



18TH ROAD SAFETY CONFERENCE

9th March 2026, Chambéry, France

The Impact and Consequences of Climate Change:

The January 2022, case of the
Extreme Athens Snowstorm

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Hosted by



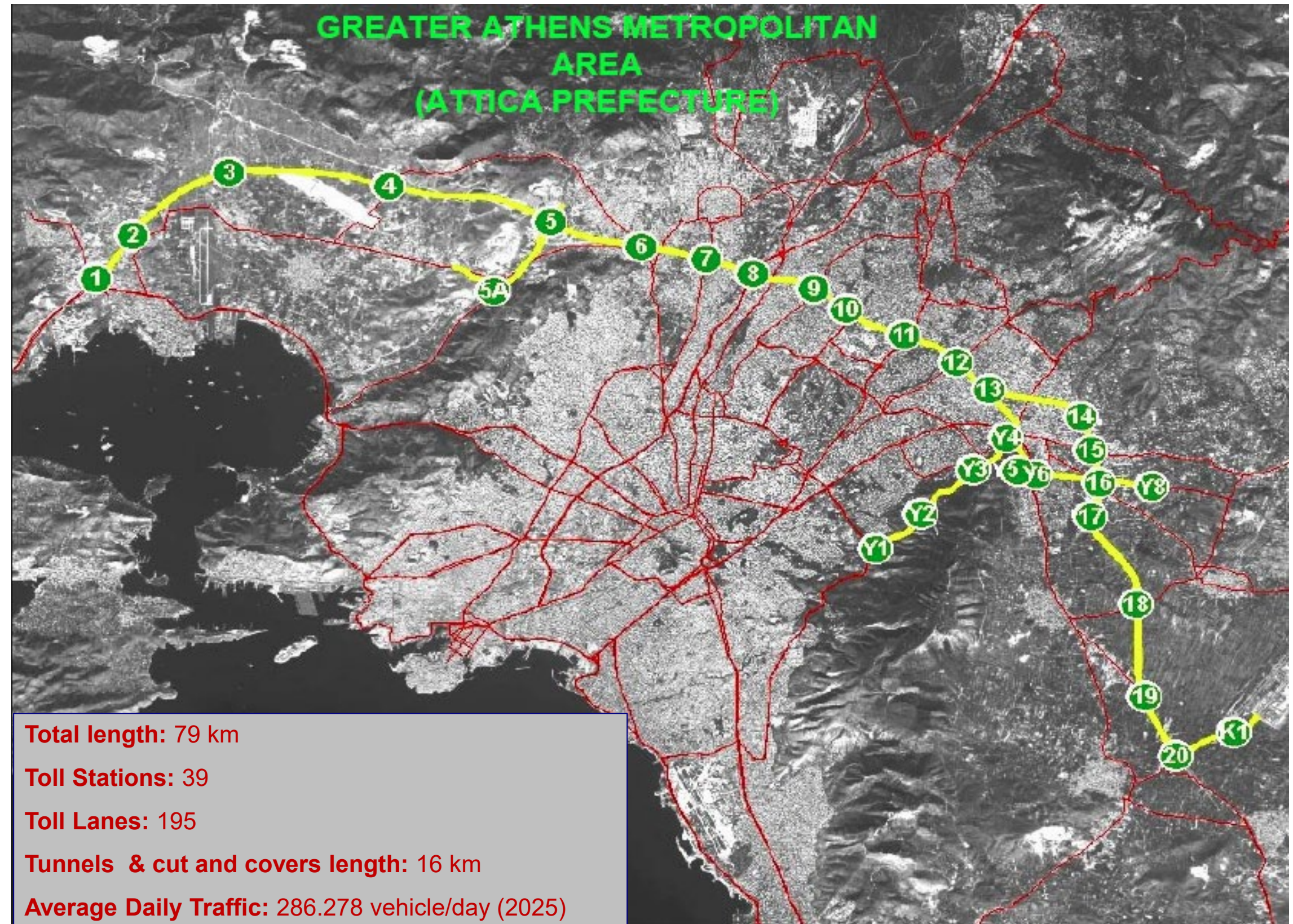
Attica Tollway - The city of Athens Ring Road

A Concession Project.

