



Testimony of the American Council of Engineering Companies of Pennsylvania (ACEC/PA)

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Before the House Transportation Committee's Public Hearing on
House Transportation Task Force's Legislative Bills
August 18, 2020

Chairman Hennessey, Chairman Carroll, House Infrastructure Taskforce Chair White and members of the committee, thank you for the opportunity to testify on the package of bills which have been introduced following the work of the House Transportation Infrastructure Taskforce in 2019.

I am Leeann Sherman, executive director for the American Council of Engineering Companies of Pennsylvania and I have with me today the President of our board of directors, Troy Holloway from Century Engineering who will be happy to take questions as well.

ACEC/PA is a trade association representing over 12,000 engineering consultants throughout the commonwealth consisting of engineers, land surveyors, scientists, technicians and various other professionals with varied disciplines, including civil, structural, sanitary, environmental, mechanical, electrical, geotechnical, chemical, industrial and agricultural engineering services. ACEC/PA is the *business* association of Pennsylvania's engineering industry.

Consulting engineers are involved in designing virtually every construction and renovation project in the nation, from bridges and prisons to water purification plants and energy-efficient generation and distribution systems. They design ventilation and electrical systems for new hospitals, figure out how to build tunnels through mountains without disturbing the local wildlife, and renovate wastewater treatment systems for bustling cities. They solve environmental and ecological problems.

As a catalyst in the problem-solving process, consulting engineers lead teams of multi-disciplined professionals on complex technical projects. They serve as expert advisors to local, state and federal government agencies, and to private businesses and industries. Consulting engineers serve these public and private clients from preliminary survey and analysis through final design and construction.

While our members provide a wide range of professional engineering services, our membership has a very keen interest in civil engineering and the design of the public's water and transportation infrastructure that drive the design of America's built environment and its transportation, water and energy infrastructure.

From the industry's perspective, Act 89 was unquestionably the single-most important piece of state legislation – so thank you! Others have spoken about the benefits to the Commonwealth over the years since the 2013 passing and many states have used it as model for transportation funding. While we agree with its success, its intent was never going to fully solve the challenges especially should an anomaly like COVID-19 occur.

Almost decade ago, Pennsylvania was faced with critical choices on how to solve several extremely important issues not only for our residents but visitors. Public Transportation serves all 67 counties and was being strained in both rural and urban communities alike, the condition of our bridges was deteriorating, passenger rail, air and sea ports needed attention and our highways both state and local could no longer rely upon just "fixing and maintaining". We, Pennsylvania, needed a true investment in our infrastructure.

The passage of Act 89 provided a much needed \$2.3 billion-dollar investment and created the dedicated Multimodal Fund. This did not happen without many conversations, partnerships, education, study after study showing findings of need and a coalition of groups coming together for the betterment of Pennsylvania. As one of only a handful of states who passed such legislation at that time, we have since witnessed so many more recognize that this kind of dedicated effort must be accomplished and continued to further create a more stable tomorrow.

Many people wondered if our industry and others could handle the increases put upon us with the influx of projects and challenges and if we had the workforce to handle the increase in infrastructure that Act 89 would bring. I can tell you that we were ready, and we did it! Not alone of course but with public and private partnerships, associates from across sectors and industries alike, blue and white-collar workers and a coming together of businesses and state government to set us on a path for the future.

The jobs Act 89 created are not only in the engineering sector but across all sectors as we continuously partner and collaborate with other industries to solve issues and challenges and build a better community by building a better infrastructure in Pennsylvania. Please reference some statistics in the ACEC/PA Legislative Day Pocket Guide handout you have been provided. For every \$1billion spent on public transportation capital projects it sustains approximately 15,900 jobs, on public transportation operations it sustains 24,200 jobs and highway operations sustains 17,810 jobs while 25,000-30,000 jobs are created in the AEC industry or Architecture, Engineering and Construction all by the investment.

As infrastructure and construction projects have increased, we have also increased more jobs for Pennsylvania residents and companies which in turn creates economic growth across industries and sectors. I urge you to review the second document provided which is an economic update compiled just a few days ago from our national association, ACEC, which shows various charts and graphs but I do draw your attention to page 3 which is Construction by Project Type pie chart. You can see that no industry is not touched by the architecture, engineering and construction industry which sustains tens of thousands of direct jobs and hundreds of thousands from products and services the AEC firms utilize. This economic impact is significant.

There are many obstacles we still face, as we knew that we would have to build upon the foundation laid by Act 89. Act 44 requires the Pennsylvania Turnpike Commission to provide \$450 million per year for public transportation and projects and Act 89 modified this to change in 2022 with only \$50 million coming from the Turnpike and \$450 from the sales tax of motor vehicles. This legislated relief for the Turnpike is needed in 2022 or sooner.

