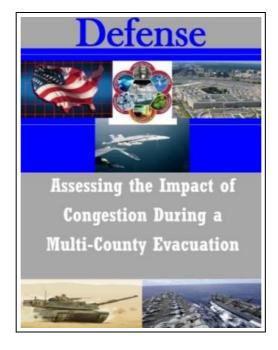
# Assessing the Impact of Congestion During a Multi-County Evacuation (Paperback)



Filesize: 3.1 MB

### Reviews

The best publication i actually study. I actually have study and so i am confident that i am going to likely to study once more yet again later on. You will not sense monotony at at any moment of your respective time (that's what catalogs are for relating to if you ask me). (Ernest Bergnaum)

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



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)

## See Also



# 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

HarperCollins Publishers Inc, United States, 2016. Paperback. Book Condition: New. Reprint. 203 x 135 mm. Language: English. Brand New Book. An international bestseller, Barbara Coloroso s groundbreaking and trusted guide on bullying-including cyberbullying-arms parents...

**Download Document »** 



### Oxford Reading Tree Treetops Time Chronicles: Level 13: the Stone of Destiny

Oxford University Press, United Kingdom, 2014. Paperback. Book Condition: New. Mr. Alex Brychta (illustrator). 205 x 148 mm. Language: English . Brand New Book. In The Stone of Destiny the Time Runners battle to stop...

**Download Document »** 



#### The Adventures of Sheriff Williker: /Book 1: The Case of the Missing Horseshoe

Createspace, United States, 2014. Paperback. Book Condition: New. Kim Hansen (illustrator). large type edition. 216 x 216 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*\*. A missing horseshoe for a prize winning...

**Download Document »** 



#### The Tale of Jemima Puddle-Duck - Read it Yourself with Ladybird: Level 2

Penguin Books Ltd. Paperback. Book Condition: new. BRAND NEW, The Tale of Jemima Puddle-Duck - Read it Yourself with Ladybird: Level 2, This is a gentle adaptation of the classic tale by Beatrix Potter. Jemima...

**Download Document »** 



### The Breathtaking Mystery on Mt. Everest The Top of the World Around the World in 80 Mysteries

Gallopade International. Paperback. Book Condition: New. Paperback. 144 pages. Dimensions: 7.3in. x 5.2in. x 0.4in.When you purchase the Library Bound mystery you will receive FREE online eBook access! Carole Marsh Mystery Online eBooks are an...

**Download Document »** 



#### Ella the Doggy Activity Book

Husky Publishing, United States, 2015. Paperback. Book Condition: New. 254 x 203 mm. Language: English. Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*. This activity book is comprised of crossword puzzles, word search games, word

Read PDF »



#### Happy Monsters: Stories, Jokes, Games, and More!

 $Createspace, United States, 2015. \ Paperback. \ Book Condition: New. 214 x 149 \ mm. \ Language: English \ . \ Brand \ New Book ***** Print on Demand ******. Are you looking for a kid s or children's book that is$ 

Read PDF »



#### Flappy the Frog: Stories, Games, Jokes, and More!

Createspace, United States, 2015. Paperback. Book Condition: New. 279 x 216 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*. Are you looking for a kid s or children s book that is

Read PDF »



#### ESL Stories for Preschool: Book 1

Createspace, United States, 2013. Paperback. Book Condition: New. 212 x 210 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*. A big attractive colourful book for ESL beginners, aged 3 to 5. It

Read PDF »



# Tax Practice (2nd edition five-year higher vocational education and the accounting profession teaching the book)(Chinese Edition)

paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment. Pages Number: 282 Publisher: Higher Education Pub. Date: 2009-01-01 version 2. This book is

Read PDF »