

ECONOMIC OUTLOOK THE NEW POST-PANDEMIC ECONOMY

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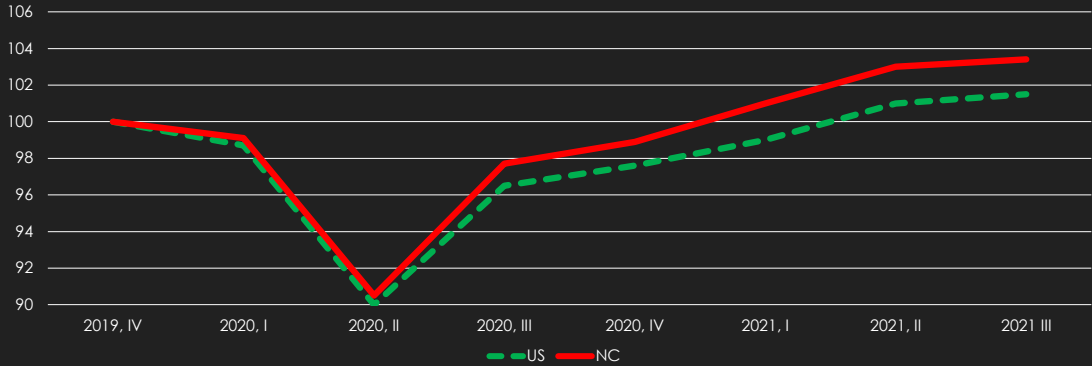
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TOPICS ADDRESSED INCLUDE:

- WHERE WE'VE BEEN – THE DOWNS AND UPS OF THE ECONOMY
- THE BIG LIFELINE – FEDERAL GOVERNMENT POLICY DURING THE PANDEMIC
- SURPRISE – WHY IS THERE A LABOR SHORTAGE?
- DOWNSIDE OF THE UPSIDE – INEVITABLE INFLATION?
- DROWNING IN DEBT – CAN WE AFFORD FIGHTING COVID?
- TURNING THE CORNER ON COVID – BUT WHAT'S ON THE LANE AHEAD?
- PREPARING FOR THE POST-PANDEMIC ECONOMY

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DOWN AND UPS OF THE US AND NC ECONOMIES (QUARTERLY GDP AS PERCENT OF 2019 IV GDP)



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BUT ALL SECTORS HAVEN'T FALLEN AND RISEN AT THE SAME RATE (% OF 2019 IV GDP)

	US		NC	
	2020 II	2021 II	2020 II	2021 II
FARMING	95%	104%	58%	111%
CONSTRUCTION	93%	103%	94%	104%
MANUFACTURING	88%	102%	89%	101%
TRADE	90%	101%	92%	103%
TRANSP/WAREHOUSING	75%	87%	79%	97%
PROFESSIONAL SERVICES	96%	104%	95%	105%
EDUCATION	88%	91%	87%	92%
HEALTH CARE	83%	97%	84%	97%
HOSPITALITY/LEISURE	47%	83%	60%	85%
PERSONAL SERVICES	77%	86%	79%	89%

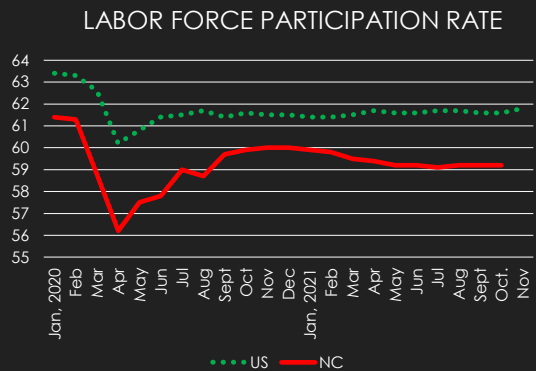
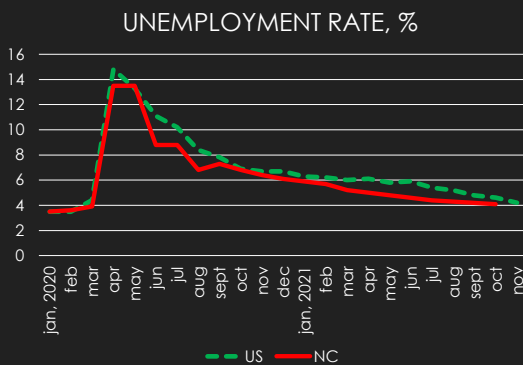
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RECOVERY HAS ALSO VARIED WITHIN NORTH CAROLINA EMPLOYMENT IN OCTOBER 2021 AS % OF EMPLOYMENT IN FEBRUARY 2020

