

The Systematic Targeting of Civilian Infrastructure in Mariupol

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Executive Summary

The Centre for Information Resilience's Eyes on Russia (EoR) is an open-source investigations project to map, document and verify significant incidents during the conflict in Ukraine. Our aim is to provide reliable information on the conflict through verified open-source evidence. The lead resource of the Eyes on Russia project is the Russia-Ukraine Monitor Map.

This investigation is a result of that work. The verification seen in this report will be logged in a central database where the material is archived for future use by researchers, reporters as well as justice and accountability bodies.

Since the start of the siege of Mariupol on 24 February, civilian infrastructure in the city has been systematically targeted by Russian miliary forces. Despite denials by the Kremlin that their military has targeted civilian infrastructure¹, our investigation reveals clear evidence of harm to such targets. This represents a breach of international law².

Our report focuses on the targeting of a total of 36 schools and universities throughout the four city districts of Mariupol: Zhovtnevyi, Kalmiuskyi, Prymorskyi and Livoberezhnyi.

The report describes each individual school that has suffered damage from battles in Mariupol since the beginning of the Russian invasion. Contrary to the Russian government denials, our work adds to the body of evidence showing how Russia has systematically targeted civilian infrastructure.

¹ https://edition.cnn.com/2022/02/25/europe/ukraine-russia-videos-civilians-intl-cmd/index.html

² https://ihl-databases.icrc.org/customary-ihl/eng/docs/v2_rul_rule7_sectionc



1. Introduction

Since the start of the invasion of Ukraine, civilian infrastructure has been systematically targeted by Russian military forces³. The aim of this report is to provide an overview of damaged and destroyed infrastructure with a focus on educational facilities in the city of Mariupol.

It will analyze 36 educational facilities that were either destroyed or damaged by bombings, shelling and fighting in Mariupol.

The map in *figure 1* provides an overview of the locations of all destroyed and damaged educational facilities in the city of Mariupol.

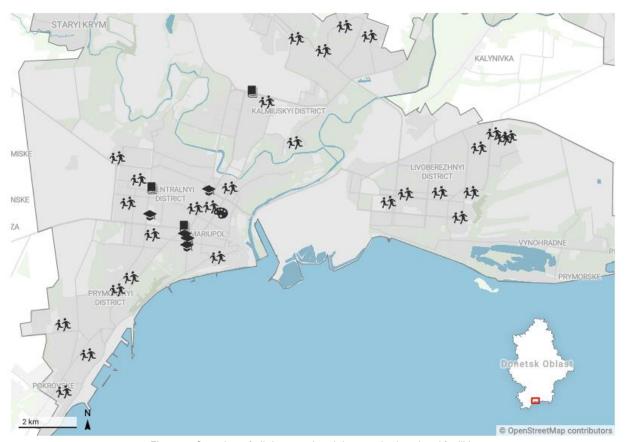


Figure 1: Overview of all destroyed and damaged educational facilities

³ https://www.nytimes.com/interactive/2022/03/23/world/europe/ukraine-civilian-attacks.html



This report is split up into 4 parts, each part discussing individually damaged or destroyed schools according to the particular district in which they are located.

The first part will be Zhovtnevyi district, the second Kalmiuskyi District, the third Prymorskyi District and the last part will be Livoberezhnyi district.



2. Zhovtnevyi District

This part of the report focuses on all damaged and destroyed educational facilities in the Zhovtnevyi district.

The section discusses three university facilities of which one is a volleyball complex, one a college, one medical institute, seven schools, one lyceum and one art school.

Figure 2 maps out the locations of affected educational facilities in this district.



Figure 2: Overview of all destroyed and damaged educational facilities in Zhovtnevyi District



Destruction of Pryazovskyi State Technical University

Geolocated to: 47.095426477997925, 37.541080541723744

A video posted on 9 March shows the aftermath of a strike that hit Pryazovskyi State Technical University.⁴

Figure 3 shows the complex before and after its destruction by Russian shelling. A video evidencing the destruction shows part of the building has completely collapsed whilst the rest of has suffered severe damage.

Additional footage confirms the heavy damage that was caused to the building as a result of a strike.⁵⁶



Figure 3: A comparison of the Pryazovskyi State Technical University before (left) and after (right) the strike hit

Images posted in a news article on 10 March show further damage to the University after the rocket attacks.⁷

⁴ https://twitter.com/leonidragozin/status/1501590915521122306

⁵ https://t.me/mariupolnow/2879

⁶ https://t.me/mariupolnow/8360

⁷ https://www.radiosvoboda.org/a/foto-mariupol-obstril/31746667.htmll



According to the article, the attacks happened on 9 March, not only destroying the university but also its surroundings and other infrastructure including a children's hospital and a maternity hospital.