Construction completed
in 2004.

Initial Concession ended
on 05.10.2024.

New Concession Agreement
for 25 years, started
on 06.10.2024.



Snowstorms Around the World resulting in Highway Closures [1-2]



January 2014
Atlanta Metropolitan Area, Georgia, USA



January 2016
Turnpike, Pennsylvania, USA



January 2022
I-95 Highway, Virginia, USA



January 2021
France, Europe



January 2021
Spain, Europe



February 2021
Germany, Europe

Snowstorms Around the World resulting in Highway Closures [2-2]



Saudi Arabia's region experiences first-ever recorded snowfall.

In mid-December 2025, parts of Saudi Arabia were hit by a rare winter storm that brought snow to areas that normally stay hot and dry. This unusual weather mainly affected northern regions like Tabuk, Jabal Al-Lawz, Hail, and the Trojena Highlands, where snow blanketed mountain peaks and even parts of the desert landscape.

Past Experience with Snowstorms in Athens

A/A	Date of Snowstorm	Accumulation / Temperature	Duration
1	2004, February 12 th – 13 th	15–20 cm / -8°C	30 hours
2	2008, February 16 th – 18 th	20–25 cm / -10°C	36 hours
3	2021, February 14 th – 17 th	15–20 cm / -3°C	36 hours
4	2022, January 24th	15–20 cm / -3°C	12 hours

Snowstorms in Athens, Greece !!!



February 13th, 2004
Snowstorm in Athens



February 16-18th, 2008
Snowstorm in Athens



February 13th, 2021
Snowstorm in Athens




January 24th, 2022
Snowstorm in Athens

The "ELPIDA" Snowstorm - Preparation by the Greek State

1. Forecasts predicted start of heavy snowfall around noon on Monday, January 24th, 2022.
2. Newly formed Ministry of Climate Crisis and Civil Protection undertook coordination role and organized virtual meetings on Friday January 21st & Sunday January 23rd, 2022.
3. Critical Players were not part of the meeting (Traffic Police and Ministry of Infrastructure Officials were not present).
4. Tollway Operators requested **advanced prohibition of heavy vehicles the day before**, closure of schools on Monday and **extensive communication** to the public in order to reduce unnecessary trips.
5. Tollway Operators also requested **increased presence of Traffic Police** on their roads, for taking immediate measures, if necessary.
6. Ministry initially rejected requests for taking preventive actions claiming that **"The city must operate and roads must remain open"** and **"The supply chain needs NOT to be disrupted"**. The State embraced a **"Wait and See"** approach.

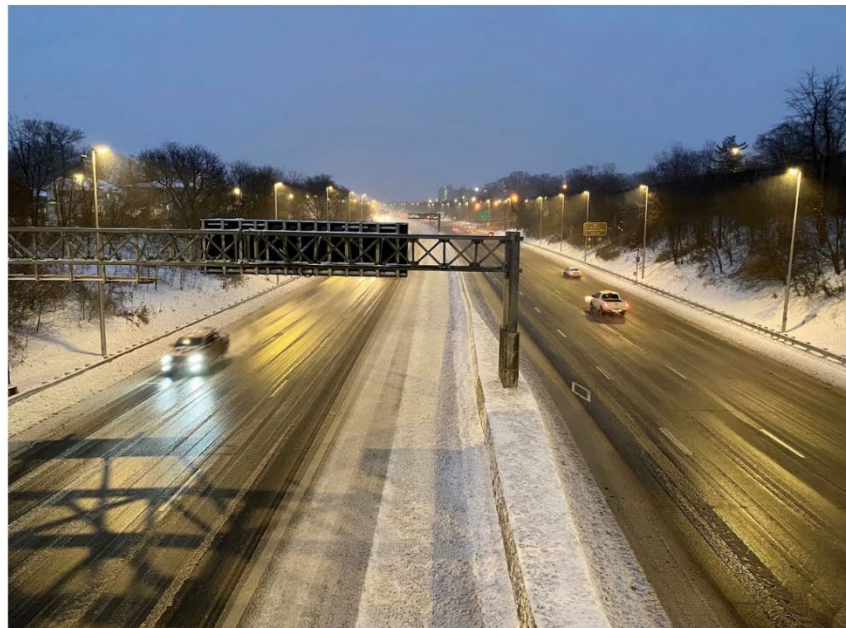
Preparing for incoming snowstorm (February 2026, NJ, USA)

 Premium Access + Family Sharing - \$1 a week for a whole year. Sale Ends 3/1/26

NEWS

N.J. to ban commercial vehicles from these highways in advance of monster snowstorm

Published: Feb. 21, 2026, 9:58 p.m.