ASHEVILLE	95%	HICKORY	100%
BURLINGTON	99%	JACKSONVILLE	99%
CHARLOTTE	98%	NEW BERN	97%
DURHAM-CH	100%	RALEIGH	100%
FAYETTEVILLE	96%	ROCKY MOUNT	97%
GOLDSBORO	96%	WILMINGTON	100%
GREENSBORO-HP	96%	WINSTON-SALEM	98%
GREENVILLE	102%		
NORTH CAROLINA	98%	US	97%

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TWO PICTURES OF THE LABOR MARKET



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POLLING QUESTION 1

In addition to the unemployment rate, an important indicator of the labor market is:

- A. the federal funds rate
- B. the prime interest rate
- C. the labor force participation rate
- D. the debt to income rate

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THE “SURPRISE” SHORTAGE OF LABOR

REASONS WHY FEWER PEOPLE HAVE BEEN LOOKING FOR WORK:

- CONTINUED WORRY OVER COVID
- UNCERTAINTY ABOUT SCHOOLS
- REDUCED AVAILABILITY OF CHILD CARE
- CASH FROM STIMULUS CHECKS AND CHILD PAYMENTS
- STOCK GAINS AND COVID MOTIVATING MORE RETIREMENTS
- UP-SKILLING OF LAID-OFF WORKERS
- DECLINE IN “REAL” WAGE RATES

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LABOR RE-ALLOCATION AMONG SECTORS IS ALSO OCCURRING

BASED ON LATEST DATA FOR NORTH CAROLINA (SEPTEMBER 2021)

SECTORS ABOVE THEIR PRE-PANDEMIC EMPLOYMENT PEAK:

CONSTRUCTION, INFORMATION, FINANCIAL SERVICES, PROFESSIONAL SERVICES

SECTORS STILL BELOW THEIR PRE-PANDEMIC EMPLOYMENT PEAK:

HOSPITALITY/LEISURE, PERSONAL SERVICES, GOVERNMENT, MANUFACTURING

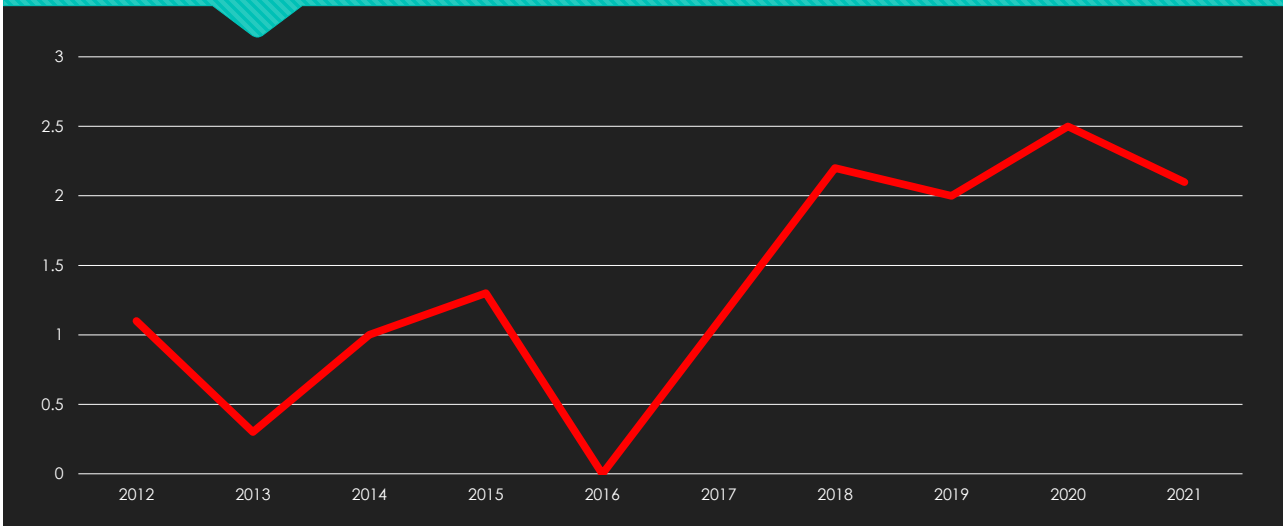
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BUSINESS RESPONSES TO LABOR SUPPLY ISSUES