Figures 4a and 4b show the footage used in the article evidencing the destroyed university building.



Figure 4a: Images of the destroyed Pryazovskyi State Technical University building and its surroundings



Figure 4b: Images of the destroyed Pryazovskyi State Technical University building and its surroundings



An image posted on 20 April shows the old building from the Pryazovskyi State Technical University having suffered damage.⁸

Shelling marks are visible, as well as shattered windows and a part of the brick wall destroyed.





Figure 5: Images of the old building of Pryazovskyi State Technical University before (left) and after (right) damage

⁸ https://t.me/dvish_alive/12651



Destruction of the Faculty of Economics and Law of Mariupol State Humanitarian University

Geolocated to: 47.101487, 37.525378

An image posted on 6 April shows the faculty of Economics and Law of the Mariupol State Humanitarian University partially destroyed and heavily damaged.⁹

The footage displays that part of the building, presumably the entrance hall, has collapsed.

Furthermore, the facade of the building is heavily damaged with visible shelling marks and shattered windows.





Figure 6: Faculty of Economics and Law of Mariupol State Humanitarian University before (left) and after (right) destruction

⁹ https://t.me/mariupolnow/5418



Damage to Volleyball Complex of Mariupol State Humanitarian University

Geolocated to: 47.091776, 37.542023

In addition to the Faculty of Economics and Law having suffered damage, the Volleyball Complex of Mariupol State Humanitarian University was also shelled.

An image posted on April 12 shows extensive damage to the building, 10 with shelling marks and rubble covering the exterior.

In a video posted on April 13, the destruction is also visible.¹¹





Figure 7: Volleyball complex of Mariupol State Humanitarian University before (left) and after (right) damage

https://t.me/mariupolnow/6180https://t.me/mariupolnow/6302



Damage to Vidokremlenyy Strukturnyy Pidrozdil College

Geolocated to: 47.109773, 37.526354

A post from 9 April shows Vidokremlenyy Strukturnyy Pidrozdil heavily damaged.¹² One of the videos shows a fire in front of the college building.

The building itself suffered severe damage, as the windows are shattered or broken, the outside brick walls have in some parts been destroyed and there is visible damage to the entrance ceiling.





Figure 8: College before (left) and after (right) damage

¹² https://t.me/mariupolnow/5796



Destroyed Medical Institute

Geolocated to: 47.109026, 37.551981

In a video from 1 April¹³, a medical institute is seen under severe damage.

The footage shows that all the windows have been completely broken and large parts of the building are completely destroyed as seen by the large holes in the walls.





Figure 9: Medical Institute before (left) and after (right) destruction

¹³ https://t.me/mariupolnow/4744



Geolocated to: 47.095229, 37.526303

An image posted on 26 April shows damage to school #9 in Mariupol.¹⁴

The windows are visibly damaged, and taken from another post, damage is visible to the exterior brick wall.15





Figure 10: School #9 before (top) and after (bottom) damage

https://t.me/mariupolnow/7983https://t.me/mariupolnow/8046



Geolocated to: 47.10504437, 37.5154882

In a video posted on the 16 April, 16 school #25 is seen following heavy damage from shelling.

Windows are shattered and broken and the inside of the building is covered in rubble and damaged school furniture.





Figure 11: School #25 before (top) and after (bottom) damage

¹⁶ https://twitter.com/vanessa_p_831/status/1515097117345427462



Destruction of School #36

Geolocated to: 47.1098462, 37.5617329

Pictures posted on 20 March¹⁷ and 29 April show heavy damage to school #36.¹⁸

The images show that on one side of the building part of the exterior walls have broken down. For more see *figure 12*.





Figure 12: Before (left) and after (right) the damage to school #36 in Mariupol

 $^{^{17}} https://twitter.com/no_itsmyturn/status/1505483522072588290?t=OjyAVZDA5TWWV_GWOt5UBw\&s=09$

¹⁸ https://t.me/mariupolnow/8465



Geolocated to: 47.11234929389294, 37.52010371567336

Footage emerging on 10 April shows significant damage to School #52.19

The visible damage includes: damage to the roof covering the entrance of the school building, and shattered windows, while the inside of the building is in covered with rubble.