COMMERCIAL VEHICLE TRAVEL RESTRICTION

Winter Weather Travel Advisory





Check 511nj.org for road conditions,  closures, and travel updates.

NJDOT WINTER WEATHER TRAVEL ADVISORY

Reduced Speed Limit

Highway speed limits reduced to 35 mph starting at 3 pm today, Sunday, February 22



Visit 511nj.org  for closures and travel updates

Attica Tollway: Technical Design & Construction Difficulties

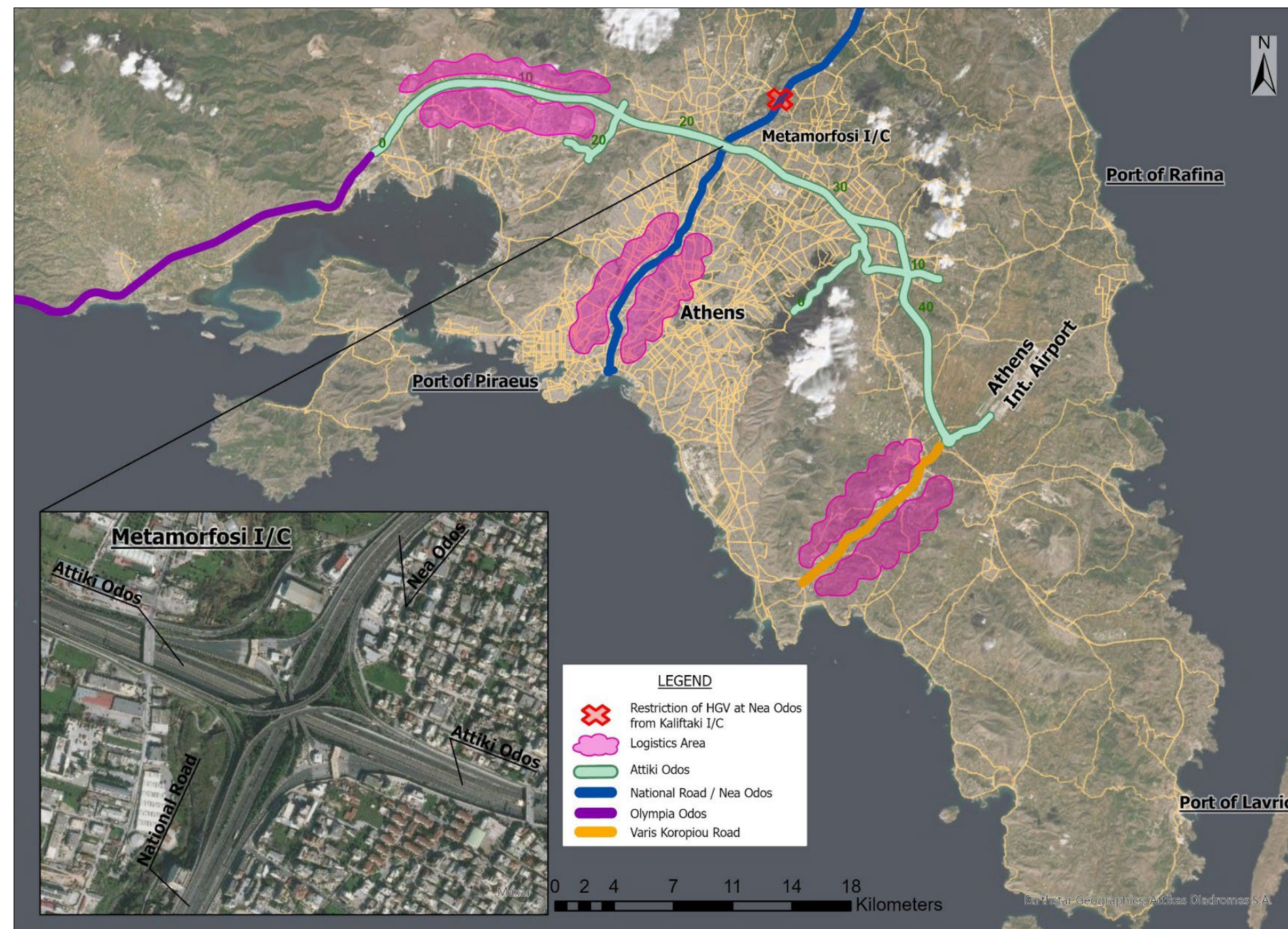


1. The city woke up with sunshine.
Monday morning traffic almost as usual.
2. Snowstorm arrived at 10:00 am when everybody was at work.

Decisions that disrupted Attica Tollway Operations

[2-3]

3. Traffic Police prohibited HGV traffic on National Road at 8:00 am, just north of Attica Tollway. Most trucks were then diverted on Attica Tollway.



4. At 12:00 noon all government services were ordered closed with employees attempting to return home via the Tollway.
5. Mass Transit Authority closed suburban rail and Metro services to and from the Athens International Airport, not enabling early evacuation of people.

The ELPIDA Snowstorm - The major cause of disaster. Jack knifed tractor trailers!



The Cascade of Events ...

At about 14:00 pm Traffic Police issues prohibition of HGV's on Attica Tollway.

Too late.

At about 15:00 pm the central section of the Toll Road closes down.

Inevitable.

At about 18:00 pm the entire Toll Road closes to traffic. About 3,500 vehicles are stranded.

