importance of safe and affordable housing and its key role and function in every phase of both the individual and family recovery process. As a result, a separate report was created through the collaboration of the Roanoke Valley Collective Response and Virginia Tech’s Institute for Policy and Governance and Center for Housing Research. That report, “Recovery Housing in the Roanoke Valley of Virginia Context and Planning Summary Report” was released and presented to the full organization of the RVRC in November of 2021 on behalf of the Recovery Housing Taskforce Group. This work was done during the height of the pandemic, so the report reflects numbers that were researched in real-time with COVID-19. While there are current plans to update key data collected during that time, it is still valuable in its current form.

The Task Force reported, “The recent housing study conducted for the Roanoke Valley-Alleghany Regional Commission (2020) indicates that Roanoke City would need to add another 1,120 owner-occupied housing units and 1,042 renter-occupied units in order to meet demand for 2025. With a loss of nearly 500 housing units over the past decade, the city will not meet this demand without increasing 1-and 2-bedroom units, and units for households at or below 30% of AMI (Area Median Income) in particular.”

The Roanoke Valley-Alleghany Regional Commission Housing Study utilized knowledge gained from extensive data analysis to examine housing challenges facing regional residents. The study identified housing barriers and gaps and contained an analysis of broadband infrastructure and strategies and recommendations for future housing programs.

The community needs to continue to analyze both the issues and solutions through academic research while creating needed changes in entrepreneurial time. For example, simple changes to the Virginia State Tax Credit Code Laws such as creating a specific Low Income Housing Tax Credit Recovery Housing Group category would create specific incentives for local developers to become more interested in developing more affordable housing in general and more specifically Recovery Housing in Virginia. This category already exists at the federal level and has been adopted in other states, such as Ohio and Kentucky.

Workforce

The Workforce group is new to The Collective Response, but not to the region. This group focuses on workforce development to bridge the gaps between people living with substance use disorders, the reentry population, and the workforce. Throughout the region, workforce development organizations work to educate, train, and certify individuals to get them fully and gainfully engaged in the workforce, as well as identify workforce needs and solutions with employers to ensure that employee skills demands are met. Since the start of the COVID-19 pandemic, the need for workforce development services has expanded drastically. Numerous industry sectors have experienced lasting labor shortages, and individuals continue to struggle to find work. The need for services has expanded programs and funding availability in the area, leading to new programs like the new Star City Works program of the Greater Roanoke Workforce Development Board, the TAP RESTORE project, among others.

Area for Potential Cross-Sector Integration: Job readiness and job placement if addressed within treatment programs can serve as relapse prevention and recovery skill building as a facet of one's treatment program.

Priority Needs: Key recommendations are summarized below based on outreach with relevant stakeholders ongoing literature and case study review, and the goals identified by the task group.

1. Increase participation from relevant public, private, and non-governmental organizations to enhance cross-sector collaboration.
2. Foster opportunities for individuals that promote self-sufficiency through regional and local solutions to support successful integration in society, including but not limited to job skills training, job placement, and transportation.
3. Engage and Educate employers to increase awareness of programs in the area for those seeking recovery and/or second-chance citizens.
4. Understand, anticipate, and support developing workforce needs of:
 - Individuals: training, communication, and services for impacted populations.
 - a. Systems: including, but not limited to practitioners, nurses, and behavioral health technologies in the behavioral health continuum of care. (Interim Feasibility Analysis Catawba Hospital Campus Transformation, 2022).
5. Develop a resource/procedure list for employers with employees suffering from substance use disorders.
6. Create a master list of second-chance employers in the Roanoke MSA.
7. Create a central repository of resources around recovery and workforce reentry.

The Importance of Workforce Access

Employers are working through unprecedented labor shortages across industry sectors, and job-seekers, including those with substance use disorders, struggle to find gainful work in the economy.

In September 2022 alone, there were over 14,000 active job advertisements in over 500 occupations (*Appendix A, Table 1*). Unemployment rates are slowly returning to pre-pandemic levels (*Appendix A, Table 2*), and low-income earners bear the brunt of employment exits (*Appendix A, Table 3*). In fact, there are some localities in the Roanoke MSA with labor force participation rates below 52% (*Appendix A, Table 4*).

Workforce development organizations have continued to work towards bridging these gaps throughout the pandemic. Across the Roanoke MSA, organizations have worked to raise the active jobs from 55,264 in 2020 to 65,017 in 2022, and increase the average wage almost \$3,000 in the same timeframe. Of the programs that are currently connected to the Workforce group, at least 1,847 job seeker services have been provided through the Virginia Career Works offices in Roanoke, Covington, and Franklin and the TAP Restore program. The Greater Roanoke Workforce Development Board provided 1,070 business services in the same time frame, including hiring events, consultation services, workshops, and more.