At the moment, we are facing another challenge with detrimental effects.... a pandemic which not only has caused medical and economic hardship to Pennsylvania residents but state and local governments, small and large businesses in almost every sector and an unknown future when it comes to innovation and modernization. We have only been dealing with COVID-19 for just over 6 months, yet the effects will be felt for years if not decades to come. While this is fresh in our minds do not forget the statistics deputy secretary Batula has provided as to the planned reductions and estimated loss revenues. In 2019, the Pennsylvania Transportation Advisory Committee's (TAC) *Risks to Transportation Funding* noted the increasing funding gap of approximately \$5.5Billion annually and is rising because of the growing fuel efficiency of vehicles and decreasing buying power of revenues.

With a projected loss of \$800 million through 2021 to PennDOT from the pandemic, the

diversions from the MLF, the needs gap we knew would eventually catch up when Act 89 was passed, and the debt the Turnpike is under, we cannot spend another day doing nothing. We have hit a pivotal point and need you to act. Doing nothing and allowing the crisis at hand to continue is just not possible.

With travel restrictions, teleworking and financially strained companies and the workforce, we cannot ignore that we need to find solutions and we need to find them now. SB 778 passed the Senate in July 2019 with bipartisan support and now HB 2361 is set up to do the same although both would need amended to reflect the current timeframe. This is just one tool in the toolbox as some would say, but I say it is a start to much needed progression of actions that you as legislators can do. It cannot stop with HB 2361 or should even SB778 as hard conversations need to be had once again to find solutions like our consulting engineers do each and every day. You have done it before and we will continue to be here to educate, offer resources, assist with grassroots, and bring coalition and industries together but it needed to start yesterday. The pandemic has only exacerbated the urgency. The success of Act 89 was something to be celebrated with the support of many of you sitting here today but we knew it fell short and this pandemic has further increased the gap.

In summary, I urge the following:

- Move and pass HB 2361 with appropriate real time amendments needed which would tackle one of several actions to help ease the burden of the Turnpike in a stepdown and organized approach.
- Ensure monies are not diverted from the Motor License Fund or any fund dedicated to transportation and transportation infrastructure for non-transportation related items. One example is the diversion of monies to the PA State Police. While we support the PSP and understand the value of their existence especially to ensure the safety of not only all residents and visitors but of our roadways whether drivers, transporters or highway operation workers, a source must be established in lieu of the Motor License Fund transfers. There have been options put forth but with no substantial action taken. This is critical to the MLF and PSP to be a priority of the state legislature.
- Discuss and develop a sustainable and reliable solution for the sunset of Act 44 monies from the PA Turnpike Commission and the replacement with sustainable, bondable revenues for public transportation. This must include a bipartisan approach with honest discussions and education on the impacts if nothing is done. The time to act is now.
- And finally, we cannot assume or wait for the federal government to act. Just like Pennsylvania's local governments have said they need the ability to raise revenues because they cannot wait for the state legislature as their challenges are building,

Pennsylvania cannot assume there will be a savior in the federal government. We, you, and all Pennsylvania's need to work together and it must be now. Waiting will create deeper problems and shifting of the funds available will only leave maintenance and other projects on the table. We have seen what can happen if we do nothing for our highways, roadways and bridges but it is so much bigger than only these. The lag time to construction when design activities or environmental surveys are not completed can be years and when maintenance or modernization is not attended too, we sink deeper behind. With some of the legislation introduced in the package of bills discussed here, some in the Senate and even some that have yet to be introduced, there are solutions and ideas but we all need to work together and it cannot wait any longer. And if the federal government does come through with relief, Pennsylvania needs to be ready to leverage that opportunity.

To date, a clear solution to this impediment has not been brought forth. ACEC/PA and the consulting industry will continue to engage with you and our partners to help solve the crisis we are facing.

Thank you again for the opportunity to provide testimony today and note that I have also supplied with the written testimony two additional documents; the Economic Impact from ACEC and the pocket guide which we provided to every legislator as we stopped at every office last year during our ACEC/PA Legislative Day.

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The background of the entire page is a dark, high-contrast photograph of the Pennsylvania State Capitol building at night. The building's iconic dome and classical architectural features are silhouetted against a deep blue night sky. The lighting is dramatic, with some highlights on the building's facade and the dome's structure.

PARTNERING FOR THE FUTURE OF PENNSYLVANIA'S INFRASTRUCTURE

ACEC/PA

AMERICAN COUNCIL OF ENGINEERING COMPANIES
of Pennsylvania

ACEC/PA represents nearly 12,000 engineers, architects, land surveyors and other specialists in Pennsylvania, with a primary mission to strengthen the business environment for member firms through government advocacy, political action and business education.