The Civil Protection Authorities initiate operation of evacuating people.

At about 23:00 pm the Army was called in to assist in the evacuation.

A €2.000 compensation for each stranded vehicle was announced.

The Road is closed for the first time in its up to then 21-year history.

The removal of Stranded vehicles operation intensified.

Toll Road Re-opens fully clean on Thursday January 27th at 08:00 a.m.

The issue now becomes political with the opposition initiating non-confidence procedure against the Government in the Greek Parliament.

The day after: The media outrage!

1

"ELPIDA" Snowstorm: The strongest wave of snow is in progress - Appeals to avoid travel, schools closed
The second and most intense wave of snowstorm "ELPIDA" is in progress, which has been affecting Greece since Saturday



2

Attiki Odos to pay €2 million fine for the snow fiasco

The fine is imposed on the companies Attiki Odos SA (Concessionaire Company) and ATTICA ROUTES SA (Operation and Maintenance Company of Attiki Odos)

f x v m



3

"ELPIDA" snowstorm: It is snowing in Attiki - The national road north of Kalyftaki is closed for trucks.
Snow in the center of Athens as well - Which roads are closed - Avoid unnecessary travel - Instructions for the safety of workers - Traffic on the Athens-Thessaloniki axis with snow chains – Through Olympia and Ionia Motorways the access to heavy vehicles