1. ATTRACT LABOR WITH HIGHER PAY AND/OR BENEFITS
2. SUBSTITUTE TECHNOLOGY AND AUTOMATION FOR WORKERS
3. IMPROVE WORKER PRODUCTIVITY

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TRENDS IN LABOR PRODUCTIVITY IMPROVEMENTS (ANNUAL % CHANGE IN OUTPUT PER HOUR)



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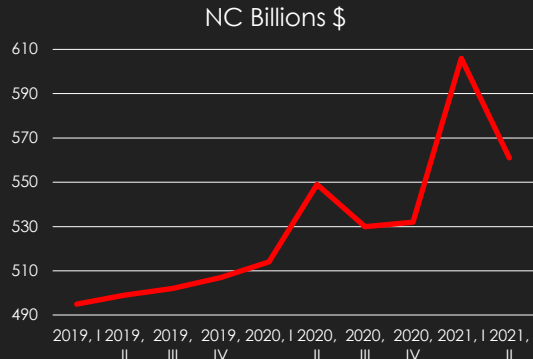
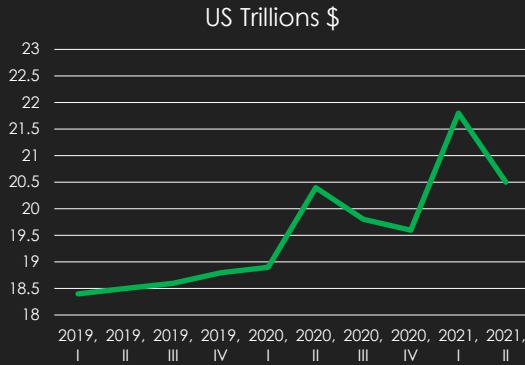
UNPRECEDENTED FEDERAL ASSISTANCE

\$6 TRILLION
25% of GDP
\$80 BILLION to NC



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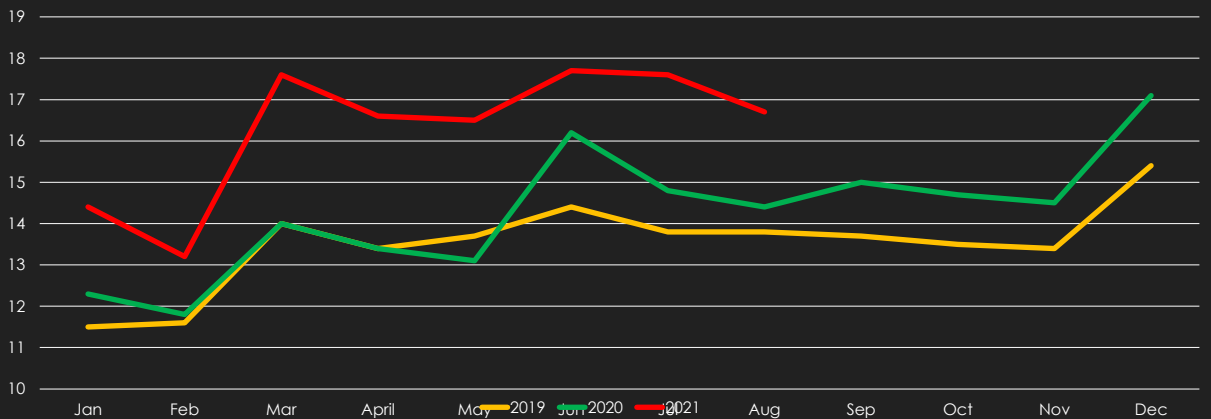
FEDERAL AID HAS SUPPORTED PERSONAL INCOME