FACT:

The 2011 Transportation Funding Advisory Commission report quantified the state's unfunded transportation needs at approximately \$3.5 billion, which would grow to \$7.2 billion by 2020. Transportation could become the most significant factor related to Pennsylvania's economic health if funding risks are not addressed properly.

FACT:

EVERY \$1 BILLION SPENT ON:

- Public transportation capital projects sustains 15,900 jobs
- Public transportation operations sustain 24,200 jobs
- Highway operations sustain 17,810 jobs Source: American Public Transportation Association

For every billion we invest, 25,000-30,000 good-paying jobs are created in *engineering*, construction and other like industries.

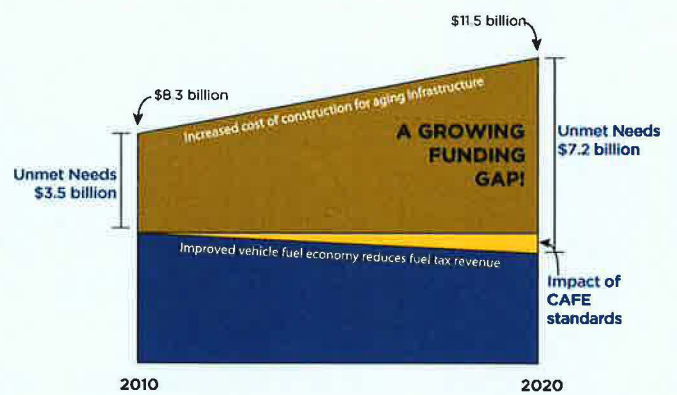
Source: Pennsylvania Department of Transportation

BENEFITS OF ACT 89 OF 2013:

- 50,000 jobs created by 2017-18
- 1.3 billion additional investment in state roads and bridges by 2017-18
- 237 million additional investment in local roads and bridges by 2017-18
- 86 million additional investment in PA Turnpike expansion by 2017-18

PENNSYLVANIA'S TRANSPORTATION FUNDING NEEDS

Construction cost inflation and increased vehicle fuel efficiency further reduce our future buying power



WHERE DOES YOUR TOLL DOLLAR GO?

	ACT 44 PAYMENTS	OPERATING EXPENSES	CAPITAL IMPROVEMENTS
2012	18¢	40¢	42¢
2018	25¢	31¢	44¢

Source: Pennsylvania
Turnpike Commission

TRANSPORTATION FUNDING SOURCES

PRIMARY PENNSYLVANIA FUNDS:

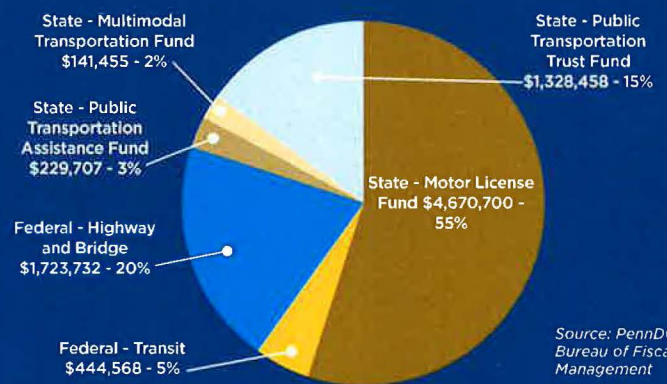
- Motor License Fund (MLF)
- Public Transportation Trust Fund (PTTF)
- Multimodal Transportation Fund (MTF)
- Public Transportation Assistance Fund (PTAF)

Source: Rules to Pennsylvania Transportation Funding-Transportation Advisory Committee

PRIMARY FEDERAL FUNDS:

- Highway Trust Fund (HTF),
which allocates to states
 - Highway and bridge funding
 - Public transportation

FY 2018-19 PENNSYLVANIA TRANSPORTATION FUNDING BY SOURCE



FY 2018 PTC REVENUE VS. EXPENSES

TOTAL EXPENDITURES \$2.1B

EXPENDITURES

Operating Expenses	\$370M
Debt Service	\$690M
Act 44 Payments	\$450M
Capital Expenditures	\$550M