**ELPIDA
means HOPE
in English !!!**

4

Hundreds of Motorists Trapped in Athens Ring Road Due to Snow



5

Snow wreaks havoc on Athens roads, leaves dozens trapped overnight on highway



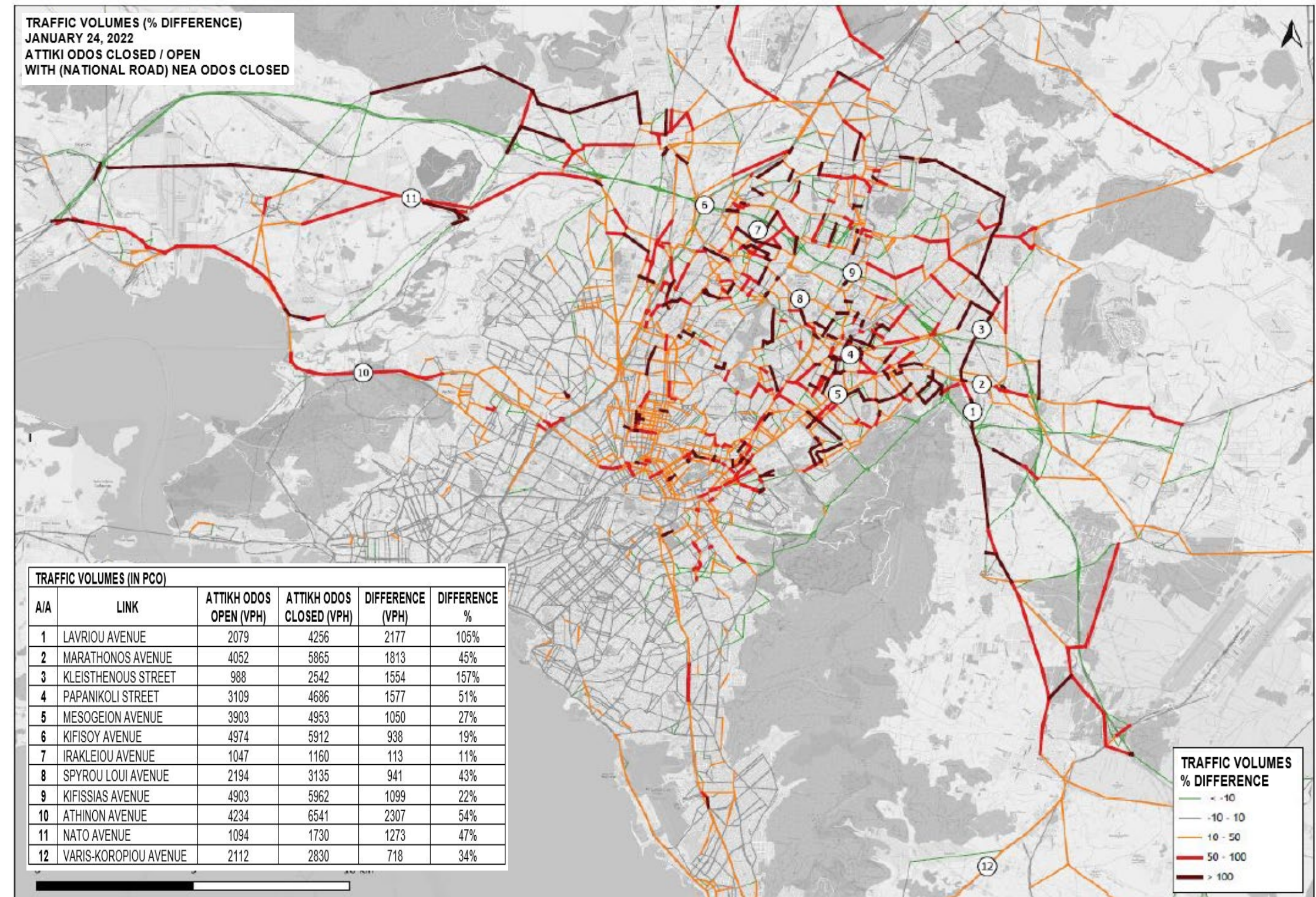
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Snowstorm "ELPIDA" - Attiki Odos: This is how stranded vehicles are moved
Images from the operation



What if Attica Tollway had closed in the morning?

- Apart from the 3,500 vehicles trapped, approx. 29,455 vehicles were also served by Attiki Odos during 10:00–15:00.
- Attiki Odos traffic model has shown that Attiki Odos absorbed approx. 15,000 vehicles/h from the rest of the Attica Road Network.
- Undoubtedly, the operation (and not closing earlier) of Attiki Odos contributed to preventing worse conditions in the entire of road network of Attica.