To better address these challenges, stakeholder organizations should actively look to increase collaboration across sectors to foster opportunities for impacted individuals that will promote self-sufficiency and support successful societal integration.

Second Chance Employers

To help make employment accessible to those in or seeking recovery, stakeholder organizations must increase engagement with business sectors to educate about the realities of substance use disorders and provide relevant resources to employers and recovery-seeking employees. This education curriculum can be centered around the HOPE Initiative Substance Use Disorder/Mental Health Resource Database, the Virginia Bonding Program, and other available resources, as well as a pre/post assessment.

As a crucial part of this curriculum, and in general business outreach, procedures should be created to assist employers that have employees that are suffering from substance use disorders. Using best practices and guiding principles from SAMHSA (Substance Abuse and Mental Health Services Administration), this procedure list should include both local resources, found in the Greater Roanoke Workforce Development Board's asset map, the HOPE Initiative Substance Use Disorder/Mental Health Resource Database, as well as local, regional, and national information on supporting those seeking recovery.

The region is desperately seeking organizations that are open to hiring re-entry citizens, including those with Substance Use Disorders. Using data from workforce development organizations, VADOC partners, and businesses that engage with the education curriculum mentioned above, efforts should be made to create a master list of employers open to hiring re-entry citizens to help those seeking gainful employment.

Lastly, This curriculum, as well as the identified resources, procedures, and second-chance employers will be stored in a central repository. This digital repository will provide easy access to workforce-related information and resources from across the Roanoke MSA.

Public Safety

The Roanoke Valley has experienced an endemic of generalized violence against others. Overdose rates have seen a drastic increase relative to pre-COVID years as well as with state and national reports of OD incidents. Also, per data from the Virginia Department of Health Medical Examiner, drug overdoses in the Greater Roanoke Valley increased by 92.8% in 2020, as compared to 2019. The Virginia Department of Health reports that statewide in Virginia, fatal overdoses have continued to increase by 15% between 2020 and 2021. The isolation created by COVID-19 led to unprecedented reports of self-medication – to the point of individuals overdosing numerous times. The repeated intervention of law enforcement in overdose incidents has led to “compassion fatigue” throughout the department and officials.

The balance between being compassionate to victims of crimes and overdoses, and being hard on those who are choosing to perpetuate violent, organized crime in the region is taxing. Adding in the worries of civil unrest due to the actions of other law enforcement agencies

across the country, all greatly impacts the quality and quantity of services that law enforcement provides.

Crimegrades.org reports a violent crime happens in the Roanoke Valley every two hours and three minutes. Statistics from *city-data.com* show that in 2019 the crime rate for the City of Roanoke was higher than 87.7% of U.S. cities. It is further reported that in 2021, 16 homicides were committed in the Roanoke Valley compared to 11 in 2020 and 13 in 2019, per the Roanoke Gun Violence Prevention Commission. In addition, for every violent crime that is committed, the number of ancillary victims is unknown. As the crime rate in the Roanoke Valley increases, the number of individuals and families impacted increases exponentially alongside it.

Area for Potential Cross-Sector Integration: Public Safety and Public Health sectors can educate and inform one another. Combatting compassion fatigue and burnout in multi-sector educational sessions is needed. Reports of compassion fatigue post-pandemic are pervasive.

Priority Needs: Key recommendations are summarized below based on law enforcement feedback, outreach with relevant stakeholders ongoing literature, and case study review.

1. Recruitment. Staffing issues, illness, and resignations have drastically impacted the amount of work officers can perform.
2. Develop a network of Peer Specialists to provide training aimed at addressing compassion fatigue.
3. Revisit COVID-19 protocols that impeded an officer's capacity to stop vehicles for minor offenses, which has impacted the interception of drug trade.
4. Facilitation of regional partnerships to open dialog and bridge understanding between LE and citizens.

Fighting Compassion Fatigue

First responders witness unspeakable events and traumas regularly. This constant exposure to dangerous and traumatic situations increases the chances that they end up not only serving those with mental health issues including drug addiction and alcohol addiction but are also at a disproportionately higher risk of developing one themselves.

There are millions of first responders in the United States. And of these millions, some will develop mental health issues due to the exposure to the trauma associated with their lines of work. According to the Substance Abuse and Mental Health Services Administration (SAMHSA), 30% of first responders develop behavioral health issues as compared with a rate of 20% in the general population. These conditions include depression, post-traumatic stress disorder (PTSD), and substance abuse issues.

