



RAC MPHISE Pilot Project
Mission Critical Functions Survey
(Excerpted from RAC MPHISE Pilot Project Report)

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Executive Summary

Resilient America Communities Bay County (RAC Bay County) is a multi-sector public-private partnership working to provide situational awareness to residents so they can make informed decisions both individually and collectively to help them flatten the pandemic curve in ways that build community capacity. The Medical and Public Health Information Sharing Environment (MPHISE) is a public/private sector initiative that facilitates the open sharing of medical and public health information across organizational boundaries – both internal and external to Government – with a goal of delivering the consistent guidance, policy, and capabilities required to serve and protect our nation's people and critical infrastructure. The purpose of the RAC-MPHISE pilot project in Bay County Florida was to create a Whole of Society approach to sharing data related to the mitigation of COVID-19 and its associated societal impacts in ways that: increase stakeholder engagement across sectors, promote community cohesion, facilitate data sharing and increase situational awareness. The pilot efforts resulted in:

- Gap and Solution Analysis derived from dialogue at the pilot Kickoff Meeting and at virtual Community Forums,
- Potential solutions to community gaps with action plan frameworks produced at a simulation of the full trajectory of the pandemic, called Simulated Solutions,
- Mission Critical Functions Survey, and
- Identified priority vulnerabilities at the county and zip code levels derived from a Mission Critical Functions Survey that was conducted in partnership with Trust Network members from 6 churches, a dance studio and a civic group.

Outgrowths of the data gathering efforts include a robust communications plan, that has launched a series of Zoom Community Forums streamed on Facebook, the formation of a work group to refine and implement the Mental Health action plan framework advanced by the community at the Simulated Solutions, and a Trust Network that reaches deeply into the zip codes most affected by COVID-19 in Bay County, Florida. This pilot project also broadened stakeholder engagement in the Resilient American Communities Core Leadership Work Group, and increased the voice of the community in core leadership.



Bay County Overall Mission Critical Function Priority Vulnerabilities

Mission Critical Functions Surveys allow respondents to rank 26 different functions essential to a functioning society on a scale from 1 (Extremely Vulnerable) to 7 (Resilient and Regenerative). These rankings provide a snap shot of the vulnerable and resilient components in the community. Aggregation of data can obscure vulnerabilities that may be acute at greater levels of resolution. Therefore the results of the survey were analyzed in the aggregate, by zip code and by census tract.

The survey also posed questions specific to the COVID pandemic, and solicited comments from respondents on the mission critical functions themselves. Comments were examined at the zip code and census tract level as well. Correlations among responses to related questions were also examined to obtain a better assessment of the factors contributing to respondent determinations of rank.

The bar chart of Mission Critical Functions on the following page is the Bay County aggregation. Average critical functions ratings fell between 3.41 and 4.94 on a 1 to 7 scale. The colors in the legend are based on rounding to an integer value. By doing so, it is clear that in the aggregate, residents of Bay County experience elevated vulnerability in **Housing Safety** (3.41), and that both **Health Services** (4.52) and **Communications** (4.94) are regarded to be resilient. The balance of the aggregated Mission Critical Functions rounded to a 4, which indicates categories that are not affected by hazards, or recover quickly.

