

REFERENCES

- 1] Abdel-Aal, M. M. M. (2017). Value of time determination for the city of Alexandria based on a disaggregate binary mode choice model. *Alexandria Engineering Journal*. <https://doi.org/10.1016/j.aej.2017.04.016>
- 2] Aboudolas, K., Papageorgiou, M., & Kosmatopoulos, E. (2009). Store-and-forward based methods for the signal control problem in large-scale congested urban road networks. *Transportation Research Part C: Emerging Technologies*, 17(2), 163–174. <https://doi.org/10.1016/j.trc.2008.10.002>
- 3] Ahmane, M., Abbas-Turki, A., Perronnet, F., Wu, J., Moudni, A. E., Buisson, J., & Zeo, R. (2013). Modeling and controlling an isolated urban intersection based on cooperative vehicles. *Transportation Research Part C: Emerging Technologies*, 28, 44–62. <https://doi.org/10.1016/j.trc.2012.11.004>
- 4] Ahmed, M. M., & Abdel-Aty, M. (2015). Evaluation and spatial analysis of automated red-light running enforcement cameras. *Transportation Research Part C: Emerging Technologies*, 50(Supplement C), 130–140. <https://doi.org/10.1016/j.trc.2014.07.012>
- 5] Akçelik, R. (1988). The Highway Capacity Manual Delay Formula for Signalized Intersections. *ITE J.; (United States)*, 58:3.
- 6] Al-Masaeid, & Hashem, J. (2008). Capacity of U-turn at median openings. Retrieved June 8, 2015, from <http://search.proquest.com/openview/d4287ba10f6a63259e495bbb18dc24b6/1?pq-origsite=gscholar>
- 7] Ashvin. (2015, August 5). How Did Traffic Lights Evolve Over the Years? Retrieved December 22, 2017, from <https://www.scienceabc.com/innovation/ready-steady-go-the-evolution-of-traffic-lights.html>
- 8] Athira, I. C., Muneera, C. P., Krishnamurthy, K., & Anjaneyulu, M. V. L. R. (2016). Estimation of Value of Travel Time for Work Trips. *Transportation Research Procedia*, 17(Supplement C), 116–123. <https://doi.org/10.1016/j.trpro.2016.11.067>

- 9] Bazzan, A. L. C. (2005). A Distributed Approach for Coordination of Traffic Signal Agents. *Autonomous Agents and Multi-Agent Systems*, 10(2), 131–164. <https://doi.org/10.1023/B:AGNT.0000049887.90232.cd>
- 10] Bazzan, A. L. C., de Oliveira, D., & da Silva, B. C. (2010). Learning in groups of traffic signals. *Engineering Applications of Artificial Intelligence*, 23(4), 560–568. <https://doi.org/10.1016/j.engappai.2009.11.009>
- 11] Belosic, J. (2015). How to Calculate the Value of Your Time. Retrieved May 26, 2015, from <http://www.inc.com/jim-belosic/how-to-calculate-the-value-of-your-and-your-employees-time.html>
- 12] Börjesson, M., & Eliasson, J. (2012). The value of time and external benefits in bicycle appraisal. *Transportation Research Part A: Policy and Practice*, 46(4), 673–683. <https://doi.org/10.1016/j.tra.2012.01.006>
- 13] (Brian) Park, B., & [Maggie] Qi, H. (2005). Development and Evaluation of a Procedure for the Calibration of Simulation Models. *Transportation Research Record: Journal of the Transportation Research Board*, 1934, 208–217. <https://doi.org/10.3141/1934-22>
- 14] Brilon, W., & Miltner, T. (2005). Capacity at Intersections without Traffic Signals. *Transportation Research Record: Journal of the Transportation Research Board*, 1920, 32–40. <https://doi.org/10.3141/1920-04>
- 15] Brockfeld, E., Kühne, R., & Wagner, P. (2004). Calibration and Validation of Microscopic Traffic Flow Models. *Transportation Research Record: Journal of the Transportation Research Board*, 1876, 62–70. <https://doi.org/10.3141/1876-07>
- 16] Carter, D., Hummer, J., Foyle, R., & Phillips, S. (2005). Operational and Safety Effects of U-Turns at Signalized Intersections. *Transportation Research Record: Journal of the Transportation Research Board*, 1912, 11–18. <https://doi.org/10.3141/1912-02>
- 17] Central Bank of Sri Lanka. (2012). *Household Income and Expenditure Survey*.
- 18] Central Bank of Sri Lanka. (2014). *Central Bank of Sri Lanka, Annual Report*.
- 19] Chang, E. C., & Messer, C. J. (1986). *Warrants for Interconnection of Isolated Traffic Signals. Research Report, September 1079-August 1986 (final)* (No. PB-87-107553/XAB; TTI-2-18-80-293). Texas A and M Univ., College Station (USA).