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NORTH CAROLINA MONTHLY RETAIL SALES

(NOMINAL, MILLIONS \$)



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TOO MUCH, TOO LITTLE?

FIRST PANDEMIC OF THIS SIZE IN A CENTURY – UNKNOWN, UNCERTAINTIES
 ERR ON THE SIZE OF TOO MUCH HELP
 FUNDS USED TO MAINTAIN HOUSEHOLDS, BUSINESSES, INSTITUTIONS
 WANTED ECONOMY TO SURVIVE

CONSUMER SPENDING AND HOUSEHOLD SAVINGS ROSE DURING THE PANDEMIC
 STILL, ISSUES PERSISTED – EVICTIONS,

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BALANCING THE CURRENT AGAINST THE FUTURE

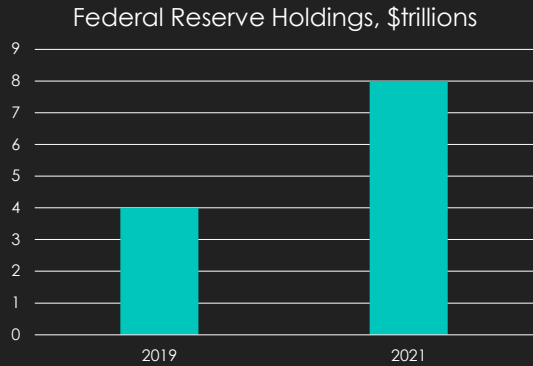
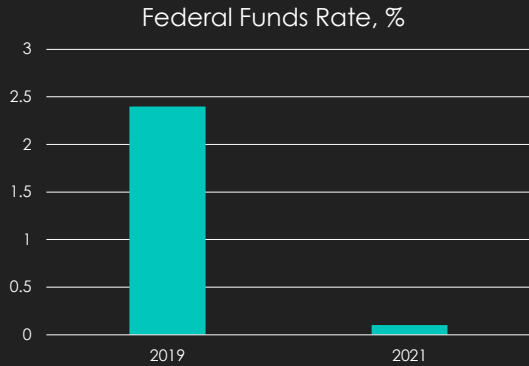
OPPORTUNITY COST OF
 WHAT ELSE COULD DO
 WITH FUTURE FUNDS

LOSSES IF LET ECONOMY
 COLLAPSE DURING THE
 PANDEMIC



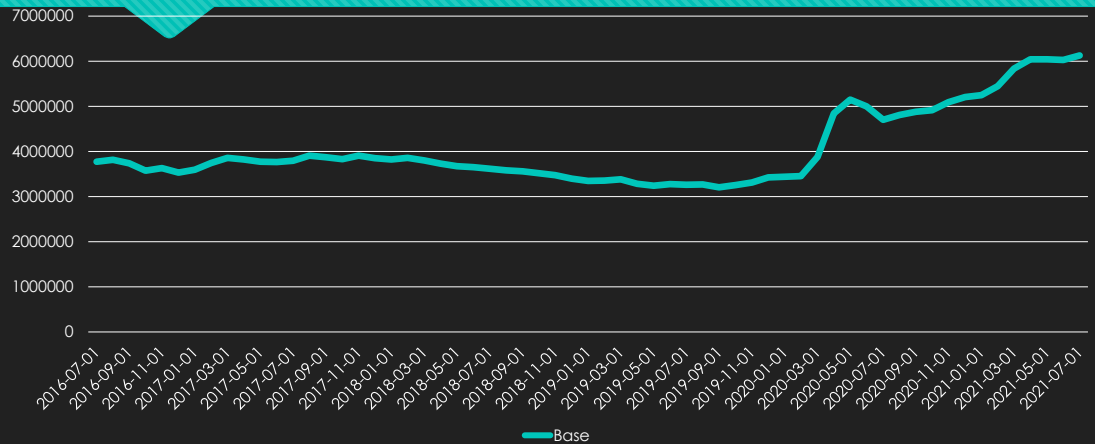
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FEDERAL RESERVE ALSO STEPPED UP – FINANCED GOVERNMENT BORROWING, KEPT INTEREST RATES LOW