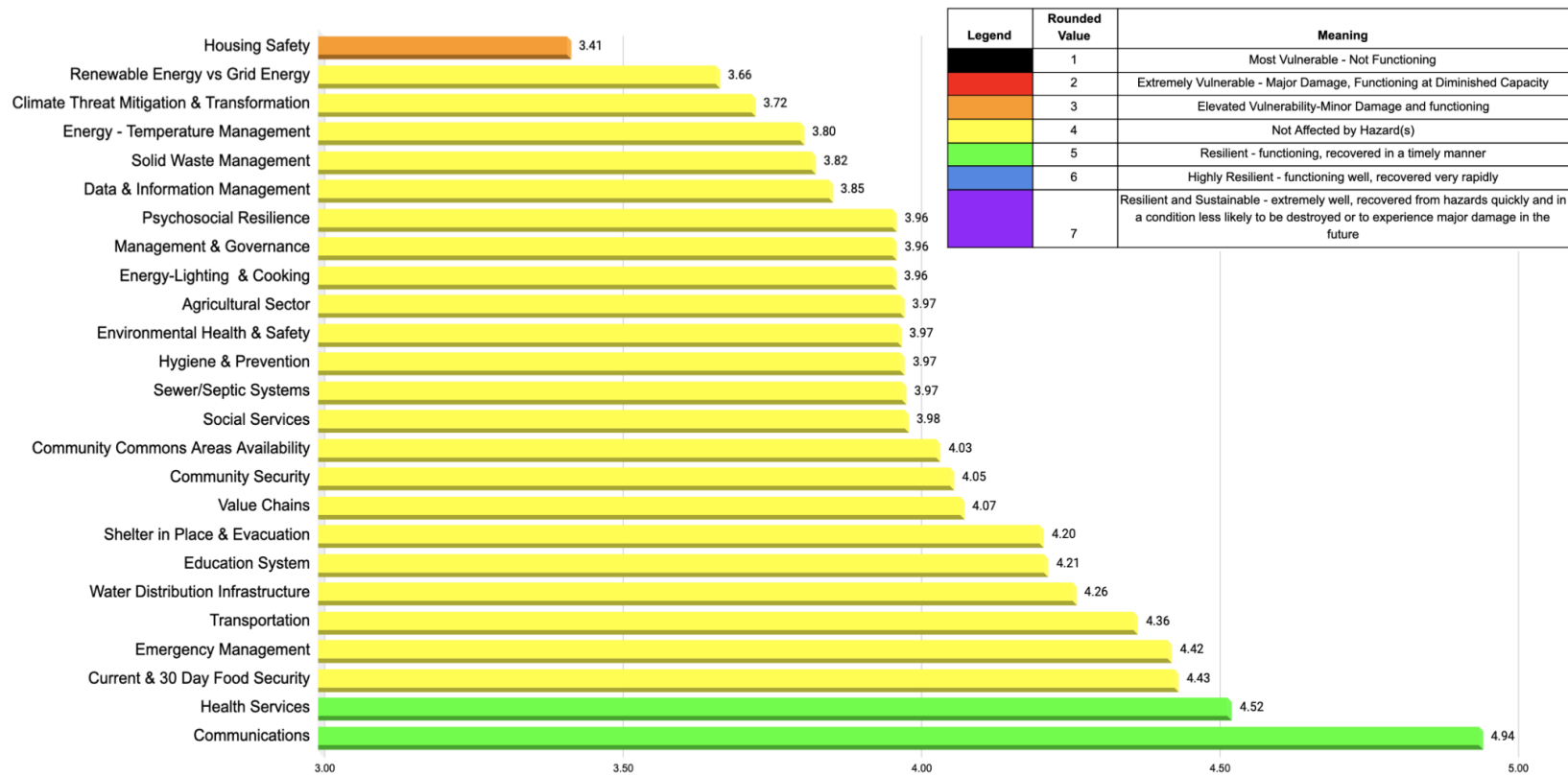
Housing Safety and affordability as well as issues of homelessness were voiced by community leaders at the project Kick off event (p. 28) and by residents at Community Forums (p. 29) during Gap and Solutions discussions (see APPENDIX A). and the Community Forum Gap and Solutions discussions are consistent with this finding, however other gaps identified, such as Environmental Health and Safety and Education of students that is 2 years behind were not picked up in this aggregated data.

It is therefore necessary to disaggregate the quantitative Mission Critical Functions data into zip codes and to include residents' comments to identify Mission Critical Functions Vulnerabilities.