Total **\$2.1B**

TOTAL REVENUES \$2.0B

REVENUES

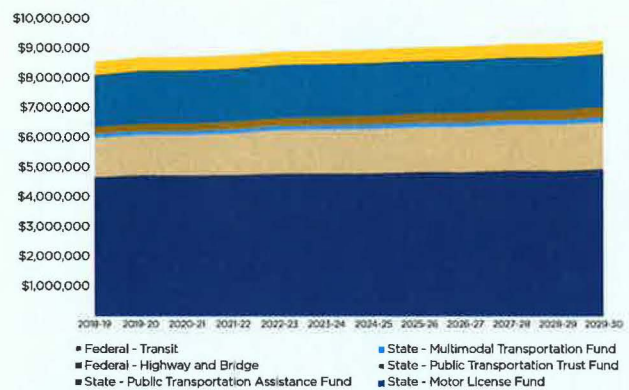
Total Operating Revenues	\$1.1B
Bond Proceeds	\$900M

Total **\$2.0B**

Source: Pennsylvania Turnpike
Commission

TRANSPORTATION BASELINE FUNDING PROJECTIONS

Baseline projections assume no risk impacts. Even with no risks considered, funding is expected to increase only about 1 percent over the study period—not even keeping pace with typical inflation.



Source: Risks to Pennsylvania Transportation
Funding - Transportation Advisory Committee

FEDERAL FUNDING IMPACT

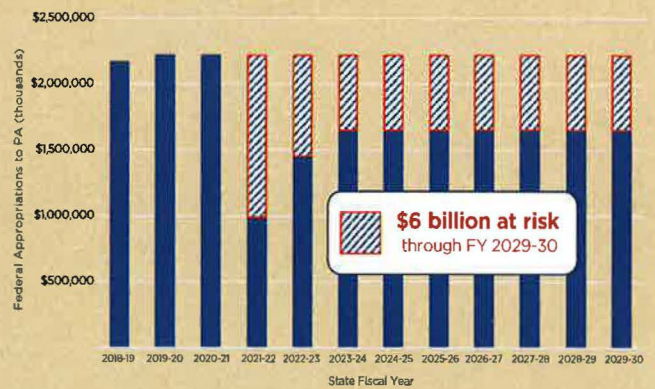
Source: *Risks to Pennsylvania Transportation Funding - Transportation Advisory Committee*

IF

...federal appropriations are reduced beginning in federal FY 2021 due to the insolvency of the Highway Trust Fund...

THEN

...Pennsylvania's highway and public transportation funding through FY 2029-30 could be reduced by a cumulative \$6 billion.



PUBLIC TRANSPORTATION TRUST FUND AND MULTIMODAL TRANSPORTATION FUND IMPACT

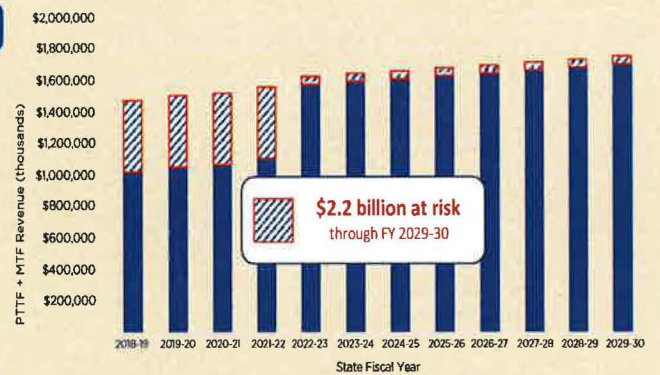
IF

...litigation by national motor carrier organizations against the PTC continues to prevent payments by the PTC to the PTTF and MTF...

THEN

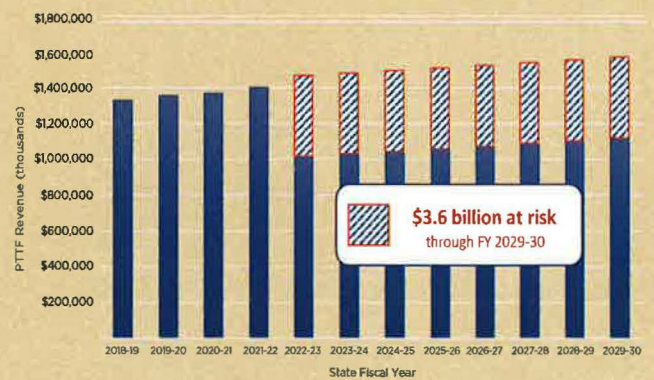
...transportation funding through FY 2029-30 could be reduced by a cumulative \$2.2 billion.