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MONETARY BASE(\$ MILLIONS)



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POLLING QUESTION 2

THE FEDERAL RESERVE HAS THE UNIQUE ABILITY TO

- A. CREATE MONEY
- B. BORROW MONEY
- C. PASS THE FEDERAL BUDGET
- D. PREVENT GOVERNMENT SHUTDOWNS

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CHALLENGE FOR THE FEDERAL RESERVE

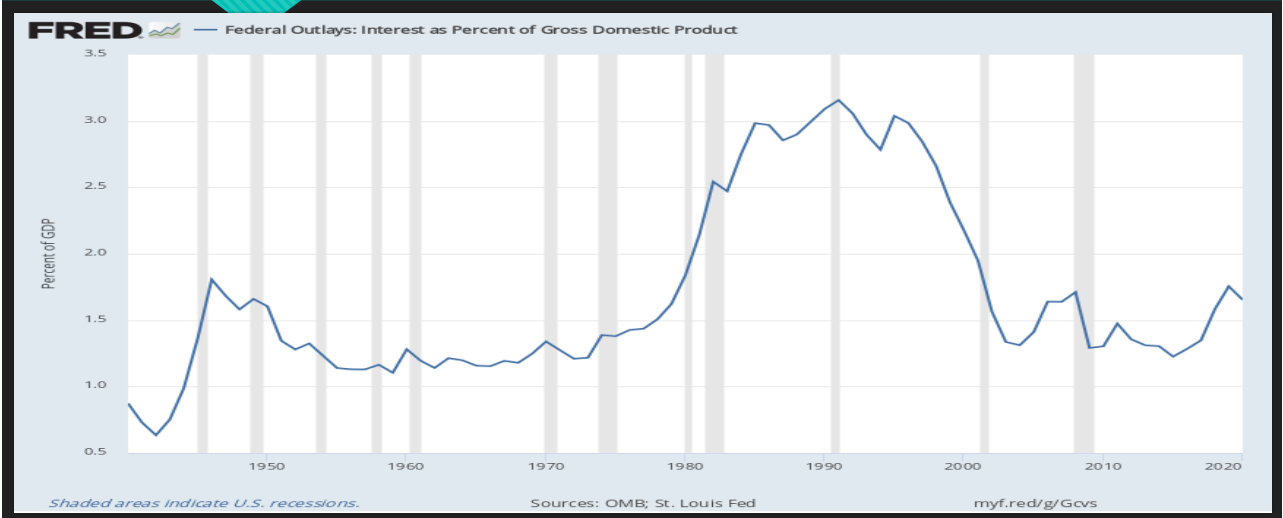
REDUCING STIMULUS –
MEANING INCREASING
INTEREST RATES AND
DECREASING BALANCE
SHEET –WITHOUT
HINDERING ECONOMIC
GROWTH



