

How our Societies Infrastructure is Failing

Rony Garcia-Vivas

College Park Scholars – Science & Global Change Program Biomolecular and Chemical Engineering rgarciav@umd.edu



College Park Scholars Academic Showcase, April 17, 2021

Introduction

Although my time in CPSP349T has not ended, I have learned a lot about the crumbling infrastructure within the U.S. and in particular, our own communities. As of 2019 the U.S. is currently ranked 13th in the world of overall infrastructure behind other powerhouse countries.

2021 Infrastructure Grades

	1 D+) (PORTS	1 B-	America's
	L C		RAIL	B	Cumulative Infrastructure Grade
	D		ROADS	D	÷
	1 C-		SCHOOLS	D+	C-
	1 C-	0	SOLID WASTE	C+	
B HAZARDOUS WASTE	D+	(STORM WATER	D	A EXCEPTION
	1 D+		TRANSIT	D-	С мерноске
	D	5	WASTEWATER	D+	D POOR
PARKS AND RECREATION	D+				F FAILING

A schematic created by the American Society of Civil Engineers which shows the grading of our infrastructure over as well as withing different categories. This is the first time in 20 years the US does not have a D overall rating. ASCE: 201: "ASCE's 2021 Infrastructure Report Card" ASCE Foundation. Accessed April 144: 2021

Site Information:

Name of Site: Sargent Shriver Elementary School

Address: 12518 Greenly St. Silver Spring, MD 20906

Your supervisor: Professor Nicole Mogul

The site mission:

- Capture images of infrastructural issues on the premise
- Outline both the things that are well done within the school for accessibility as well as what needs to be fixed



The front entrance of Sargent Shriver Elementary School MontgomerySchoolsMD, 2021. "Welcome to Sargent Shriver Elementary School!" Montgomery County Public Schools. Accessed April 149, 2021

Issues Confronting Site:

Sargent Shriver Elementary School is a relatively new school, built in the early 2000s. Having gone there almost 15 years ago, I have come to realize the status of it and how much rebuilding it needs from the streets around it, to the inaccessible sides, to the over crowding portables in the back.



Activities:

Throughout this class we...

- · Learned about new ways to improve our infrastructure
- Went out into our community to learn about the failures and impacts of the infrastructure in it.
- Gained a new perspective on our crumbling infrastructure especially around my own
- community.

Impact:

Ultimately, this class showed me how our infrastructure really is and how there needs to be some sort of change both political and budgetary if there is any chance in repairing it and making it better.



Both these images were captured at Sargent Shriver Elementary School in Silver Spring , MD by myself. The image on the right shows the cracked streets and uneven pavement right in the front entrance of the school, a low point for its infrastructure. The image on the right show that the school is accessible by both able and disabled people.

Discussion:

CPSP349T was a interactive and social class where we got to discuss lots of issues of our infrastructure within small groups and as a class. The consensus of the class was that WE NEED TO FIX OUT CRUMBLING

INFRASTRUCTURE. It is failing and depleting. Roads need to be repaved, buildings need to be rebuilt, bridges need to me maintained. There are so many things that lackluster in our communities when it comes to infrastructure and now is the time to start fixing it.



Here is an image taken by myself of a very busy 4-way intersection in front of the school that causes a multitude of traffic issues and has caused crashes in the past.

Future Work:

- Reaching out to our local officials about the needs of the community with regards to the elementary school.
- · Looking out for other schools and taking note of infrastructural issues in and around them

Acknowledgments:

I would like to thank Professor Mogul for the wonderful class experience as well as College Park Scholars, Science and Global Change, and Drs. Holtz and Merck for the opportunity to grow as a college student and strive to learn more.