The COVID-19 pandemic and additional collective traumas that followed have had an increasingly negative impact on the public safety front-line service providers. The workforce was drastically reduced while the number of crimes, calls, and community crisis intervention needs have skyrocketed to unprecedented levels. An overworked public safety workforce combined with an ever-increasing workload has led to an excessive turnover on the force with newer officers and public safety officers entering the front lines while more experienced officers retire due to compassion fatigue, and lack of mental health support for community members and the officers themselves.

Recovery Services

The Recovery Services Workgroup was derived from three of the original workgroups: Crisis Response, Treatment, and Recovery. The Recovery Services workgroup is focused on the integration of peer support services and care coordination across all aspects of the recovery and wellness spectrum. Peer Recovery Specialists are engaged in the recovery process to help others experiencing similar situations such as substance use, mental health, and trauma. Through shared understanding, respect, and mutual empowerment, peers support individuals to become and stay engaged in the recovery process.

There continues to be a rise in the number of overdoses and fatalities fueled by the onset of COVID, depleting support systems, access to supportive care, and increasing isolation and mental health concerns. Before COVID, programs like the HOPE Initiative were seeing an average of 180 participants per year seeking peer support services and looking for resources for treatment and recovery programs. Last year, 458 individuals sought those services. With an already existing addiction epidemic, along came the COVID pandemic which created the perfect storm. Addiction is a disease of isolation and the solution of recovery is community; in a time of quarantine and social distancing, this escalated mental health and substance use.

Areas for Potential Cross-Sector Integration: Peer recovery specialists have an impact throughout the response and recovery systems.

Priority Needs:

1. Embed peers support in EMS and Public Safety organizations through local programs like the HOPE Initiative, Rescue Mission, Blue ridge Behavioral Healthcare, and Virginia Department of Health.
2. Rapid access to evidence-based treatment options for economically depressed and low-income individuals, their families, and loved ones.
3. Restore connections with law enforcement and EMS and educate them on the resources available.
4. Advocate for community-facing staff in EMS and law enforcement.

5. Increase communication and collaboration among agencies. Share best practices from existing programs to strengthen programs.

Crisis to Treatment Touchpoint

The Recovery Framework drafted pre-COVID had a wonderful focus on the process and desired health outcomes; but the escalating progressive and chronic nature of substance use disorder is a scourge for those directly affected, people who use drugs, their families, and their communities. Untreated, this chronic disease is a devastating killer.

The benefits of treatment are numerous and accrue beyond the individual treated: families are reunited, employment increases, and improved medical outcomes are just some of these. Most importantly, abstinence and evidence-based recovery services give people the opportunity to reclaim their lives and the direction of their future.

Healthcare providers across the service area have seen the benefit of rapid access to a treatment appointment from the ER, especially when supported by a peer. Results improve when ER staff understand the disease of addiction and are seen as trusted partners in recovery, and when shame and stigma are replaced with an understanding that derives from accurate training on the subject. Detoxification is not a treatment that puts people at high risk for a lethal overdose. These realizations and adjustments made were game-changers for the regional medical system. The greatest hurdle currently faced is that COVID-19 has compounded compassion fatigue to an extent that could derail further linkages to treatment if left unaddressed or unsupported. To save lives, the region must focus intently on making appointments and getting rapid access to care that is needed to stop the downward spiral that is unavoidable in untreated and active addiction. The more the disease progresses the more severe the consequences become. The body becomes taxed by drug abuse and becomes an easy host for skin infections, heart complications, and lung and upper respiratory infections.

With a resurgence in homelessness as well as severe addiction post-COVID-19, there is immediate needs for street-based care, increased harm reduction medical services, and low-threshold clinics that offer immediate help with one's addiction and its consequences.

Conclusion

COVID-19 changed the world without notice or warning. The issues that were emerging before the pandemic have only deepened, as the result of extreme anxiety, isolation, and barriers to connection which prompted the rising overdose rates and self-medication by way of illicit drug use.

The Roanoke Valley Collective Response mission and the *Bluepring for Action* have only been further validated by the mental health and overdose crisis that has been felt nationally. More people have died as a result of untreated Substance Use Disorder than died of the Covid-19 pandemic, which should underscore the importance, urgency, and priorities outlined above.

Building on Hope serves to demonstrate the relevance and necessity for evolving and collaborative efforts among key regional stakeholders to address and implement. The RVCR seeks to develop an ecosystem that reflects the unique needs of each community through the action taken to combat the OD rate epidemic.