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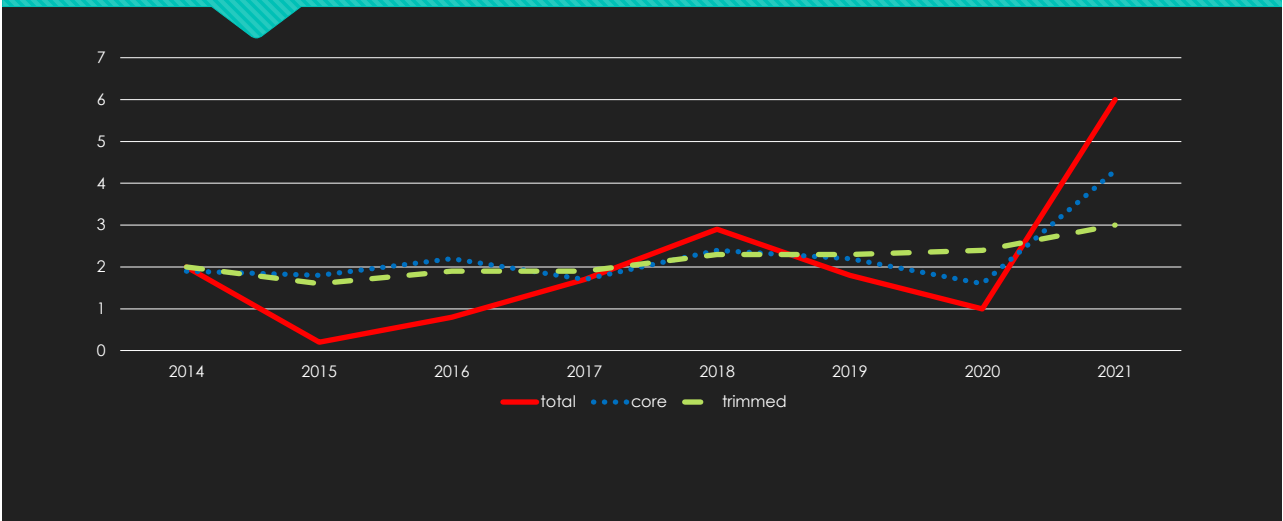
ISSUE: CAPACITY TO CARRY FEDERAL DEBT

(federal debt interest payments as a percent of GDP)



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ISSUE: INFLATION (% change)



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TWO VIEWS ON INFLATION

DEMAND PULL: ECONOMY IS FLUSH WITH CASH AND "PENT-UP" DEMAND
HIGHER INFLATION RATE (5% to 6%) THROUGH 2022

SUPPLY PUSH: FASTER INFLATION IS RELATED TO DISRUPTIONS IN THE PRODUCTION OF
PRODUCTS AND SERVICES AS THE ECONOMY RECOVERS FROM THE PANDEMIC.
THE DISRUPTIONS ARE TEMPORARY.

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ISSUE: LABOR AVAILABILITY

SHOULD IMPROVE AS SUPPLEMENTAL UNEMPLOYMENT PAYMENTS ENDED

THE UP-SKILLING OF MANY WORKERS WILL PRESENT ON-GOING ISSUES
FOR SOME INDUSTRIES

THERE ARE LONG-RUN SOLUTIONS, BUT TAKES TIME

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POLLING QUESTION 3

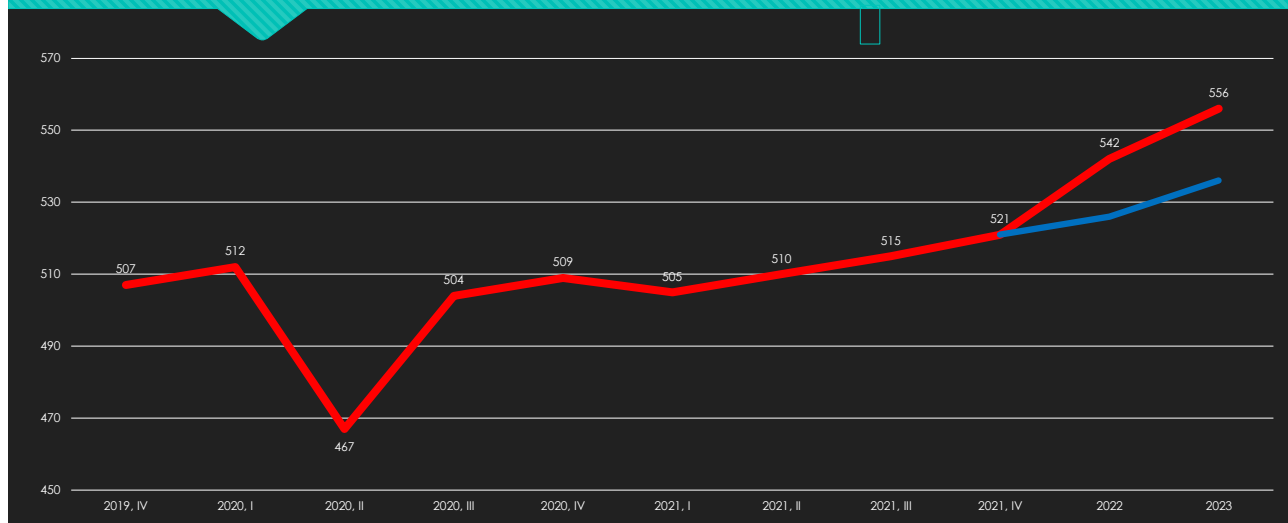
FOR MOST OF THE 21ST CENTURY, THE U.S. INFLATION RATE WAS