Source: *Risks to Pennsylvania Transportation Funding - Transportation Advisory Committee*



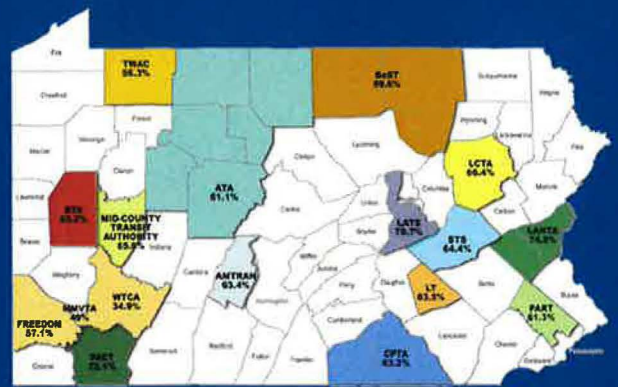
PUBLIC TRANSPORTATION TRUST FUND IMPACT

Source: Risks to Pennsylvania Transportation Funding - Transportation Advisory Committee



PERCENTAGE OF FIXED-ROUTE TRANSIT CUSTOMERS WITHOUT ALTERNATE TRANSPORTATION

Source: Customer surveys during Act 44-mandated transit agency performance reviews in 2017 and 2018



ENGINEERING IMPACTS THE US ECONOMY THROUGH VARIOUS MARKETS

(Measured in firms reporting)
Source: ENR



PA TRANSPORTATION FUNDING AT RISK BY FUND TOTAL POTENTIAL IMPACT THROUGH FY 2029-30

\$18.5 billion Risk by Fund

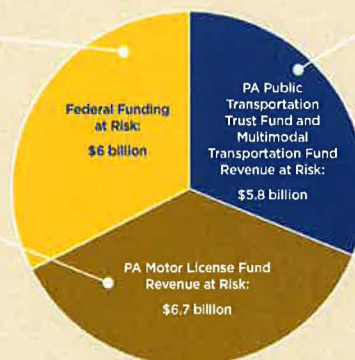
Source: Risks to Pennsylvania Transportation Funding - Transportation Advisory Committee

Purposes:

- Highway and bridge construction
- Public transportation capital projects

Purposes:

- Highway and bridge construction, maintenance, repair, and safety projects
- Payments to PA State Police



Purposes:

- Public transportation operating and capital costs
- Programs of statewide significance
- Multimodal grants

TODAY'S FACTS:

- Pennsylvania is realizing more efficiencies through improved information systems, shared services, enhanced maintenance operations and planning, and improved strategic investment planning.

- Of PennDOT's highway and bridge investments, roughly 74 percent currently goes to the private sector.
- Pennsylvania loses roughly \$100 million in buying power each year under a modest inflation rate of 2.25 percent. Meanwhile, due to increasing fuel efficiency, our fuel revenue is projected to remain essentially flat, which means a net loss when factoring in inflation.
- Pennsylvania supported nearly 400 million transit trips in the 2017-18 state fiscal year.

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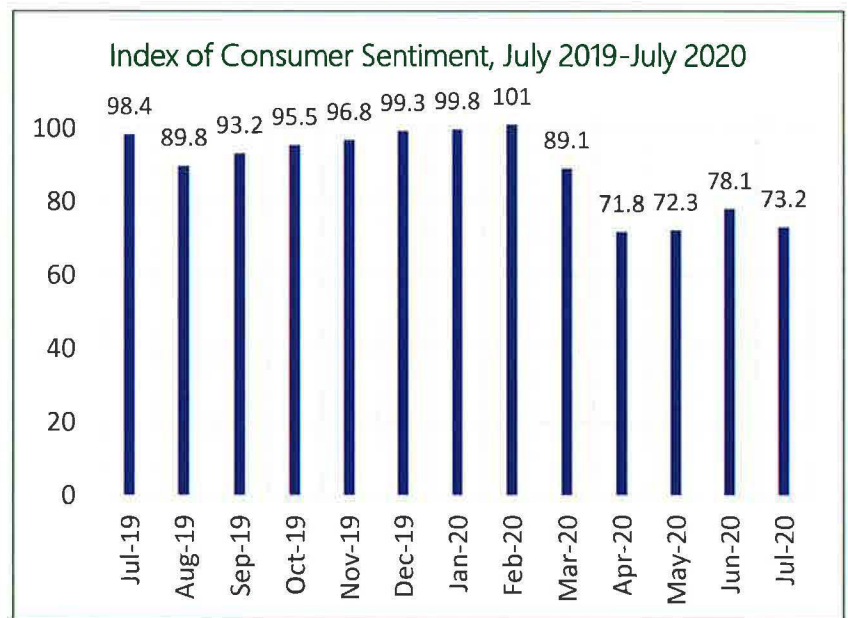
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Consumer Behavior Drives U.S. Economy, Commercial Design

