

Optimization Models for Prioritizing Bus Stop Facility Investments for Riders with Disabilities



Filesize: 1.84 MB

Reviews


Basically no words to describe. It is filled with knowledge and wisdom I am just pleased to let you know that this is actually the greatest publication i have read within my individual lifestyle and may be he best publication for at any time.

(Prof. Ron Gaylord II)

OPTIMIZATION MODELS FOR PRIORITIZING BUS STOP FACILITY INVESTMENTS FOR RIDERS WITH DISABILITIES



CreateSpace Independent Publishing Platform. Paperback. Book Condition: New. This item is printed on demand. Paperback. 120 pages. Dimensions: 11.0in. x 8.5in. x 0.3in. The Americans with Disabilities Act (ADA) of 1990 prescribes the minimum requirements for bus stop accessibility by riders with disabilities. Due to limited budgets, transit agencies can only select a limited number of bus stop locations for ADA improvements annually. These locations should preferably be selected such that they maximize the overall benefits to patrons with disabilities. In addition, transit agencies may choose to implement the universal design paradigm, which involves higher design standards than current ADA requirements and can provide amenities that are useful for all riders, like shelters and lighting. Many factors can affect the decision to improve a bus stop, including rider-based aspects like the number of riders with disabilities, total ridership, customer complaints, accidents, deployment costs, as well as spatial aspects like the location of employment centers, schools, shopping areas, and so on. These interlacing factors make it difficult to identify optimum improvement locations without the aid of an optimization model. This report proposes two optimization models to help identify a priority list of bus stops for accessibility improvements. The first is a binary integer programming model designed to identify bus stops that need improvements to meet the minimum ADA requirements. The second involves a multi-objective nonlinear mixed integer programming model that attempts to achieve an optimal compromise among the two accessibility design standards. Based on a case study using data from Broward County Transit (BCT) in Florida, the models were found to produce a list of bus stops that were determined to be highly logical upon close examination. Compared to traditional approaches using staff experience, requests from elected officials, customer complaints, etc. , these optimization models offer a more objective and efficient platform...

 [Read Optimization Models for Prioritizing Bus Stop Facility Investments for Riders with Disabilities Online](#)

 [Download PDF Optimization Models for Prioritizing Bus Stop Facility Investments for Riders with Disabilities](#)

Relevant eBooks



The Stories Julian Tells A Stepping Stone Book™

Random House Books for Young Readers. Paperback. Book Condition: New. Ann Strugnell (illustrator). Paperback. 80 pages. Dimensions: 7.6in. x 5.0in. x 0.4in. Julian is a quick fibber and a wishful thinker. And he is great at...

[Download PDF »](#)



Viking Ships At Sunrise Magic Tree House, No. 15

Random House Books for Young Readers. Paperback. Book Condition: New. Sal Murdocca (illustrator). Paperback. 96 pages. Dimensions: 7.4in. x 4.9in. x 0.2in. Jack and Annie are ready for their next fantasy adventure in the bestselling middle-grade...

[Download PDF »](#)



Eagle Song Puffin Chapters

Puffin. Paperback. Book Condition: New. Dan Andreasen (illustrator). Paperback. 80 pages. Dimensions: 7.6in. x 4.9in. x 0.3in. A contemporary middle grade story about confronting bullying and prejudice Danny Bigtrees family has moved to Brooklyn, New York,...

[Download PDF »](#)



Absolutely Lucy #4 Lucy on the Ball A Stepping Stone Book™

Random House Books for Young Readers. Paperback. Book Condition: New. David Merrell (illustrator). Paperback. 112 pages. Dimensions: 7.4in. x 5.1in. x 0.4in. Ilene Coopers fourth story of a boy and his beagle takes Bobby and Lucy...

[Download PDF »](#)



The Mystery in Chocolate Town Hershey, Pennsylvania Carole Marsh Mysteries Teachers Guide

Gallopade International. Paperback. Book Condition: New. Paperback. 32 pages. Dimensions: 11.0in. x 8.2in. x 0.1in. When you purchase the Library Bound mystery you will receive FREE online eBook access! Carole Marsh Mystery Online eBooks are an...

[Download PDF »](#)