- A. HISTORICALLY HIGH
- B. HISTORICALLY LOW
- C. HISTORICALLY AVERAGE

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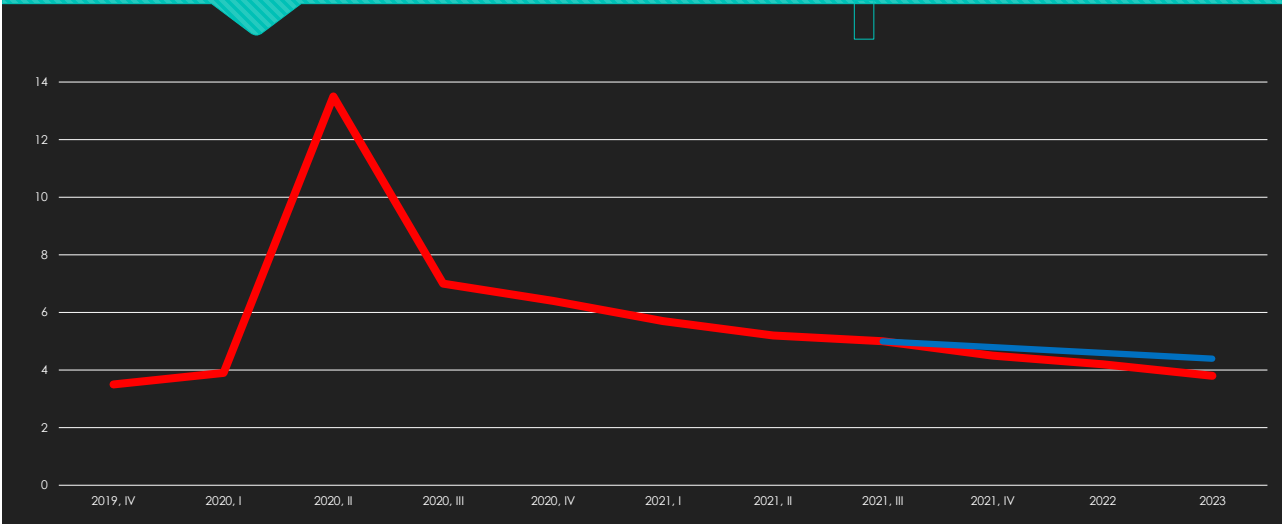
FORECASTED PATH OF NORTH CAROLINA'S REAL GDP

(red: without new variants; blue: with new variants)



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NORTH CAROLINA'S FORECASTED PATH OF THE UNEMPLOYMENT RATE (red: without new variants; blue: with new variants)



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LONG RUN IMPACTS OF THE PANDEMIC: THE POST-COVID-19 ECONOMY



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MORE LABOR MARKET DISRUPTION

SHIFT FROM PRODUCTION TO
DELIVERY, SERVICES

MORE JOBS IN TECHNOLOGY

BIGGEST ISSUE OF POST-
PANDEMIC ECONOMY

POST-HIGH SCHOOL TRAINING,
APPRENTICESHIPS, ON-THE-JOB
TRAINING, COLLABORATIONS

BE PRO-ACTIVE

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BIG IMPLICATIONS FOR EDUCATION

SOME LEVEL OF DISTANCE
LEARNING IS HERE TO STAY AT
ALL LEVELS OF EDUCATION

SHOULD GET BETTER

EDUCATION
RE-MADE

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HIGH SPEED INTERNET NOW A NECESSITY

CONTINUED EXPANSION OF
CABLE PROVISION

BUT NEW PROVISION – LOW
ORBING SATELLITES

FULL INTERNET BY 2030?