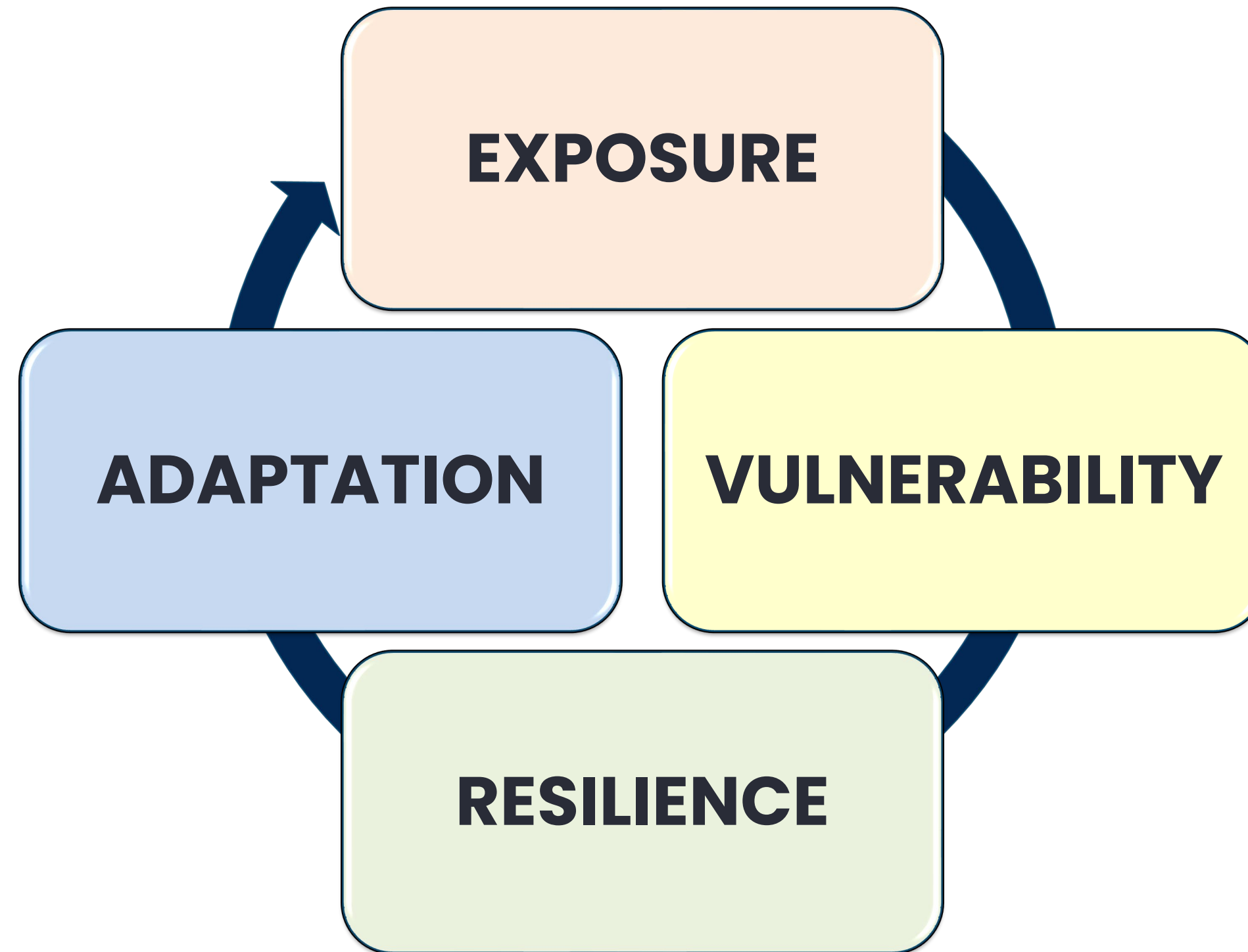


Source: Analysis of traffic data during the snowstorm of January 24th, 2022, in the greater area of Athens, G. Lympelopoulos

The day after: Lessons learned

1. Major snowstorms on limited access facilities may result in stranded vehicles for prolonged time periods. More & more frequent all over the world.
2. Roadways are blocked mainly by jackknifed trucks blocking all lanes of traffic.
3. The management of a metropolitan road network involves many agencies, and a proper coordination is necessary between them.
4. It is crucial that the implementation of traffic restriction measures and prohibitions takes into account the entire transport network due to the strong interdependencies that exist between the network.
5. All measures regarding traffic restrictions should be taken and announced well in advance.
6. Extensive Communication campaigns to raise awareness to the public in order to minimize unnecessary trips.
7. Each Agency should have its own plan, but plans should not contradict others.
8. A Crisis Management Plan shall be developed. Implementation requires **Unified Command by Governmental Agencies.**

Climate Change Adaptation is a Learning Circle



Thank you for your attention!



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