Figure 13: School #52 before (top) and after (bottom) damage

¹⁹ https://t.me/mariupolnow/5951



Geolocated to: 47.1035976244992, 37.5457996141281

A video posted on 23 April shows school #65 having suffered extensive damage.²⁰

Visible in the video are broken windows. In an image from 12 April, the damage is more visible. Some of the window frames are broken as well as some damage to the school walls.²¹





Figure 14: School #65 before (top) and after (bottom) damage

https://t.me/mariupolnow/7680
 https://t.me/mariupolnow/6250



Destruction of School #66

Geolocated to: 47.103984369119935, 37.55331396679625

The result of shelling on school #66 can be seen in a video posted on 16 March.²²

The school is completely destroyed, with shattered windows and some parts having collapsed.

This is especially seen in a video posted on 7 April,²³ showing how one side of the school has been severely hit and has completely fell apart.

Another image from 10 April gives an overview of the school and the damaged surrounding residential buildings.²⁴ In this image part of the school has collapsed.

Figure 15 portrays a before and after of the shelling on the school.



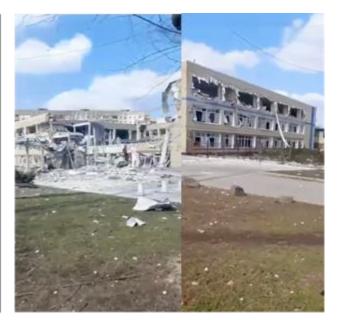


Figure 15: Before (left) and after (right) the shelling on school #66 in Mariupol

²² https://t.me/informatsia_obstanovka/5886

https://twitter.com/no_itsmyturn/status/1511996999020785665

https://t.me/mariupolnow/5929



Geolocated to: 47.11906480520633, 37.51048467050041

An image from 11 April shows some damage to school #67.25 Some damage to the windows and part of the wall is visible.





Figure 16: School #67 before (left) and after (right) damage

²⁵ https://t.me/mariupolnow/6098



Damage to Mariupol City Lyceum

Geolocated to: 47.0979886933695, 37.5410917949269

The Mariupol City Lyceum has suffered some damage following extensive Russian shelling. This is apparent from images posted on 24 April.

Some of the windows have been shattered and a small part of the exterior brick wall seems to have collapsed.²⁶



Figure 17: Mariupol City Lyceum before (top) and after (bottom) damage

²⁶ https://t.me/mariupolnow/7804



Damage to the Art school

Geolocated to: 47.102968, 37.555316

An art school located in a residential building has been severely damaged.

A video posted on 31 March shows the building in which the art school was located and surrounding residential buildings having been heavily damaged.²⁷





Figure 18: Before (left) and after (right) heavily damaged art school

²⁷ https://t.me/mariupolnow/4636



3. Kalmiuskyi District

The second part of the report examines damaged and destroyed educational facilities in the Kalmiuskyi district.

This section examines five schools, one kindergarten and one technological lyceum, totaling seven educational facilities. *Figure 19* maps out the locations of the educational facilities discussed in this part.

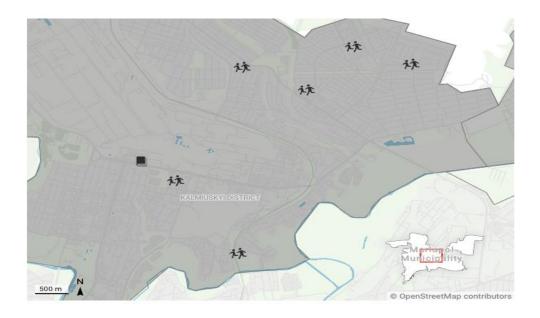


Figure 19: Overview of all destroyed and damaged educational facilities in Kalmiuskyi District



Geolocated to: 47.123781837525506, 37.59113883356332

A post from 10 April shows the damaged building of school #4.²⁸ The main damage concerns the shattered windows.





Figure 20: Images of school #4 before (left) and after (right) damage

²⁸ https://t.me/mariupolnow/5965



Destruction of School #20

Geolocated to: 47.136495, 37.578732

A video posted on 31 March shows the partial destruction of school #20.29

A wall seems to have collapsed and the building is covered in rubble. Surrounding residential buildings have also been heavily damaged.





Figure 21: School #20 before (top) and after (bottom) destruction

²⁹ https://t.me/mariupolnow/4626



Geolocated to: 47.152222, 37.604472

School #24 can be seen damaged in videos posted on 25 April.

On the exterior of the school, the main damage seems to be some shattered windows.

However, on the interior damaged furniture is visible, as well as floors covered in rubble, and a collapsed wall, and in one of the videos it can be seen that part of the ceiling has collapsed.





