



# America's Hidden Infrastructure Crisis

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Science, Discovery, and the Universe | Physics



## INTRODUCTION

In CPSP349T, the "Infrastructure and Society" Scholars Practicum, we investigated infrastructure's definition, its importance, as well as how it is created and maintained by organizations. We also learned about the state of American Infrastructure. We then trained in how to judge infrastructure based on National Guard infrastructure evaluation standards. Finally, we used this information to assess an armory.



Our group in front of the Fifth Regiment Armory after a day of Assessing their Infrastructure.

## ACTIVITIES

In class, we studied primary sources, had class discussions, guest speakers, projects, and most importantly, went to areas including the Fifth Regiment Armory to train our infrastructure understanding. We kept a journal of what was taught in class and how our perspective on infrastructure changed after learning more about it. We were trained by MDDF, Maryland Defense Force, personal on how to apply an ISR, Installation Status Report, assessments on infrastructure. For projects, we performed stakeholder and priority analyses. The stakeholder analysis shows how various people, politicians, and organizations, with varying ideologies, powers, and influence can control the creation and maintenance of infrastructure. We also used our knowledge of infrastructure needs to discern how to best divide the U.S. infrastructure budget.

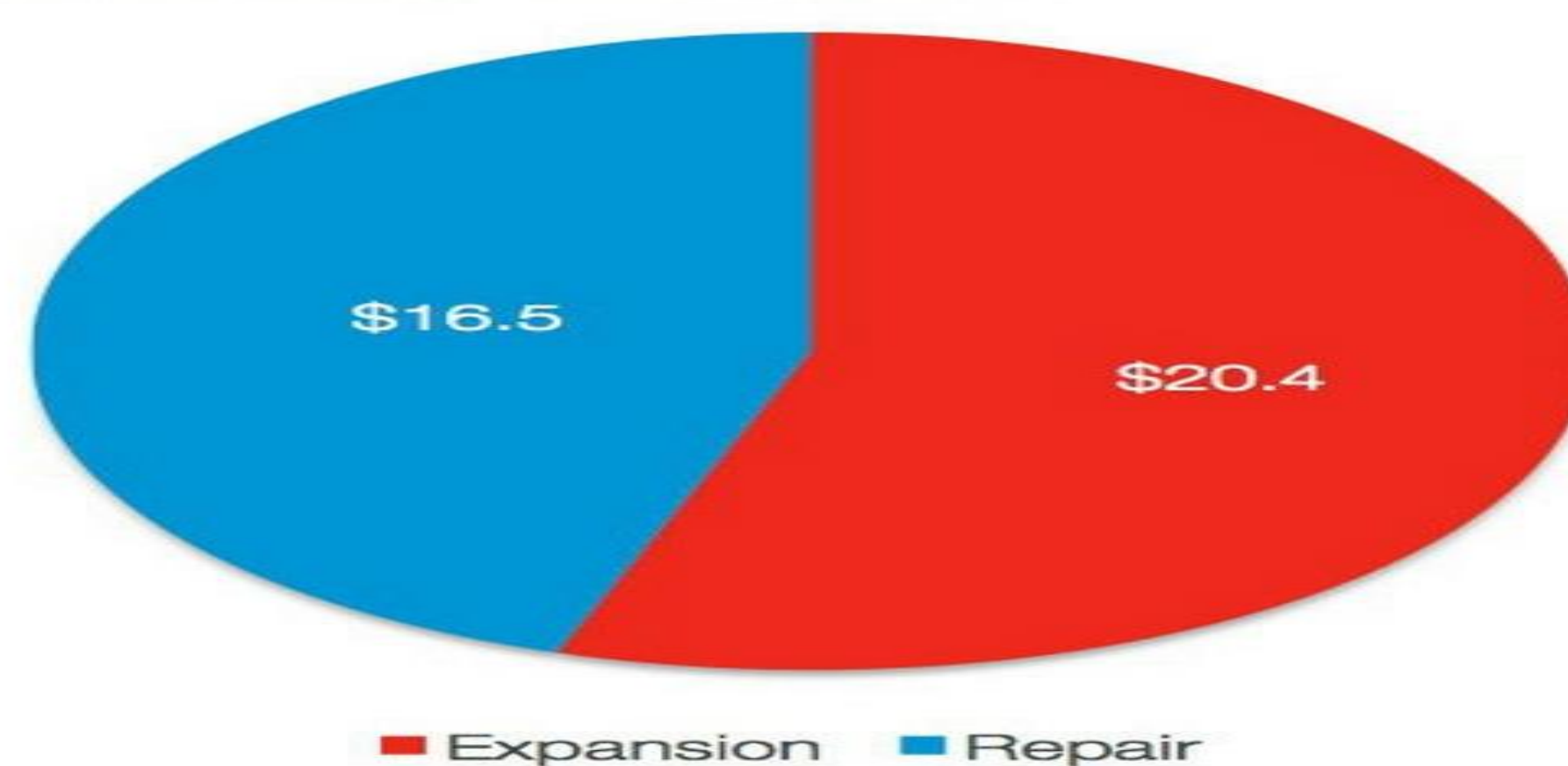
## American Society of Civil Engineer's 2017 American Infrastructure Report Card



## FINDINGS

During the class, I realized that politicians and organizations often spend more on creation of new, aesthetically pleasing infrastructure because that is what most people like to see. This in turn gets them more votes. This can be seen in the pie chart. More money, each year, is spent building new roads instead of repairing current ones, which clearly does not fix our problems. Thus, maintenance becomes less important and even neglected. This has led to an infrastructure crisis in America, seen by the 2017 ASCE Report Card. This disregard for non-aesthetically pleasing infrastructure can be seen in the picture of important water pipes in a national armory. Overall, this pattern shows how power and personal and interests influence infrastructure activity.

Annual state spending on road expansion versus repair, 2009-2011  
All dollar figures in billions.



Graph showing average annual spending on road repairs and expansion by state. Expansion spending is higher than repair!



Asbestos found lining neglected pipes in the Fifth Regiment Armory

## CONCLUSIONS

"Infrastructure and Society" taught me many things about infrastructure I never expected or knew. Besides what infrastructure is and why its important, I learned how decisions about it are made and the role of psychology and power in its creation and maintenance. People favor aesthetically pleasing infrastructures and disregard or underfund infrastructure that needs to be maintained. This has led to major crises in American infrastructure, and people do not even know. This class showed me its critical to ensure we focus on repairing and maintaining infrastructure now, or we will face serious problems on the future.

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