Bay County Mission Critical Functions

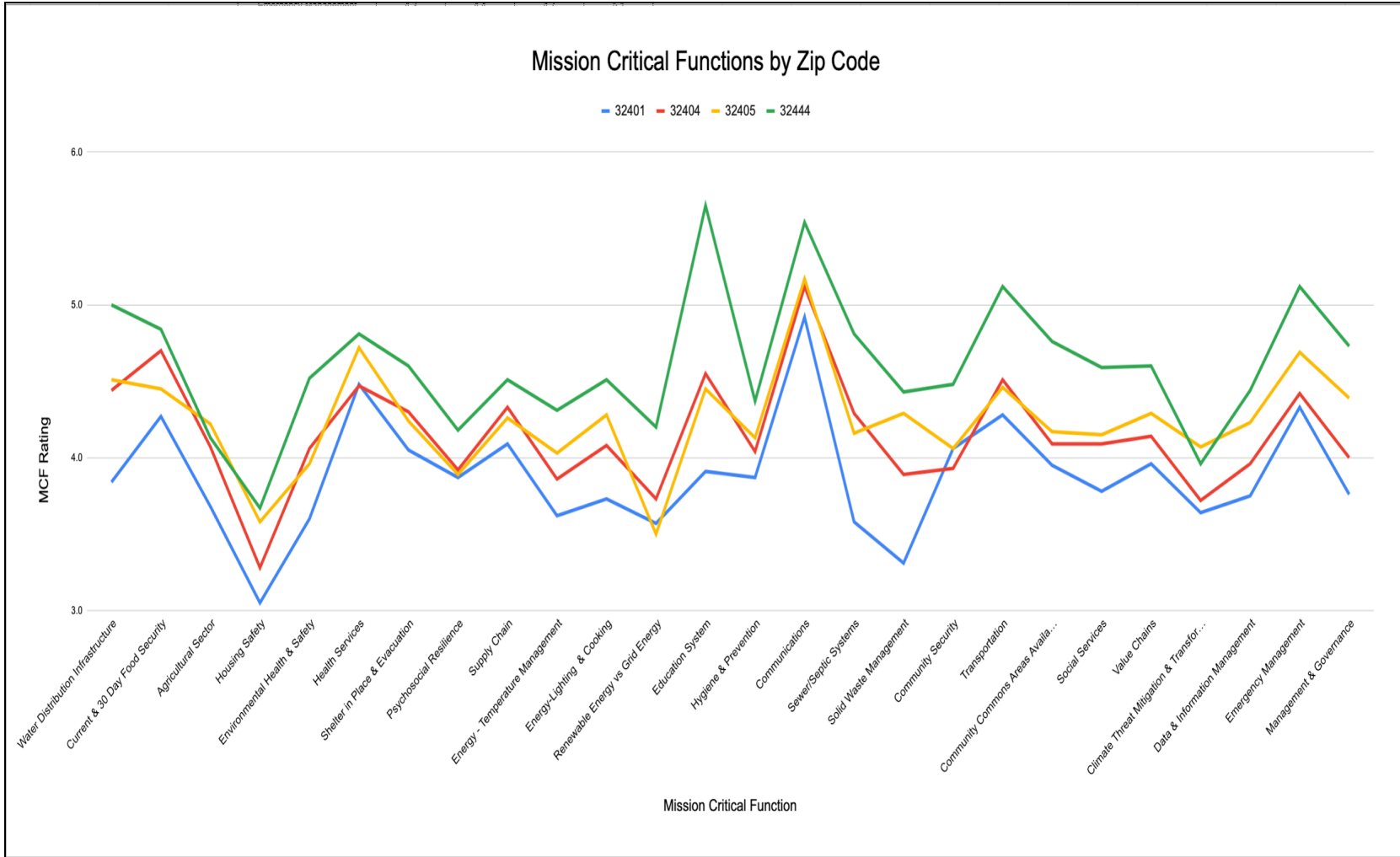
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Mission Critical Functions
Zip Code Analysis

Mission Critical Functions Ratings by Zip Code





The zip code specific graph of Mission Critical Functions enables the identification of vulnerabilities specific to zip code. In general, 32401 has the lowest rankings, indicating greater vulnerability, and 32444 has higher rankings, indicating greater resilience, with 32404 and 32405 between the extremes.

Notable deviations from trend are:

- The greatest Water Distribution, Sewer and Septic and Solid Waste vulnerability is in 32401 and 32404, followed by 32405. Resident comments explain the low ratings due to sewage back-up, overfull landfills and the closing of the incinerator. In **32401** there were 18 comments about water. There were 3 complaints about taste, 5 about smell, 3 about color and 2 about hardness. One person complained of “too many water boils from sewage.” A specific mention of Watson Bayou cited discoloration and oiliness. There were 4 comments expressing water safety concerns including the need for more testing. One comment was about flooding. Of the 18 comments, 2 were that they had no problem with their water.
- There are markedly lower rankings for Solid Waste in 32401
- Housing Safety receives low ratings in all 4 zip codes, and is the only Mission Critical Function for which all zip codes have ratings less than 4 on a 1 to 7 scale.
- The lowest ranking for Renewable Energy v Grid Energy is in 32405.
- 32404 dips below 32405 for Solid Waste and below all other zip codes for Community Security.