Figure 22: School #24 before (left) and after (right) damage



Destruction of School #30

Geolocated to: 47.1567127510746, 37.625198718090076

A video posted on 18 March shows school #30 and its surroundings heavily damaged following extensive Russian shelling.³⁰

In a different video,³¹ one side of the school building has been completely destroyed and collapsed. Additionally, the houses in the area surrounding the school have been struck by shelling.³²

Further images also show the damage to the interior of the school. *Figure 23* shows a comparison of the school before and after it was destroyed.³³





Figure 23: Before (left) and after (right) the destruction of school #30 in Mariupol

³⁰ https://t.me/mariupolnow/2858

³¹ https://t.me/mariupolnow/6047

³² https://t.me/mariupolnow/6498

³³ https://t.me/mariupolnow/5575



Geolocated to: 47.1561152912523, 37.5918425974082

In footage emerging on 26 April, school #45 is evidenced to have suffered heavy damage.34

Large holes can be seen in the building where walls have been destroyed and collapsed, part of the roof has been damaged as well as the windows.





Figure 24: School #45 before (top) and after (bottom) damage.

³⁴ https://t.me/mariupolnow/8000



Damage to Kindergarten #167

Geolocated to: 47.159792204340114, 37.613751208534225

An image posted on 24 April on Telegram shows Kindergarten #167 with heavy damage, following shelling.

Images show that a part of the exterior wall has collapsed. $^{\! 35}$





Figure 25: Kindergarten #167 before (left) and after (right) damage.

³⁵ https://t.me/mariupolnow/7410



Damage to Technological Lyceum

Geolocated to: 47.1398153818979, 37.5720466864177

Images of Mariupol Technological Lyceum, posted on 26 April, show the building with heavy damage.

The footage shows extensive damage to the windows and the outside wall is covered in burn marks.³⁶





Figure 26: Technological Lyceum before (top) and after (bottom) damage.

³⁶ https://t.me/mariupolnow/8037



4. Prymorskyi District

The third part of the report examines all the educational facilities that suffered damage in the Prymorskyi district of Mariupol.

A total of six schools will be analyzed. The map in *figure 27* shows the locations of these six schools.



Figure 27: Overview of all destroyed and damaged educational facilities in Prymorskyi District



Destruction of School #15

Geolocated to: 47.06742476430629, 37.485702980559

In footage emerging on 27 March,³⁷ it appears that school #15 is mildly damaged.

The walls have shelling marks and a crater can be seen in the yard. However, in videos from 22 of April, the building can be seen as having suffered more severe damage.³⁸

It shows that the exterior of the building has been largely stripped away and the entrance to the school destroyed.





Figure 28: Before (top) and after (bottom) the damage to school #15 in Mariupol

https://t.me/mariupolnow/4123https://t.me/mariupolnow/7547



Geolocated to: 47.078355, 37.510707

In a video posted on 26 April, both interior and exterior damage to school #26 in the Prymorskyi district is visible.³⁹

Inside the school, furniture in classrooms is damaged, as well as the ceilings.

The outside of the building is also heavily damaged with shattered windows and pieces of the building's exterior either ripped off or containing shelling marks.





Figure 29: School #26 before (top) and after (bottom) suffering heavy damage

³⁹ https://t.me/informatsia_obstanovka/15790



Destruction of School #32

Geolocated to: 47.0580616973594, 37.4972279893726

School #32 is partially destroyed and heavily damaged, as seen in footage from 20 April.⁴⁰ In the images, a large hole can be seen in the building as the walls have broken down and windows were shattered.

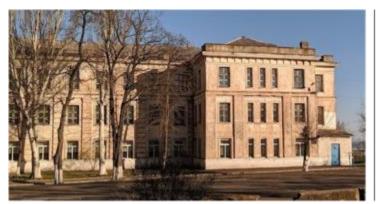




Figure 30: School #32 before (left) and after (right) damage

⁴⁰ https://t.me/mariupolnow/7227



Geolocated to: 47.0466392399925, 37.4861040434988

A video posted on 22 April shows extensive damage to school #33. Predominantly visible are some shattered windows and rubble in front of the building.⁴¹





Figure 31: School #33 before (top) and after (bottom) damage

⁴¹ https://t.me/mariupolnow/7503



Geolocated to: 47.0884010429283, 37.5562249133187

In footage posted on 26 April, extensive footage is seen on school #37. Noticeably the school contains burn marks, suggesting the dire effect of continuous shelling.⁴²





Figure 32: School #37 before (left) and after (right) damage

⁴² https://t.me/mariupolnow/8045



Geolocated to: 47.0819710052892, 37.5165957035024

Images from 26 April⁴³ and a video from 21 April show the heavy damage and partial destruction of school #54.44 The building's exterior has appeared to suffer extensive damage. Additionally, one part of the school has been destroyed, with the walls collapsed into rubble.





