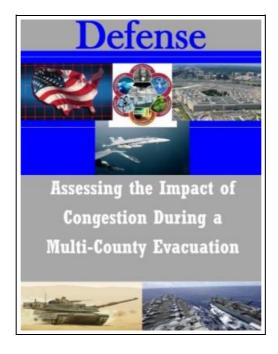
Assessing the Impact of Congestion During a Multi-County Evacuation (Paperback)



Filesize: 6.79 MB

Reviews

Definitely among the best book I have possibly read. I have study and i am sure that i will going to go through once more once more later on. Your lifestyle span is going to be convert when you full looking at this publication.

(Prof. Damon Kautzer III)

ASSESSING THE IMPACT OF CONGESTION DURING A MULTI-COUNTY EVACUATION (PAPERBACK)



To save **Assessing the Impact of Congestion During a Multi-County Evacuation (Paperback)** eBook, make sure you refer to the hyperlink beneath and download the file or get access to additional information which might be highly relevant to ASSESSING THE IMPACT OF CONGESTION DURING A MULTI-COUNTY EVACUATION (PAPERBACK) ebook.

Createspace, United States, 2014. Paperback. Condition: New. Language: English . Brand New Book ***** Print on Demand ******. This book introduces an integer linear program called the Minimum Cost Flow with Congestion Assignment (MCFCA) model. MCF-CA is a multi-period evacuation model that uses a novel approach called congestion assignment to analyze clearing times during mass evacuations. Congestion assignment discretizes the nonlinear relationship between the number of vehicles on a road segment and the maximum speed at which those vehicles can travel. MCF-CA selects among three congestion levels (none, moderate, and high) for each road segment in each time epoch. Depending on the congestion level selected, MCF-CA limits the number of vehicles that are able to traverse the road segment and uses Akcelik s Time-Dependent Speed-Flow Function (Akcelik 2003) to determine the average travel speed of the vehicles for that time period. As a result, we are able to determine approximate evacuation clearing times under nonlinear congestion effects by solving an integer linear program. We limit residents prior knowledge of traffic conditions by implementing MCF-CA in a rolling horizon fashion and book the impact of this limited knowledge on evacuation patterns. We also model the impact of sub-optimal routing decisions on the part of residents by artificially shifting residents toward their own shortest paths rather than a socially optimal route. Mass evacuation can more than double the clearing times of individual county evacuations. However, during both county and mass evacuations, resident routing choices significantly impact clearing times. As more residents choose suboptimal routes, clearing times are prolonged. Lastly, we find that more than 50 of residents will experience congestion at some point during the evacuation horizon. However, allowing some congestion improves evacuation clearing times by 20-36 over not congesting. Although congestion decreases vehicle travel speed by 70-80 , over 50 more residents...



 $Read\ Assessing\ the\ Impact\ of\ Congestion\ During\ a\ Multi-County\ Evacuation\ (Paperback)\ Online$

Download PDF Assessing the Impact of Congestion During a Multi-County Evacuation (Paperback)

Related Books



[PDF] The Mystery of the Onion Domes Russia Around the World in 80 Mysteries

 ${\bf Click\ the\ hyperlink\ below\ to\ get\ "The\ Mystery\ of\ the\ Onion\ Domes\ Russia\ Around\ the\ World\ in\ 80\ Mysteries"\ PDF\ document.}$

Save PDF

>>



[PDF] Oxford Reading Tree Treetops Time Chronicles: Level 13: the Stone of Destiny

Click the hyperlink below to get "Oxford Reading Tree Treetops Time Chronicles: Level 13: the Stone of Destiny" PDF document.

Save PDF

..



[PDF] Bully, the Bullied, and the Not-So Innocent Bystander: From Preschool to High School and Beyond: Breaking the Cycle of Violence and Creating More Deeply Caring Communities

Click the hyperlink below to get "Bully, the Bullied, and the Not-So Innocent Bystander: From Preschool to High School and Beyond: Breaking the Cycle of Violence and Creating More Deeply Caring Communities" PDF document.

Save PDF

...



[PDF] The Tale of Jemima Puddle-Duck - Read it Yourself with Ladybird: Level 2

 $Click\ the\ hyperlink\ below\ to\ get\ "The\ Tale\ of\ Jemima\ Puddle-Duck\ -\ Read\ it\ Yourself\ with\ Ladybird:\ Level\ 2"\ PDF\ document.$

Save PDF



$[PDF]\ The\ Breathtaking\ Mystery\ on\ Mt.\ Everest\ The\ Top\ of\ the\ World\ Around\ the\ World\ in\ 80\ Mysteries$

Click the hyperlink below to get "The Breathtaking Mystery on Mt. Everest The Top of the World Around the World in 80 Mysteries" PDF document.

Save PDF

»



$[PDF]\ The\ Mystery\ of\ the\ Crystal\ Castle\ Bavaria,\ Germany\ Around\ the\ World\ in\ 80\ Mysteries$

Click the hyperlink below to get "The Mystery of the Crystal Castle Bavaria, Germany Around the World in 80 Mysteries" PDF document.

Save PDF

»