Texas Transportation Inst. Retrieved from
<https://www.osti.gov/scitech/biblio/7171727>

- 20] Chang, E. C.-P. (1985). How to Decide the Interconnection of Isolated Traffic Signals. In *Proceedings of the 17th Conference on Winter Simulation* (pp. 445–453). New York, NY, USA: ACM. <https://doi.org/10.1145/21850.253424>
- 21] Chen, B., & Cheng, H. H. (2010). A Review of the Applications of Agent Technology in Traffic and Transportation Systems. *IEEE Transactions on Intelligent Transportation Systems*, 11(2), 485–497. <https://doi.org/10.1109/TITS.2010.2048313>
- 22] Chen, S., Xu, H., & Liu, H. (2013). Timing Oversaturated Signals: What Can We Learn from Classic and State-of-the-Art Signal Control Models? *Journal of Transportation Systems Engineering and Information Technology*, 13(1), 97–110. [https://doi.org/10.1016/S1570-6672\(13\)60093-8](https://doi.org/10.1016/S1570-6672(13)60093-8)
- 23] CHEN, X., QIAN, D., & SHI, D. (2011). Multi-objective Optimization Method of Signal Timing for the Non-motorized Transport at Intersection. *Journal of Transportation Systems Engineering and Information Technology*, 11(2), 106–111. [https://doi.org/10.1016/S1570-6672\(10\)60118-3](https://doi.org/10.1016/S1570-6672(10)60118-3)
- 24] Chimba, D. (2011). Fee model for offsetting impact of land use developments to travel delay. *Advances in Transportation Studies*, (24), 45–54.
- 25] Chu, L., Liu, H., & Recker, W. (2004). Using Microscopic Simulation to Evaluate Potential Intelligent Transportation System Strategies under nonrecurrent Congestion. *Transportation Research Record: Journal of the Transportation Research Board*, 1886, 76–84. <https://doi.org/10.3141/1886-10>
- 26] Corman, F., D’Ariano, A., Pacciarelli, D., & Pranzo, M. (2009). Evaluation of green wave policy in real-time railway traffic management. *Transportation Research Part C: Emerging Technologies*, 17(6), 607–616. <https://doi.org/10.1016/j.trc.2009.04.001>
- 27] De Coensel, B., Can, A., Degraeuwe, B., De Vlieger, I., & Botteldooren, D. (2012). Effects of traffic signal coordination on noise and air pollutant emissions. *Environmental Modelling & Software*, 35(Supplement C), 74–83. <https://doi.org/10.1016/j.envsoft.2012.02.009>

- 28] Dhibi, M., & Belkacem, L. (2013). The sampling effect on the value of travel-time savings: estimation by discrete choice models on Tunisian data. *Advances in Transportation Studies*, (29), 59–70.
- 29] Ding, X., & Xu, X. (2015). Security issues related to optimization of urban rail operating schemes under express-local mode. *Advances in Transportation Studies*, 2, 3–14.
- 30] Domenichini, L., Fanfani, F., Bacchi, M., & Braccini, A. (2013). Prediction of the incident resolution time on motorways. *Advances in Transportation Studies*, 5–22.
- 31] Dotoli, M., Fanti, M. P., & Meloni, C. (2006). A signal timing plan formulation for urban traffic control. *Control Engineering Practice*, 14(11), 1297–1311. <https://doi.org/10.1016/j.conengprac.2005.06.013>
- 32] Duan, H., Li, Z., & Zhang, Y. (2009). Generation of Coordinated Control Regions for Road Network using Hypergraph Models. *IFAC Proceedings Volumes*, 42(15), 576–581. <https://doi.org/10.3182/20090902-3-US-2007.0071>
- 33] Essen, H., Boon, B., Boer, D., Faber, J., Bossche, M., Vervoort, K., & Rochez, C. (2004). *Marginal Costs of Infrastructure Use – Towards a Simplified Approach*.
- 34] Fan, W. D., Winkler, M., & Tian, Z. Z. (2011). Arterial signal timing and coordination: Sensitivity analyses, partition techniques, and performance comparisons. *Advances in Transportation Studies*, (23), 53–66. <https://doi.org/10.4399/97888548388645>
- 35] Fellendorf, M., & Vortisch, P. (2010). Microscopic Traffic Flow Simulator VISSIM. In *Fundamentals of Traffic Simulation* (pp. 63–93). Springer, New York, NY. Retrieved from https://link.springer.com/chapter/10.1007/978-1-4419-6142-6_2
- 36] Fernandes, P., Coelho, M. C., & Roupail, N. M. (2017). Assessing the impact of closely-spaced intersections on traffic operations and pollutant emissions on a corridor level. *Transportation Research Part D: Transport and Environment*, 54(Supplement C), 304–320. <https://doi.org/10.1016/j.trd.2017.05.016>
- 37] Ferreira, M., Fernandes, R., Conceição, H., Viriyasitavat, W., & Tonguz, O. K. (2010). Self-organized Traffic Control. In *Proceedings of the Seventh ACM*