Figure 33: School #54 before (top) and after (bottom) damage

⁴³ https://t.me/mariupolnow/7366 44 https://t.me/mariupolnow/7304



5. Livoberezhnyi district

The last part of this report focuses on schools located in the Livoberezhnyi district.

A total of nine schools will be discussed including one makeshift graveyard at a kindergarten.

Figure 34 maps out the locations of all the schools discussed in this part.



Figure 34: Overview of all destroyed and damaged educational facilities in Livoberezhnyi district.



Geolocated to: 47.10095309714291, 37.66543131331871

In a video posted on social media platforms on 9 April, school #2 is visibly damaged.

The building appears to have burn marks on the walls and the windows are shattered. Houses surrounding the school have also sustained heavy damage.





Figure 35: School #2 before (top) and after (bottom) damage



Geolocated to: 47.108400, 37.657317

In a video emerging on 12 April school #14 is heavily damaged.

The damage was inflicted mainly to the gate in front of the school with parts of the fence having been completely destroyed.⁴⁵

The area surrounding school #14 is more heavily damaged with the roofs of residential buildings having completely collapsed. In a video from 31 March, further damage to surrounding residential buildings is clearly visible.46

Figure 36 shows before and after footage of the damage to school #14.





Figure 36: School #14 before (top) and after (bottom) destruction.

⁴⁵ https://t.me/mariupolnow/6188 https://t.me/mariupolnow/4639



Destruction of School #40

Geolocated to: 47.108027, 37.641612

Drone footage showing school #40, posted on 30 March, shows that the roof of the school has collapsed.⁴⁷ More images from the 2 May evidence mild damage to the front of the school.⁴⁸





Figure 37: Satellite image of the school (left) and the drone footage of the collapsed roof (right)

⁴⁷ <u>https://twitter.com/RALee85/status/1509228970977501188</u>. ⁴⁸ <u>https://t.me/mariupolnow/8900</u>.



Geolocated to: 47.1083573409473, 37.6714435029665

A video posted on 24 April⁴⁹ and an image posted on 28 April⁵⁰ show a damaged school #41. Mainly visible are the broken windows.





Figure 38: School #41 before (left) and after (right) damage

https://t.me/mariupolnow/7846https://t.me/mariupolnow/8345



Destruction of school #55

Geolocated to: 47.105339, 37.633709

Images posted on 5 April⁵¹ and 27 April⁵² show school #55 partially destroyed. One part of the building has completely collapsed into rubble. The rest of the building suffered damage with shattered or blown-out windows.





Figure 39: School #55 before (top) and after (bottom) destruction

https://t.me/mariupolnow/5220https://t.me/mariupolnow/8150



Destruction of School #57

Geolocated to: 47.122231251326, 37.6750108592367

Footage emerging on 16 April show heavy damage to school #57 in the Livoberezhnyi district of Mariupol.53

A video posted later, on 26 April,⁵⁴ confirms the damage.

The windows of the school have been shattered or broken, a large part of the roof has been damaged and some parts have collapsed and the stairs to the entrance of the school have been destroyed.

Figure 40 shows school #57 before and after its destruction.





Figure 40: School #57 before (left) and after (right) destruction

https://t.me/mariupolnow/6694https://t.me/mariupolnow/8013



Destruction of school #68

Geolocated to: 47.126702, 37.681781

School #68 in the Livoberezhnyi district has also suffered severe damage, as seen in a video posted on 28 April.55

The video shows that the windows were blown out or shattered, a part of the roof has collapsed and the exterior of the building was damaged.

In another post on 26 April, a video from the interior of the school shows the building covered in rubble, with holes in the walls and ceiling.⁵⁶





Figure 41: School #68 before (top) and after (bottom) destruction.

https://t.me/mariupolnow/8374.https://t.me/mariupolnow/8008.



Geolocated to: 47.1257168493555, 37.6888148999732

An image posted on 20 April⁵⁷ shows school #69 with some damage following Russian shelling.

The exterior of the building is seen to have been significantly damaged.





Figure 42: School #69 before (left) and after (right) damage.

⁵⁷ https://t.me/mariupolnow/7220.



Makeshift graveyard at Kindergarten

Geolocated to: 47.125093, 37.686409

Images posted on 8 April⁵⁸ and 10 April⁵⁹ show the yard of a kindergarten in Mariupol turned into a makeshift graveyard.

The images show multiple graves scattered around the field, as well as a heavily damaged kindergarten in the background.



Figure 43: image from the graveyard in the yard of a Kindergarten.

⁵⁸<u>https://t.me/mariupolnow/5610</u>
⁵⁹ <u>https://twitter.com/zcjbrooker/status/1513233692751282179</u>.