Together, the region can create pathways to progress and address the true threat to public health and safety that took shape post-2020: a lack of ongoing and action-oriented collaborations which aim to prevent, educate, destigmatize, humanize and ultimately treat substance use disorder.

Appendix A

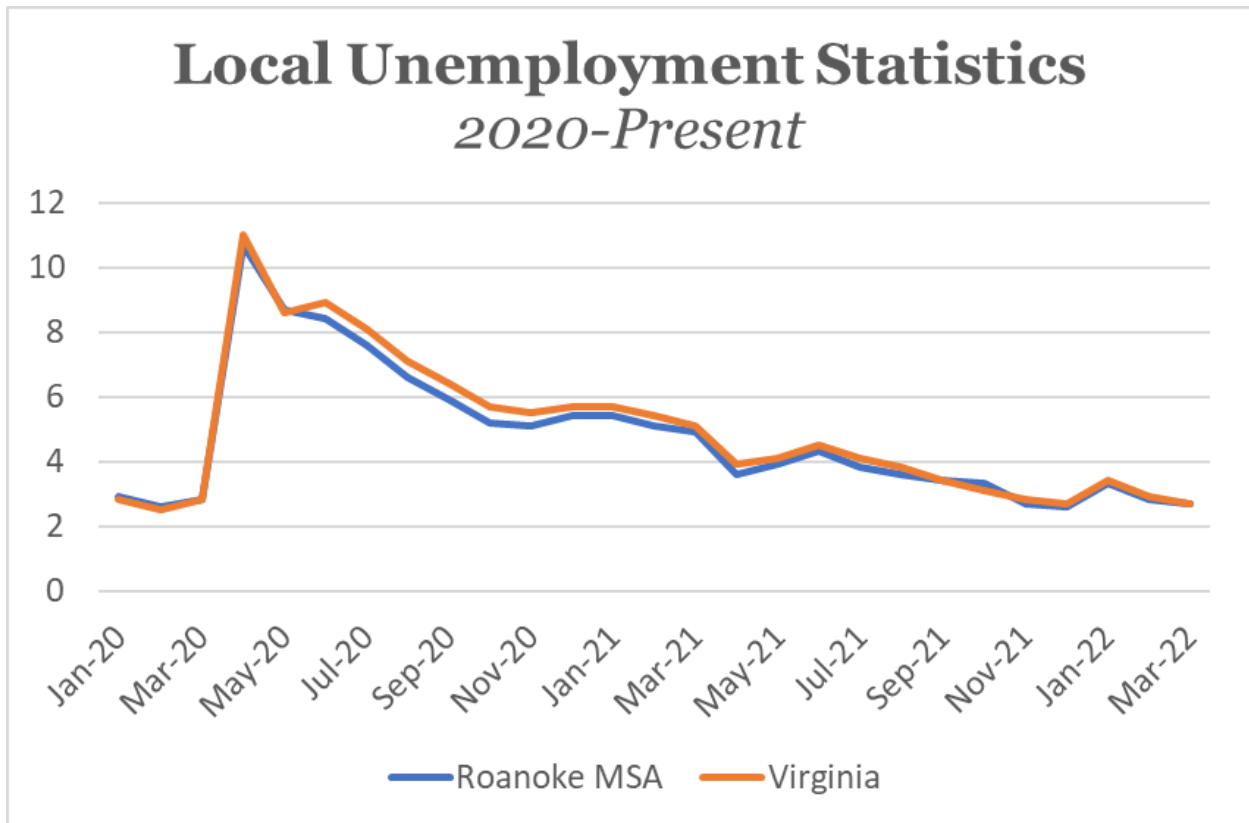
Table 1: Summary of Job Postings from 8/30/2022-9/28/2022

Summary

Total Job Posts	Occupations	Locations	Employers	Certifications	Hard Skills	Soft Skills	Job Titles	Education Levels	Programs	Job Types
14,376	572	860	3,022	276	1,182	100	9,117	6	251	9

Source: JobsEQ®, <http://www.chmuraecon.com/jobseq> Copyright © 2022 Chmura Economics & Analytics, All Rights Reserved.