- International Workshop on Vehicular InterNetworking* (pp. 85–90). New York, NY, USA: ACM. <https://doi.org/10.1145/1860058.1860077>
- 38] Gardner, A. (2017, October 17). Green Once Meant Stop—and Other Curious Facts from the History of Traffic Lights. Retrieved December 22, 2017, from <https://www.artsy.net/article/artsy-editorial-history-traffic-lights>
- 39] Gartner, N. H., Little, J. D. C., & Gabbay, H. (1975). Optimization of Traffic Signal Settings by Mixed-Integer Linear Programming. *Transportation Science*, 9(4), 321–343. <https://doi.org/10.1287/trsc.9.4.321>
- 40] Gartner, N. H., Pooran, F. J., & Andrews, C. M. (2001). Implementation of the OPAC adaptive control strategy in a traffic signal network. In *ITSC 2001. 2001 IEEE Intelligent Transportation Systems. Proceedings (Cat. No.01TH8585)* (pp. 195–200). <https://doi.org/10.1109/ITSC.2001.948655>
- 41] Gazis, D. C. (1964). Optimum Control of a System of Oversaturated Intersections. *Operations Research*, 12(6), 815–831. <https://doi.org/10.1287/opre.12.6.815>
- 42] Guo, F., Wang, X., & Abdel-Aty, M. A. (2010). Modeling signalized intersection safety with corridor-level spatial correlations. *Accident Analysis & Prevention*, 42(1), 84–92. <https://doi.org/10.1016/j.aap.2009.07.005>
- 43] Hensher, D. A., & Goodwin, P. (2004). USING VALUES OF TRAVEL TIME SAVINGS FOR TOLL ROADS: AVOIDING SOME COMMON ERRORS. *Transport Policy*, 11(2). Retrieved from <https://trid.trb.org/view/701529>
- 44] He, Q., Head, K. L., & Ding, J. (2014). Multi-modal traffic signal control with priority, signal actuation and coordination. *Transportation Research Part C: Emerging Technologies*, 46, 65–82. <https://doi.org/10.1016/j.trc.2014.05.001>
- 45] Hillier, J. A., & Rothery, R. (1967). The Synchronization of Traffic Signals for Minimum Delay. *Transportation Science*, 1(2), 81–94. <https://doi.org/10.1287/trsc.1.2.81>
- 46] Huang, W., Sun, J., Wang, H., & Li, K. (2008). Design of IDSS for Traffic Microsimulation Model Calibration. In *2008 Second International Symposium on Intelligent Information Technology Application* (Vol. 1, pp. 550–555). <https://doi.org/10.1109/IITA.2008.229>

- 47] Hu, H., & Liu, H. X. (2013). Arterial offset optimization using archived high-resolution traffic signal data. *Transportation Research Part C: Emerging Technologies*, 37, 131–144. <https://doi.org/10.1016/j.trc.2013.10.001>
- 48] Hung, K. (2014). *AN EVALUATION OF THE SAFETY AND OPERATIONAL BENEFITS OF TRAFFIC SIGNAL COORDINATION FOR AN URBAN ARTERIALS IN KUCHING*. Retrieved from <http://ir.unimas.my/8699/1/An%20Evaluation%20of%20The%20Safety%20and%20Operational%20Benefits%20of%20Traffic%20Signal%20Coordination%20For%20An%20Urban%20Arterials%20in%20Kuching%20%2824pgs%29.pdf>
- 49] Hunt, P. B., Robertson, D. I., Bretherton, R. D., & Winton, R. I. (1981). SCOOT - A TRAFFIC RESPONSIVE METHOD OF COORDINATING SIGNALS. *Publication of: Transport and Road Research Laboratory*. Retrieved from <https://trid.trb.org/view/179439>
- 50] Ioslovich, I., Haddad, J., Gutman, P.-O., & Mahalel, D. (2011). Optimal traffic control synthesis for an isolated intersection. *Control Engineering Practice*, 19(8), 900–911. <https://doi.org/10.1016/j.conengprac.2011.05.004>
- 51] Jiang, M., & Morikawa, T. (2004). Theoretical analysis on the variation of value of travel time savings. *Transportation Research Part A: Policy and Practice*, 38(8), 551–571. <https://doi.org/10.1016/j.tra.2003.11.004>
- 52] Jinpeng, & Zhang, Y. (2012). Effect of signal coordination on traffic emission. *Transportation Research Part D: Transport and Environment*, 17(2), 149–153. <https://doi.org/10.1016/j.trd.2011.10.005>
- 53] Kaczmarek, M., Cichocki, P., & Jabkowski, P. (2009). Coordination of Traffic in Two-Way Street Networks. *IFAC Proceedings Volumes*, 42(15), 594–599. <https://doi.org/10.3182/20090902-3-US-2007.0113>
- 54] Keyarsalan, M., & Ali Montazer, G. (2011). Designing an intelligent ontological system for traffic light control in isolated intersections. *Engineering Applications of Artificial Intelligence*, 24(8), 1328–1339. <https://doi.org/10.1016/j.engappai.2011.03.005>
- 55] Kim, S.-J., Kim, W., & Rilett, L. (2005). Calibration of Microsimulation Models Using Nonparametric Statistical Techniques. *Transportation Research Record:*

