



## Transportation Science

Publication details, including instructions for authors and subscription information:  
<http://pubsonline.informs.org>

## Subject Index—Articles and Letters

To cite this article:

(1973) Subject Index—Articles and Letters. *Transportation Science* 7(4):389–391. <https://doi.org/10.1287/trsc.7.4.389>

Full terms and conditions of use: <https://pubsonline.informs.org/Publications/Librarians-Portal/PubsOnLine-Terms-and-Conditions>

This article may be used only for the purposes of research, teaching, and/or private study. Commercial use or systematic downloading (by robots or other automatic processes) is prohibited without explicit Publisher approval, unless otherwise noted. For more information, contact [permissions@informs.org](mailto:permissions@informs.org).

The Publisher does not warrant or guarantee the article's accuracy, completeness, merchantability, fitness for a particular purpose, or non-infringement. Descriptions of, or references to, products or publications, or inclusion of an advertisement in this article, neither constitutes nor implies a guarantee, endorsement, or support of claims made of that product, publication, or service.

© 1973 INFORMS

Please scroll down for article—it is on subsequent pages



With 12,500 members from nearly 90 countries, INFORMS is the largest international association of operations research (O.R.) and analytics professionals and students. INFORMS provides unique networking and learning opportunities for individual professionals, and organizations of all types and sizes, to better understand and use O.R. and analytics tools and methods to transform strategic visions and achieve better outcomes. For more information on INFORMS, its publications, membership, or meetings visit <http://www.informs.org>

## SUBJECT INDEX—ARTICLES AND LETTERS

### A

Algorithms  
   Crew base constraints, 39–48  
   FORTRAN, Control Data 6400 computer, solution, different scheduling problems, 241–245  
   Scheduling problems, 224–245  
   Single and multilane traffic, 75–84  
 Announcements, 106, 207, 294  
 API method extended, 379–384  
 Airline crew-scheduling, 34–48  
 Air-cargo deployment combat personnel, 177–202  
 Aircraft  
   Average number collisions, 322–325  
   Collision probabilities, 317–339  
   Large relative velocity, 325–328  
   Special cases, velocity, 328–331  
 Air Fleet Evaluation Model (AFEM), 189–202  
 Airports, parallel runways, 331–338  
 Air routes, potential conflict, 158–167  
 Air-route network planning, 158–167  
 Augmented predecessor indexing method (API), 377–384

### B

Books of Interest, 104–105  
 Brisbane City Council transport services, note, 203–206  
 Broken shifts, bus scheduling, 203–206  
 Bus crew scheduling, 203–206

### C

Chesapeake Bay Bridge traffic control, 372–376  
 Column generation algorithm, 168–176  
 Combat personnel, equipment, deployment, 177–202  
 Comparison, steady-state and simulation methods, 194–202

Computerized duty rosters, 224–245  
 Computing times, locating facility, 308–316  
 Control, reversible traffic links, 362–376  
 Crew-scheduling, time-saving devices 40–48

### D

Designing transportation networks, 49–74  
 Digital simulation, freeway traffic, Long Island Expressway, New York, 269–286

### F

Facility location algorithm, 287–293  
 Feeder transit lines, 340–350  
 Freeway traffic, digital simulation, 269–286

### G

General networks lemmas, 290–293  
 Generalized network problems, 377–384  
 Generalized transportation problems, 351–361

### H

History maintenance, crew scheduling, 38–39

### I

Iso-veloxic traffic sampled, 246–268

### L

Link-toll collection policy, 211–223  
 Location, centers on network, 18–33  
 Location problems, minimizing costs, 297–316  
 Long Island Expressway, freeway traffic, digital simulation, 269–286

## M

MAC planning documents, 178-202  
 Mathematical model, potential conflict,  
   air routes, 158-167  
 Minneapolis-St. Paul, digital computer  
   solution procedure, 49-74  
 Minimax location of facility, 287-293  
 Minimax location problem, 100-103  
 Minimizing costs in location problems,  
   297-316  
 Minimum cost locations, public transit  
   lines, 340-350  
 Minimum cost schedules—examples, 138-  
   157  
 Minimum cost schedules—theory, 108-  
   137  
 Models  
   Conflict situations, intersecting air  
     routes, 158-167  
   Delay minimization, lost time, 365-372  
   Facilities location, 297-316  
   Mathematical, 362-376  
   Passenger arrivals, departures, 113-  
     137

## N

Network design and cost elements, 49-74  
 Network flow rates, 168-176  
 Nonlinear traffic assignment problem,  
   168-176  
 Nonparametric linear program, 100-103  
 Note on bus crew scheduling, Bennett  
   and Potts, 203-206

## O

Off-peak dispatch problem, 126-137  
 One- and two-terminal systems, 85-99  
 Optimal control, traffic links, 362-376  
 Optimal locations for plants, warehouses,  
   18-33  
 Optimal locations on a network, 18-33  
 Optimal policy, minimize waiting time,  
   85-99  
 Optimal scheduling, public transit sys-  
   tem, 108-137, 138-157  
 Optimal strategy, terminals, 85-99  
 Optimal vehicle size, public transit, 108-  
   137

## P

Parallel transit lines, 340-350  
 Path-toll collection policy, 211-223  
 Programming, Linear and nonlinear,  
   297-316  
 Public transportation costs, 108-137,  
   138-157

## Q

Quadratic programming problems, 168-  
   176

## R

Random variables, traffic flow, 246-268  
 Recursive estimation, traffic variables,  
   269-286  
 Route selection algorithm, 49-74

## S

Safety Analysis for Transportation Sys-  
   tems, 1-17  
 Safety, imperfect information, control,  
   9-17  
 Safety index, system parameters, 3-9  
 Scenario, reinforcement NATO forces,  
   178-202  
 Scheduling policies, transportation sys-  
   tems, 85-99  
 Scheduling toll collectors, 224-245  
 Section Officers, 108, 209, 296, 385  
 Simulation model, AFEM, 193-202  
 Society and Section Meetings, 107, 208,  
   295, 386  
 Solutions, Link-toll and path-toll prob-  
   lems 216-223  
 Solving generalized transportation prob-  
   lems, 351-361  
 Steady-state methods, deployment time,  
   179-202  
 Strategic air deployment resource plan-  
   ning, 177-202  
 Suboptimal schedules, transit schedul-  
   ing, 138-157

## T

Toll collectors, night shifts, day demand,  
   231-245

## INDEX, VOLUME 7 / 391

- Toll patterns, transportation networks, 211-223  
Traffic density estimation, 75-84  
Traffic flow, distribution, 246-268  
Traffic flow and concentration, 246-268  
Traffic speed/flow relation, 254-268  
Transit system, 108-137, 138-157  
Transportation costs, optimal center locations, 27-33  
Transportation demand, urban areas, 49-74  
Transportation problems, solving generalized, 351-361  
Travel time algorithm, 78-84
- V**
- Vehicular ground transportation, safety, 1-17
- W**
- Waiting time, minimizing, 85-99  
Working shifts, toll collectors, 226-245