Table 2: Unemployment Rate for Roanoke, VA MSA



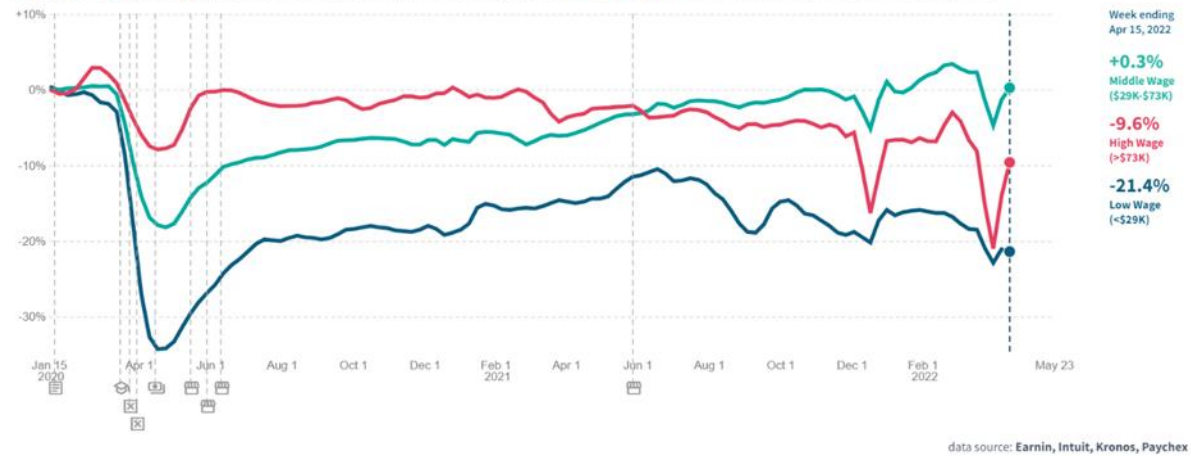
Source: Virginia Works LMI System. Local Area Unemployment Statistics. May 2022. <https://www.viriniaworks.com>

Table 3: Employment Rates by Wage in Virginia

MEMBER GOVERNMENTS: Counties of Alleghany, Botetourt, Craig, Franklin, and Roanoke; Cities of Covington, Roanoke, and Salem; Towns of Clifton Forge, Rocky Mount, and Vinton. www.rvarc.org

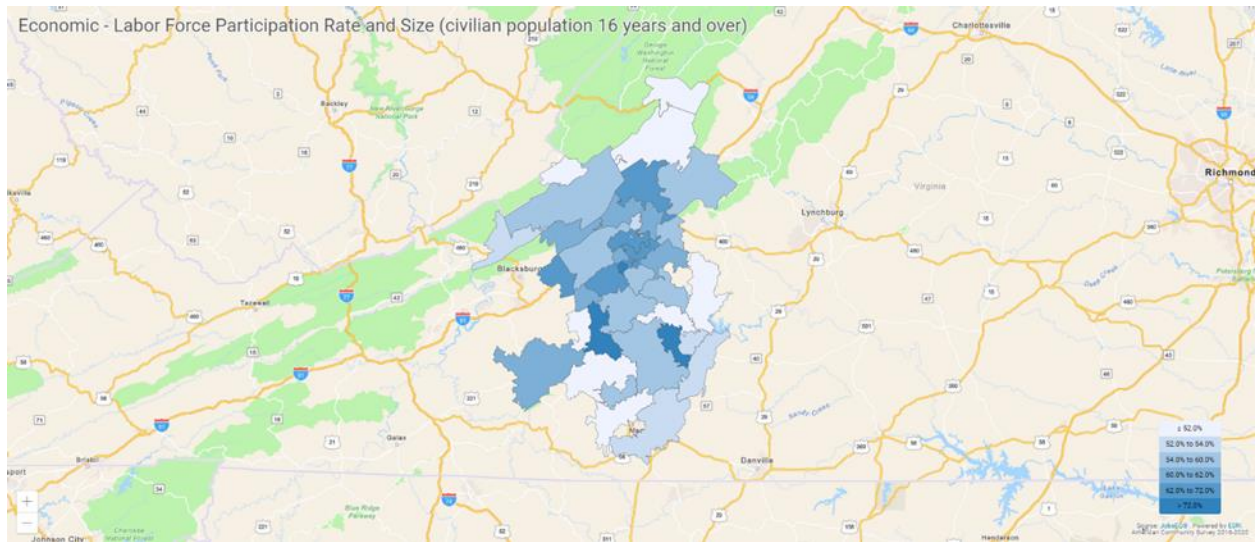
Percent Change in Employment*

In Virginia, as of April 15 2022, employment rates among workers in the bottom wage quartile decreased by 21.4% compared to January 2020 (not seasonally adjusted).



Source: JobsEQ®, <http://www.chmuraecon.com/jobseq> Copyright © 2022 Chmura Economics & Analytics, All Rights Reserved.

Table 5: Labor Force Participation Rate for the Roanoke, VA MSA



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