- Journal of the Transportation Research Board*, 1935, 111–119.
<https://doi.org/10.3141/1935-13>
- 56] Köhler, E., & Strehler, M. (2012). Combining Static and Dynamic Models for Traffic Signal Optimization Inherent Load-dependent Travel Times in a Cyclically Time-expanded Network Model. *Procedia - Social and Behavioral Sciences*, 54, 1125–1134. <https://doi.org/10.1016/j.sbspro.2012.09.827>
- 57] Koshi, M. (1989). Cycle time optimization in traffic signal coordination. *Transportation Research Part A: General*, 23(1), 29–34. [https://doi.org/10.1016/0191-2607\(89\)90137-4](https://doi.org/10.1016/0191-2607(89)90137-4)
- 58] Kumarage, A., Gunaruwan, T., Storm, U., Ranawana, S., & Mudannayake, D. (2000). *Assessing Public Investment in the Transport Sector*. Department of National Planning.
- 59] Lai, X., & Bierlaire, M. (2015). Specification of the cross-nested logit model with sampling of alternatives for route choice models. *Transportation Research Part B: Methodological*, 80(Supplement C), 220–234. <https://doi.org/10.1016/j.trb.2015.07.005>
- 60] Lämmer, S., & Helbing, D. (2008). Self-control of traffic lights and vehicle flows in urban road networks. *Journal of Statistical Mechanics: Theory and Experiment*, 2008(04), P04019. <https://doi.org/10.1088/1742-5468/2008/04/P04019>
- 61] Lämmer, S., Kori, H., Peters, K., & Helbing, D. (2006). Decentralised control of material or traffic flows in networks using phase-synchronisation. *Physica A: Statistical Mechanics and Its Applications*, 363(1), 39–47. <https://doi.org/10.1016/j.physa.2006.01.047>
- 62] Lamm, W. (2014). *History of Traffic Signal Design* (Vol. Part 7). Retrieved from <http://www.kbrhorse.net/signals/history07.html>
- 63] Lan, C.-J., Messer, C., Chaudary, N., & Chang, E. (2004). Compromise Approach to Optimize Traffic Signal Coordination Problems during Unsaturated Conditions. *Transportation Research Record*, 1360, 112–120.
- 64] Lebacque, J., Lesort, J., & Giorgi, F. (1998). Introducing Buses into First-Order Macroscopic Traffic Flow Models. *Transportation Research Record: Journal of the Transportation Research Board*, 1644, 70–79. <https://doi.org/10.3141/1644-08>

- 65] Lee, J.-H., & Lee-Kwang, H. (1999). Distributed and cooperative fuzzy controllers for traffic intersections group. *IEEE Transactions on Systems, Man, and Cybernetics, Part C (Applications and Reviews)*, 29(2), 263–271. <https://doi.org/10.1109/5326.760570>
- 66] Li, J.-Q., Wu, G., & Zou, N. (2011). Investigation of the impacts of signal timing on vehicle emissions at an isolated intersection. *Transportation Research Part D: Transport and Environment*, 16(5), 409–414. <https://doi.org/10.1016/j.trd.2011.03.004>
- 67] Little, J. D. C., Kelson, M. D., & Gartner, N. H. (1981). MAXBAND: a versatile program for setting signals on arteries and triangular networks. Retrieved from <http://dspace.mit.edu/handle/1721.1/1979>
- 68] Liu, P., Lu, J., & Cao, B. (2009). Capacity of U-Turns at Unsignalized Median Openings on Six-Lane Streets. *Transportation Research Record: Journal of the Transportation Research Board*, 2130, 59–65. <https://doi.org/10.3141/2130-08>
- 69] Liu, P., Lu, J., Fan, J., Pernia, J., & Sokolow, G. (2005). Effects of U-Turns on Capacities of Signalized Intersections. *Transportation Research Record: Journal of the Transportation Research Board*, 1920, 74–80. <https://doi.org/10.3141/1920-09>
- 70] Liu, P., Lu, J., Hu, F., & Sokolov, G. (2008). Capacity of U-Turn Movement at Median Openings on Multilane Highways. *Journal of Transportation Engineering*, 134(4), 147–154. [https://doi.org/10.1061/\(ASCE\)0733-947X\(2008\)134:4\(147\)](https://doi.org/10.1061/(ASCE)0733-947X(2008)134:4(147))
- 71] Liu, P., Lu, J. J., & Chen, H. (2008). Safety effects of the separation distances between driveway exits and downstream U-turn locations. *Accident Analysis & Prevention*, 40(2), 760–767. <https://doi.org/10.1016/j.aap.2007.09.011>
- 72] Liu, Y., & Chang, G.-L. (2011). An arterial signal optimization model for intersections experiencing queue spillback and lane blockage. *Transportation Research Part C: Emerging Technologies*, 19(1), 130–144. <https://doi.org/10.1016/j.trc.2010.04.005>
- 73] Li, W., & Tarko, A. (2010). SAFETY CONSIDERATION IN SIGNAL COORDINATION AND ROAD DESIGN ON URBAN STREETS. Retrieved from http://www.4ishgd.valencia.upv.es/index_archivos/41.pdf

- 74] Li, X., Li, G., Pang, S.-S., Yang, X., & Tian, J. (2004). Signal timing of intersections using integrated optimization of traffic quality, emissions and fuel consumption: a note. *Transportation Research Part D: Transport and Environment*, 9(5), 401–407. <https://doi.org/10.1016/j.trd.2004.05.001>
- 75] LI, Y., GUO, X., YANG, J., LIU, Y., & HE, S. (2011). Mechanism Analysis and Implementation Framework for Traffic Signal Control of Over-saturated Intersection Group. *Journal of Transportation Systems Engineering and Information Technology*, 11(4), 28–34. [https://doi.org/10.1016/S1570-6672\(10\)60130-4](https://doi.org/10.1016/S1570-6672(10)60130-4)
- 76] Louisiana Department of Transportation. (2010). VISSIM Calibration Parameters for Louisiana. Retrieved from http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Traffic_Engineering/Traffic%20Simulation/LACalibration.pdf
- 77] Lownes, N., & Machemehl, R. (2006). Sensitivity of Simulated Capacity to Modification of VISSIM Driver Behavior Parameters. *Transportation Research Record: Journal of the Transportation Research Board*, 1988, 102–110. <https://doi.org/10.3141/1988-15>
- 78] Madireddy, M., De Coensel, B., Can, A., Degraeuwe, B., Beusen, B., De Vlieger, I., & Botteldooren, D. (2011). Assessment of the impact of speed limit reduction and traffic signal coordination on vehicle emissions using an integrated approach. *Transportation Research Part D: Transport and Environment*, 16(7), 504–508. <https://doi.org/10.1016/j.trd.2011.06.001>
- 79] Manjunatha, P., Vortisch, P., & Mathew, T. V. (2012). *Methodology for the Calibration of VISSIM in Mixed Traffic*. Retrieved from <http://docs.trb.org/prp/13-3677.pdf>
- 80] Mathew, T., & Radhakrishnan, P. (2010). Calibration of Microsimulation Models for Nonlane-Based Heterogeneous Traffic at Signalized Intersections. *Journal of Urban Planning and Development*, 136(1), 59–66. [https://doi.org/10.1061/\(ASCE\)0733-9488\(2010\)136:1\(59\)](https://doi.org/10.1061/(ASCE)0733-9488(2010)136:1(59))
- 81] Mathew, T. V., & Radhakrishnan, P. (2010). Calibration of Microsimulation Models for Nonlane-Based Heterogeneous Traffic at Signalized Intersections.