32401 Priority Vulnerabilities (See Comments, p. 72)

The fourth largest number of cumulative COVID cases (1,219 cases on 12.27.2020) in Bay County is in zip code 32401. Thirty five percent of survey respondents were from 32401.

No Mission Critical Functions received a 5 or higher ranking in 32401. The highest ranking, and therefore most resilient critical functions were Communications and Health Services (Communications: 4.9 and Health Services: 4.5). The two issue areas identified in 32401 with the lowest rankings were Housing and Solid Waste (Housing Average Rank: 3.1 and Solid Waste Average Rank: 3.3).

Priority vulnerabilities identified in 32401 were **Housing** and **Solid Waste Management**.

Concerns related to housing included:

- Older homes that are not hurricane safe
- Homes with Hurricane Michael Damage that are still not repaired



- Need for mandatory home and flood insurance
- Low income residents losing family homes
- City taking possession of land
- Contractors “ripping people off”
- Flooding and the need for more drainage

Concerns related to Solid Waste included:

- Overfull landfills
- Incinerator closing
- Pollution from the landfill causing “sour water and soil.”
- The smell
- Two comments were positive, one of which was they did a good job after Hurricane Michael

32404 Priority Vulnerabilities (See Comments p. 97)

The zip code with the greatest number of cumulative COVID cases (2,494 cumulative cases on 12.27.2020) in Bay County is 32404, which includes Parker, Callaway and portions of Panama City. Nineteen percent of survey respondents lived in 32404.

The Mission Critical Functions average rankings in 32404 were between 3.3 and 5.1. The highest rankings, and therefore the most resilient critical functions were Communications and the Current and 30 day Food Security (Communications Average Rank = 5.1 and Food Security Average Rank = 4.7). Priority Issues identified in 32404 were **Housing Safety, Renewable Energy v Grid Energy and Climate Threat Mitigation and Transformation** (Housing Safety Average Rank=3.3, Renewable Energy v Grid Energy= 3.7 and Climate Threat Mitigation and Transformation = 3.7)

Concerns related to Housing Safety Included:

- Lack of enough housing
- Lack of affordable housing
- Lack of hurricane proof housing
- Remaining housing damage from Hurricane Michael
- Heavy rain causing flooded ditches and toilets stopping up in Parker
- Too many trailers
- Homeless people



32405 Priority Vulnerabilities (See Comments p. 114)

Zip code 32405 has the second largest number of cumulative COVID cases (1,926 cases on 12.27.2020) in Bay County. This is a Panama City Zip Code. Seventeen percent of survey respondents lived in 32405.

Communications (5.2), Health Services (4.7) and Emergency Management (4.7) were the highest ranked Mission Critical Functions. Priority issues identified were **Renewable Energy v Grid Energy** (3.5) and **Housing Safety** (3.6).

Concerns related to housing included:

- Flooding
- Homes in need of repair
- Vacant homes since Hurricane Michael that have not been repaired or demolished
- Mobile home parks nearby
- Displaced families
- Poor construction quality, especially in government housing
- People living in unlivable homes
- St. Andrews area Hurricane Sally damage on top of remaining Hurricane Michael damage
- ‘City and those in charge do not care about us [the have nots]’

32444 Priority Vulnerabilities (See Comments p. 133)

Zip code 32444 has the third largest number of cumulative COVID cases (1,520 cases on 12.27.2020) in Bay County. Lynn Haven is within this zip code. Thirteen percent of survey respondents resided in 32444.

The Mission Critical Functions that received the highest rankings in 32444 were Education (5.7), Transportation (5.1) and Emergency Management (5.1).

Priority vulnerabilities identified include **Housing Safety** (3.7) and **Climate Threat Mitigation and Transformation** (4.0).

Concerns related to Housing Safety included:

- Lack of affordable housing
- High rents
- Hurricane Michael damage
- Fire alarm