The U.S. economy started becoming consumer-focused as early as the 1920s when the middle class began emerging. However **the current level of consumer spending, which accounts for about 70% of U.S. economic activity**, really began in the 1980s. As a result of this heavily consumer-driven economy, the service and retail sectors grew considerably, greatly impacting urban and building design, and elevating the importance of the "third space" (social spaces outside of homes or workplaces, such as a coffee shop). **The importance of commercial spaces and the social experiences we have in them is significant; how the coronavirus pandemic will change consumer attitudes, and therefore design of such spaces, is largely to-be-determined.** Consumer sentiment is an economic indicator to watch closely (see table to the right), as it will likely offer clues to changes in our economy, and to the public's desire to fully interact once again in the "third space".

E. McLaughlin – 8.13.20



Source: University of Michigan

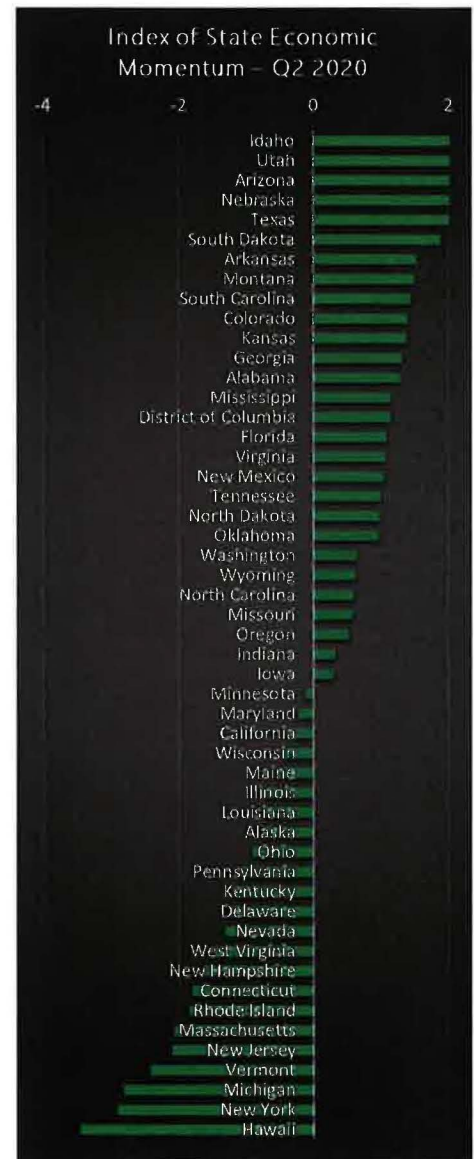
Index of State Economic Momentum

The Index of State Economic Momentum is a **quarterly measure of economic vitality which accounts for growth of personal income, employment and population**. The measures of these three components are averaged, the national average is 'zero' and each state's momentum is listed as a percentage above or below the national average (see table to right).