- Journal of Urban Planning and Development*, 136(1), 59–66.
[https://doi.org/10.1061/\(ASCE\)0733-9488\(2010\)136:1\(59\)](https://doi.org/10.1061/(ASCE)0733-9488(2010)136:1(59))
- 82] Ma, W., Yang, X., & Liu, Y. (2010). Development and Evaluation of a Coordinated and Conditional Bus Priority Approach. *Transportation Research Record: Journal of the Transportation Research Board*, 2145, 49–58. <https://doi.org/10.3141/2145-06>
- 83] Mcshane, C. (1999). The Origins and Globalization of Traffic Control Signals. *Journal of Urban History*, 25(3), 379–404. <https://doi.org/10.1177/009614429902500304>
- 84] Mehar, A., Changra, S., & Velmurugan, S. (2014). Highway capacity through vissim calibrated for mixed traffic conditions - ProQuest, 18(2), 639–645.
- 85] Meneguzzo, C., Gastaldi, M., Rossi, R., Gecchele, G., & Prati, M. V. (2017). Comparison of exhaust emissions at intersections under traffic signal versus roundabout control using an instrumented vehicle. *Transportation Research Procedia*, 25(Supplement C), 1597–1609. <https://doi.org/10.1016/j.trpro.2017.05.204>
- 86] Merkert, R., & Beck, M. (2017). Value of travel time savings and willingness to pay for regional aviation. *Transportation Research Part A: Policy and Practice*, 96(Supplement C), 29–42. <https://doi.org/10.1016/j.tra.2016.11.022>
- 87] Messe, C., & Nageswara, R. (1996). *Improved Traffic Signal Coordination Strategies for Actuated Control* (p. 95). Texas Transportation Institute. Retrieved from <http://library.ctr.utexas.edu/digitized/SWUTC/465110-1.pdf>
- 88] Messer, C. J., Haenel, H. E., & Koeppe, E. A. (1974). A REPORT ON THE USER'S MANUAL FOR PROGRESSION ANALYSIS AND SIGNAL SYSTEM EVALUATION ROUTINE--PASSER II. Retrieved from <https://trid.trb.org/view/24167>
- 89] Metz, D. (2017). Valuing transport investments based on travel time saving: Inconsistency with United Kingdom policy objectives. *Case Studies on Transport Policy*. <https://doi.org/10.1016/j.cstp.2017.07.003>

- 90] Meunier, D., & Quinet, E. (2015). Value of Time Estimations in Cost Benefit Analysis: The French Experience. *Transportation Research Procedia*, 8, 62–71. <https://doi.org/10.1016/j.trpro.2015.06.042>
- 91] Mirchandani, P., & Head, L. (2001). A real-time traffic signal control system: architecture, algorithms, and analysis. *Transportation Research Part C: Emerging Technologies*, 9(6), 415–432. [https://doi.org/10.1016/S0968-090X\(00\)00047-4](https://doi.org/10.1016/S0968-090X(00)00047-4)
- 92] Mouter, N., & Chorus, C. (2016). Value of time – A citizen perspective. *Transportation Research Part A: Policy and Practice*, 91(Supplement C), 317–329. <https://doi.org/10.1016/j.tra.2016.02.014>
- 93] Mueller, E. A. (1970). Aspects of the history of traffic signals. *IEEE Transactions on Vehicular Technology*, 19(1), 6–17. <https://doi.org/10.1109/T-VT.1970.23426>
- 94] Muralidharan, A., Coogan, S., Flores, C., & Varaiya, P. (2016). Management of intersections with multi-modal high-resolution data. *Transportation Research Part C: Emerging Technologies*, 68(Supplement C), 101–112. <https://doi.org/10.1016/j.trc.2016.02.017>
- 95] Ngoduy, D., & Maher, M. J. (2012). Calibration of second order traffic models using continuous cross entropy method. *Transportation Research Part C: Emerging Technologies*, 24, 102–121. <https://doi.org/10.1016/j.trc.2012.02.007>
- 96] Olarte, R., Bared, J. G., Sutherland, L. F., & Asokan, A. (2011). Density Models and Safety Analysis for Rural Unsignalised Restricted Crossing U-turn Intersections. *Procedia - Social and Behavioral Sciences*, 16, 718–728. <https://doi.org/10.1016/j.sbspro.2011.04.491>
- 97] Park, B. (Brian), Won, J., & Yun, I. (2006). Application of Microscopic Simulation Model Calibration and Validation Procedure: Case Study of Coordinated Actuated Signal System. *Transportation Research Record: Journal of the Transportation Research Board*, 1978, 113–122. <https://doi.org/10.3141/1978-16>
- 98] Park, B., & Qi, H. (2006). Microscopic simulation model calibration and validation for freeway work zone network - a case study of VISSIM. In *2006 IEEE Intelligent Transportation Systems Conference* (pp. 1471–1476). <https://doi.org/10.1109/ITSC.2006.1707431>