INTERNET EXPANSION

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TELE-WORKING

8% PRE-VIRUS

60% AT PANDEMIC PEAK

20% - 30% LONG-RUN LEVEL

WATCH HOW INTERNET IS
PROVIDED

WORK – HOME BALANCE

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DRONE DELIVERY OF
PRODUCTS; INTERNET
DELIVERY OF SERVICES

IMPLICATIONS FOR CONTROL OF THE SKIES

AVOIDS FACE TO FACE CONTACT

NEXT: 4D HOME MANUFACTURING

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RECONSIDERATION OF
RESIDENTIAL LOCATION

"DISTANCE IS DEAD"

PROXIMITY TO WORK,
SCHOOLS, SHOPPING NO
LONGER NEEDED

"NEW FARM LIFESTYLE" ON
CHEAPER LAND

INTERNET FROM THE SKY?

WHERE IS HOME ?

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POLLING QUESTION 4

AT IT'S PEAK DURING THE PANDEMIC, TELE-WORKING WAS USED BY WHAT PERCENTAGE OF WORKERS?

- A. 8%
- B. 20%
- C. 30%
- D. 60%

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IMPLICATIONS FOR NORTH CAROLINA

CONTINUED GROWTH –PERHAPS ACCELERATED – AFTER THE PANDEMIC

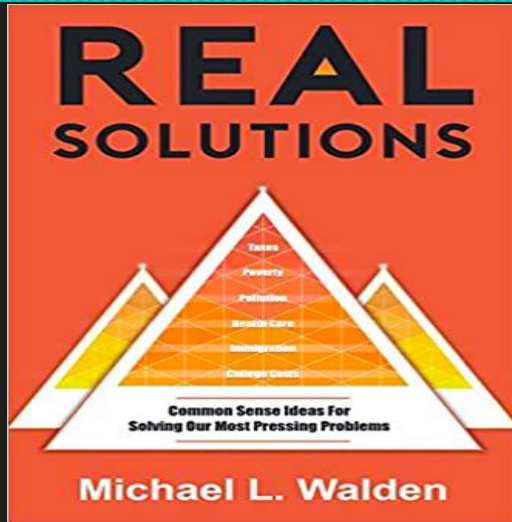
NORTH CAROLINA CONSIDERED A “SAFE STATE”

LOOK FOR SUBURBS TO HAVE FASTEST GROWTH

NEXT GAME-CHANGER – UNIVERSALLY AVAILABLE HIGH SPEED INTERNET – COULD INCREASE RURAL GROWTH

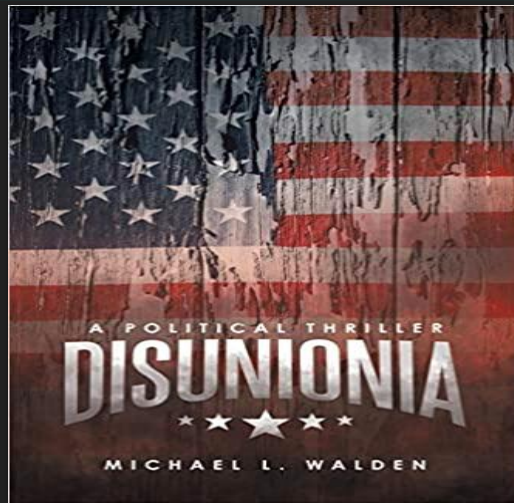
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“REAL SOLUTIONS” IS NOW AVAILABLE



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AND SO IS “DISUNIONIA”



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