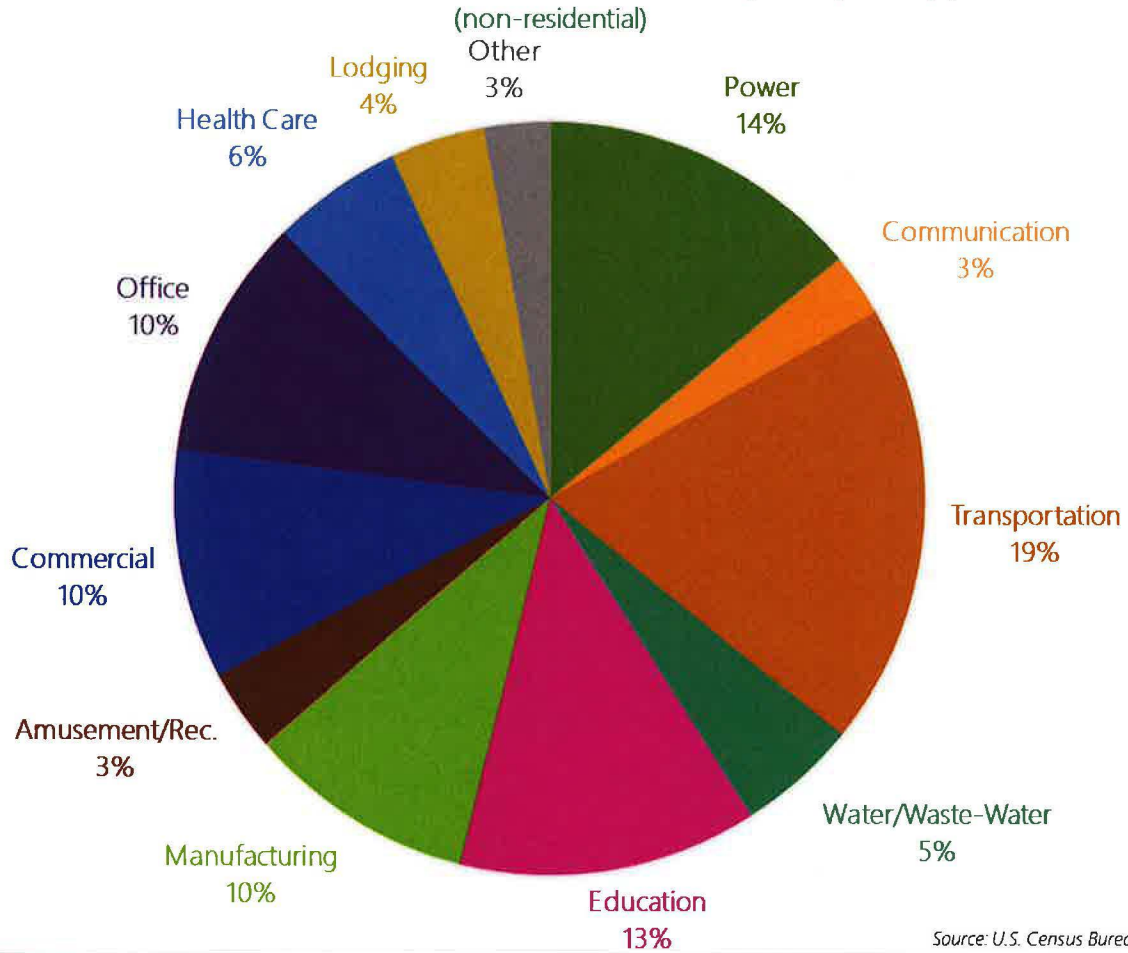
This Q2 2020 report is **notable because it quantitatively reflects how the states that were initially impacted by COVID-19 (located mostly in the Northeast)**, had to resort to business shutdowns to mitigate spread of the virus, and so were negatively impacted at the time. It will be interesting to see how states fall in future quarterly reports as infection rates and public health policies rise and change in other U.S. geographies.

Source: *State Policy Reports* by the Federal Funds Information for States (FFIS)

E. McLaughlin – 8.13.20



2019 U.S. Construction Put in Place by Project Type



Macro & Industry Indicators

Macro & Industry Indicators	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Gross Domestic Product (GDP) Growth	2.0%	2.1%	2.1%	-5.0%	-32.9%
Core Inflation Rate (2% is target)	2.1%	2.3%	2.3%	2.3%	1.3%
Unemployment Rate	3.6%	3.6%	3.5%	3.8%	13.0%
New Housing Units Authorized (seasonally adjusted annual rate)	1.31M	1.43M	1.49M	1.44M	1.17M
A/E/C Industry Economic Indicators					
Architecture Billings Index (AIA)*	49.9	52.7	52.6	46.3	33.8
ABC Construction Backlog Indicator	8.8 mos.	8.8 mos.	8.7 mos.	8.4 mos.	7.9 mos.
FMI Construction Industry Round Table (CIRT) Index*	65.0	64.9	57.6	63.6	21.6
FMI Design Index*	70.1	63.2	60.9	62.7	39.8

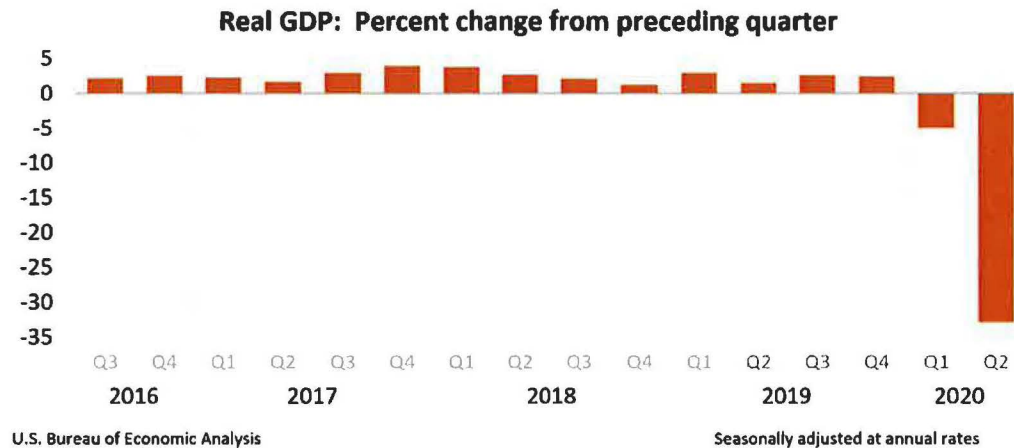
*Index scores over 50 indicate expansion; below 50 indicate contraction.