- 99] Park, B., & Schneeberger, J. (2003). Microscopic Simulation Model Calibration and Validation: Case Study of VISSIM Simulation Model for a Coordinated Actuated Signal System. *Transportation Research Record: Journal of the Transportation Research Board*, 1856, 185–192. <https://doi.org/10.3141/1856-20>
- 100] Parr, S. A., Kaiser, E. I., & Stevanovic, A. (2011). Examining the Level of Service Consequence of Transit Signal Priority during Urban Evacuation. *Procedia - Social and Behavioral Sciences*, 16, 588–599. <https://doi.org/10.1016/j.sbspro.2011.04.479>
- 101] Pillai, R. S., Rathi*, A. K., & L. Cohen, S. (1998). A restricted branch-and-bound approach for generating maximum bandwidth signal timing plans for traffic networks. *Transportation Research Part B: Methodological*, 32(8), 517–529. [https://doi.org/10.1016/S0191-2615\(96\)00033-1](https://doi.org/10.1016/S0191-2615(96)00033-1)
- 102] Porche, I., Sampath, M., Sengupta, R., Chen, Y. L., & Lafortune, S. (1996). A decentralized scheme for real-time optimization of traffic signals. In *Proceeding of the 1996 IEEE International Conference on Control Applications IEEE International Conference on Control Applications held together with IEEE International Symposium on Intelligent Control* (pp. 582–589). <https://doi.org/10.1109/CCA.1996.558925>
- 103] Pursula, M. (1999). SIMULATION OF TRAFFIC SYSTEMS - AN OVERVIEW, 3(1), 1–8.
- 104] Putha, R., & Quadrifoglio, L. (2010). Using Ant Colony Optimization for Solving Traffic Signal Coordination in Oversaturated Networks. Presented at the Transportation Research Board 89th Annual Meeting Transportation Research Board. Retrieved from <https://trid.trb.org/view.aspx?id=910669>
- 105] Rakha, H., Medina, A., Sin, H., Dion, F., Van Aerde, M., & Jenq, J. (2000). Traffic Signal Coordination across Jurisdictional Boundaries: Field Evaluation of Efficiency, Energy, Environmental, and Safety Impacts. *Transportation Research Record: Journal of the Transportation Research Board*, 1727, 42–51. <https://doi.org/10.3141/1727-06>
- 106] Reid, J., & Hummer, J. (1999). Analyzing System Travel Time in Arterial Corridors with Unconventional Designs Using Microscopic Simulation. *Transportation*

- Research Record: Journal of the Transportation Research Board*, 1678, 208–215.
<https://doi.org/10.3141/1678-25>
- 107] Robertson, D. I. (1983). Esso Energy Award Lecture, 1982: Coordinating Traffic Signals to Reduce Fuel Consumption. *Proceedings of the Royal Society of London. Series A, Mathematical and Physical Sciences*, 387(1792), 1–19.
- 108] Robertson, D. L., & Hunt, P. B. (1982). A method of estimating the benefits of coordinating signals by TRANSYT and SCOOT, 23(11), 527–531.
- 109] Roozmond, D. A. (2001). Using intelligent agents for pro-active, real-time urban intersection control. *European Journal of Operational Research*, 131(2), 293–301.
[https://doi.org/10.1016/S0377-2217\(00\)00129-6](https://doi.org/10.1016/S0377-2217(00)00129-6)
- 110] Rrecaj, A. A., & Bombol, K. M. (2015). Calibration and Validation of the VISSIM Parameters - State of the Art, 4(3), 255–269.
- 111] Sekiyama, K., Nakanishi, J., Takagawa, I., Higashi, T., & Fukuda, T. (2001). Self-organizing control of urban traffic signal network. In *2001 IEEE International Conference on Systems, Man and Cybernetics. E-Systems and e-Man for Cybernetics in Cyberspace (Cat.No.01CH37236)* (Vol. 4, pp. 2481–2486 vol.4).
<https://doi.org/10.1109/ICSMC.2001.972930>
- 112] Serafini, P., & Ukovich, W. (1989). A mathematical model for the fixed-time traffic control problem. *European Journal of Operational Research*, 42(2), 152–165.
[https://doi.org/10.1016/0377-2217\(89\)90318-4](https://doi.org/10.1016/0377-2217(89)90318-4)
- 113] Sherman, G., & Gerald, C. (2009). The Color of Sin: White and Black Are Perceptual Symbols of Moral Purity and Pollution. *Psychological Science*, 20(8), 1019–1025. <https://doi.org/10.1111/j.1467-9280.2009.02403.x>
- 114] Siddharth, S. M. P., & Ramadurai, G. (2013). Calibration of VISSIM for Indian Heterogeneous Traffic Conditions. *Procedia - Social and Behavioral Sciences*, 104, 380–389. <https://doi.org/10.1016/j.sbspro.2013.11.131>
- 115] Skabardonis, A., & Christofa, E. (2011). Impact of Transit Signal Priority on Level of Service at Signalized Intersections. *Procedia - Social and Behavioral Sciences*, 16, 612–619. <https://doi.org/10.1016/j.sbspro.2011.04.481>

- 116] Sommer, C., German, R., & Dressler, F. (2011). Bidirectionally Coupled Network and Road Traffic Simulation for Improved IVC Analysis. *IEEE Transactions on Mobile Computing*, 10(1), 3–15. <https://doi.org/10.1109/TMC.2010.133>
- 117] Tindale, S. A., & Hsu, P. (Peter). (2005). Crash data and signal coordination: A one-way pair case study. *Journal of Safety Research*, 36(5), 481–482. <https://doi.org/10.1016/j.jsr.2005.10.007>
- 118] Van Katwijk, R., & van Koningsbruggen, P. (2002). Coordination of traffic management instruments using agent technology. *Transportation Research Part C: Emerging Technologies*, 10(5–6), 455–471. [https://doi.org/10.1016/S0968-090X\(02\)00034-7](https://doi.org/10.1016/S0968-090X(02)00034-7)
- 119] Victoria Transport Policy Institute. (2013). *Transportation Cost and Benefit Analysis - Travel Time costs* (p. 24). Retrieved from www.vtpi.org/tca/tca0502.pdf
- 120] Virkler, M. (1998). Signal Coordination Benefits for Pedestrians. *Transportation Research Record: Journal of the Transportation Research Board*, 1636, 77–82. <https://doi.org/10.3141/1636-12>
- 121] Wahlstedt, J. (2011). Impacts of Bus Priority in Coordinated Traffic Signals. *Procedia - Social and Behavioral Sciences*, 16, 578–587. <https://doi.org/10.1016/j.sbspro.2011.04.478>
- 122] Wang, F.-Y., Tang, S., Sui, Y., & Wang, X. (2003). Toward intelligent transportation systems for the 2008 Olympics. *IEEE Intelligent Systems*, 18(6), 8–11. <https://doi.org/10.1109/MIS.2003.1249163>
- 123] Wang, X., & Abdel-Aty, M. (2006). Temporal and spatial analyses of rear-end crashes at signalized intersections. *Accident Analysis & Prevention*, 38(6), 1137–1150. <https://doi.org/10.1016/j.aap.2006.04.022>
- 124] Wang, X., Cottrell, W., & Mu, S. (2005). Using k-means clustering to identify time-of-day break points for traffic signal timing plans. In *Proceedings. 2005 IEEE Intelligent Transportation Systems, 2005.* (pp. 586–591). <https://doi.org/10.1109/ITSC.2005.1520102>
- 125] Wardman, M., Chintakayala, V. P. K., & de Jong, G. (2016). Values of travel time in Europe: Review and meta-analysis. *Transportation Research Part A: Policy and Practice*, 94(Supplement C), 93–111. <https://doi.org/10.1016/j.tra.2016.08.019>

- 126] Webster, F. V. (1958). TRAFFIC SIGNAL SETTINGS. *Road Research Lab Tech Papers /UK/*. Retrieved from <http://trid.trb.org/view.aspx?id=113579#>
- 127] Wheat, P., & Batley, R. (2015). Quantifying and decomposing the uncertainty in appraisal value of travel time savings. *Transport Policy*, 44(Supplement C), 134–142. <https://doi.org/10.1016/j.tranpol.2015.06.010>
- 128] Wiering, M., Vreeken, J., Veenen, J. van, & Koopman, A. (2004). Simulation and optimization of traffic in a city. In *IEEE Intelligent Vehicles Symposium, 2004* (pp. 453–458). <https://doi.org/10.1109/IVS.2004.1336426>
- 129] Wilkins, S. (2015). *Network Switching Methods: Store-and-Forward Versus Cut-Through* | *Network Switching Methods: Store-and-Forward Versus Cut-Through* | Pearson IT Certification. Retrieved from <http://www.pearsonitcertification.com/articles/article.aspx?p=2420611>
- 130] Wilshire, R., Black, R., Grochoske, R., & Higinbotham, J. (1985). *Traffic Control Systems Handbook*. Federal Highway Administration.
- 131] Wu, A., Qi, L., & Yang, X. (2013). Mechanism Analysis and Optimization of Signalized Intersection Coordinated Control under Oversaturated Status. *Procedia - Social and Behavioral Sciences*, 96, 1433–1442. <https://doi.org/10.1016/j.sbspro.2013.08.163>
- 132] Wu, A., & Yang, X. (2013). Real-time Queue Length Estimation of Signalized Intersections Based on RFID Data. *Procedia - Social and Behavioral Sciences*, 96, 1477–1484. <https://doi.org/10.1016/j.sbspro.2013.08.168>
- 133] Xie, K., Wang, X., Huang, H., & Chen, X. (2013). Corridor-level signalized intersection safety analysis in Shanghai, China using Bayesian hierarchical models. *Accident Analysis & Prevention*, 50(Supplement C), 25–33. <https://doi.org/10.1016/j.aap.2012.10.003>
- 134] Xinwu, Y., Qiaohui, W., Huibin, X., & Xiaoyan, X. (2016). A coordinated signal control method for arterial road of adjacent intersections based on the improved genetic algorithm. *Optik - International Journal for Light and Electron Optics*, 127(16), 6625–6640. <https://doi.org/10.1016/j.ijleo.2016.04.044>
- 135] Xi, X., ZhaoCheng, H., WenBo, S., ZhanQiu, C., & JunFeng, G. (2013). Traffic Impact Analysis of Urban Intersections with Comprehensive Waiting Area on