Sources: U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics, U.S. Census Bureau, U.S. Department of Housing and Urban Development, AIA, ABC & FMI

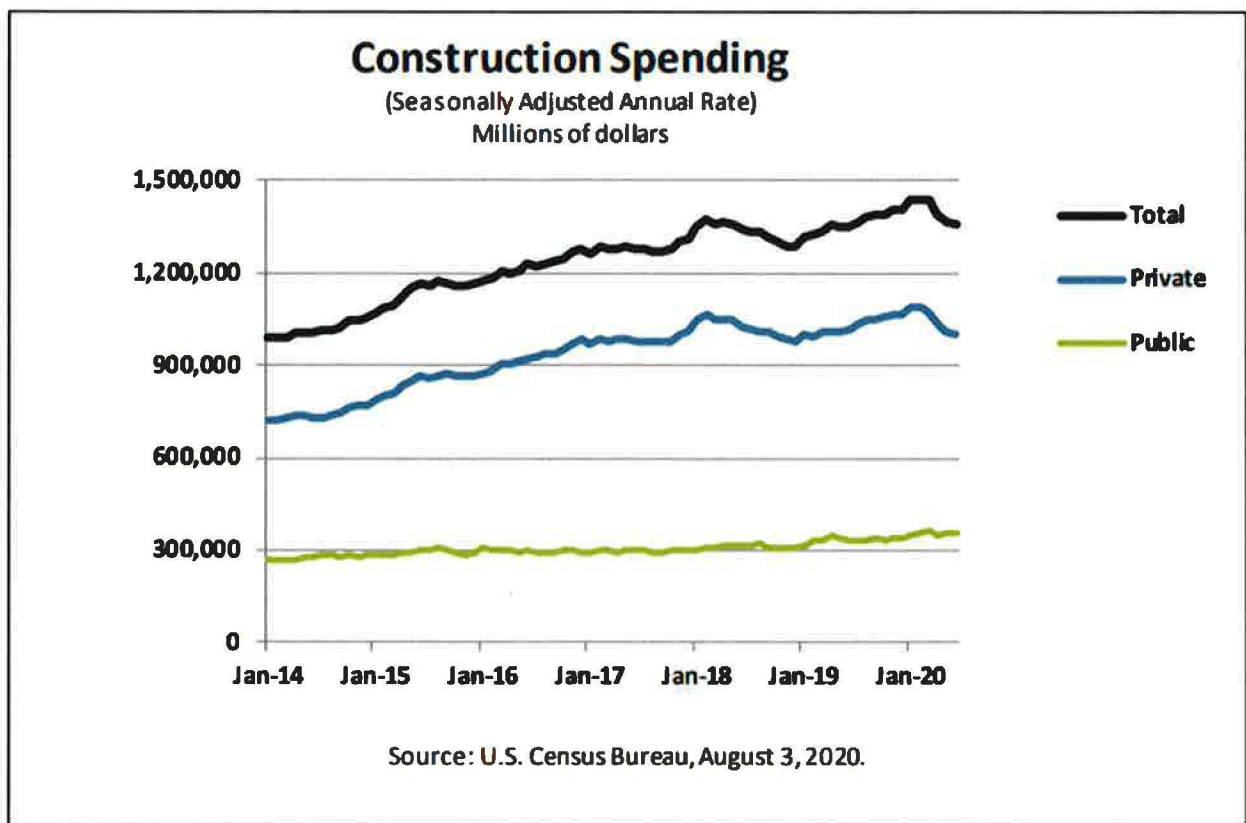
GDP Sharp Decline

Real gross domestic product (GDP) decreased at an annual rate of 32.9 percent in the second quarter of 2020 (table 1), according to the "advance" estimate released by the Bureau of Economic Analysis. In the first quarter, real GDP decreased 5.0 percent.

The GDP estimate released today is based on source data that are incomplete or subject to further revision by the source agency (see "Source Data for the Advance Estimate" on page 2). The "second" estimate for the second quarter, based on more complete data, will be released on August 27, 2020.



Construction Put in Place



Construction Put in Place

	June 2020	June 2019	Change
Total Construction	\$1.355 T	\$1.354 T	+0.1 %
Residential	\$542.3 B	\$544.4 B	-0.4%
Private (non-residential)	\$812.9 B	\$809.6	+0.4%
Public	\$353.3 B	\$332.6 B	+6.2%

Source: U.S. Census Bureau