- Urban Intersection based on PARAMICS. *Procedia - Social and Behavioral Sciences*, 96, 1910–1920. <https://doi.org/10.1016/j.sbspro.2013.08.216>
- 136] Xuan, Y., Daganzo, C. F., & Cassidy, M. J. (2011). Increasing the capacity of signalized intersections with separate left turn phases. *Transportation Research Part B: Methodological*, 45(5), 769–781. <https://doi.org/10.1016/j.trb.2011.02.009>
- 137] Yagoda, N., Principe, E., Vick, E., & Leonard, B. (1973). Subdivision of signal systems into control areas, 42–45.
- 138] Yang, H., Wang, X., & Yin, Y. (2012). The impact of speed limits on traffic equilibrium and system performance in networks. *Transportation Research Part B: Methodological*, 46(10), 1295–1307. <https://doi.org/10.1016/j.trb.2012.08.002>
- 139] Yang, Z., Liu, P., Chen, Y., & Yu, H. (2012). Can Left-turn Waiting Areas Improve the Capacity of Left-turn Lanes at Signalized Intersections? *Procedia - Social and Behavioral Sciences*, 43, 192–200. <https://doi.org/10.1016/j.sbspro.2012.04.091>
- 140] YU, X., SULIJOADIKUSUMO, G., & PREVEDOUROS, P. (2012). Analysis of Downstream Queues on Upstream Capacity Expansion of Urban Signalized Intersection. *Journal of Transportation Systems Engineering and Information Technology*, 12(3), 98–108. [https://doi.org/10.1016/S1570-6672\(11\)60206-7](https://doi.org/10.1016/S1570-6672(11)60206-7)
- 141] Yu, X., Suljoadikusumo, G., & Prevedouros, P. (2012). Analysis of Downstream Queues on Upstream Capacity Expansion of Urban Signalized Intersection. *Journal of Transportation Systems Engineering and Information Technology*, 12(3), 98–108. [https://doi.org/10.1016/S1570-6672\(11\)60206-7](https://doi.org/10.1016/S1570-6672(11)60206-7)
- 142] Zanon, M., Gros, S., Wymeersch, H., & Falcone, P. (2017). An Asynchronous Algorithm for Optimal Vehicle Coordination at Traffic Intersections**this work was supported by Copplar (project number 32226302), the Swedish Research Council (VR, grant number 2012-4038) and the European Commission Seventh Framework (AdaptIVe, grant number 610428). *IFAC-PapersOnLine*, 50(1), 12008–12014. <https://doi.org/10.1016/j.ifacol.2017.08.2124>
- 143] Zhang, L., Song, Z., Tang, X., & Wang, D. (2016). Signal coordination models for long arterials and grid networks. *Transportation Research Part C: Emerging Technologies*, 71(Supplement C), 215–230. <https://doi.org/10.1016/j.trc.2016.07.015>

- 144] ZHANG, Y., CHEN, X., ZHANG, X., SONG, G., HAO, Y., & YU, L. (2009). Assessing Effect of Traffic Signal Control Strategies on Vehicle Emissions. *Journal of Transportation Systems Engineering and Information Technology*, 9(1), 150–155. [https://doi.org/10.1016/S1570-6672\(08\)60050-1](https://doi.org/10.1016/S1570-6672(08)60050-1)
- 145] Zhao-Meng, C., Xiao-ming, L., Wen-Xiang, W., Zhao-Meng, C., Xiao-ming, L., & Wen-Xiang, W. (2015). Optimization Method of Intersection Signal Coordinated Control Based on Vehicle Actuated Model, Optimization Method of Intersection Signal Coordinated Control Based on Vehicle Actuated Model. *Mathematical Problems in Engineering*, *Mathematical Problems in Engineering*, 2015, 2015, e749748. <https://doi.org/10.1155/2015/749748>, 10.1155/2015/749748
- 146] Zheng, J. (2015). A fuzzy TOPSIS approach based to evaluate the transportation mode selection: an experience in a suburban university. *Advances in Transportation Studies*, 1(Special Issue), 23–34.
- 147] Zhizhou, W., Jian, S., & Xiaoguang, Y. (2005). Calibration of VISSIM for Shanghai expressway using genetic algorithm. In *Proceedings of the Winter Simulation Conference, 2005*. <https://doi.org/10.1109/WSC.2005.1574564>
- 148] Zhou, H., Hawkins, H. G., & Zhang, Y. (2017). Arterial signal coordination with uneven double cycling. *Transportation Research Part A: Policy and Practice*, 103(Supplement C), 409–429. <https://doi.org/10.1016/j.tra.2017.07.004>
- 149] Zhou, H., Hsu, P., Lu, J., & Wright, J. (2003). Optimal Location of U-Turn Median Openings on Roadways. *Transportation Research Record: Journal of the Transportation Research Board*, 1847, 36–41. <https://doi.org/10.3141/1847-05>