Download File Solutions To Reduce Traffic Congestion Pdf For Free

Does Providing Information to Drivers Reduce Traffic Congestion? Revised Edition Apr 12 2022
Traffic Congestion May 21 2020
Traffic management Mar 31 2021
Establishing a Strong Telework and Flexible Work Hours Program to Help Reduce Traffic Congestion and Improve Quality of Life Oct 14 2019
Does E-commerce Reduce Traffic Congestion? Dec 28 2020
Traffic Congestion Jun 14 2022 "587833"
Re-engineering of Traffic Systems in the Central Business District (CBD) of a South African City Jun 21 2020 Most cities of the world face the challenges of dealing with traffic congestion and its undesirable consequences. In South Africa many large and medium sized cities– and specifically the central business district (CBD) thereof – are experiencing traffic congestion and are severely affected by it. One such city which warranted this investigation, is Kimberley in the Northern Cape Province. Because of its unique physical and spatial attributes; its road network; economic characteristics and the requirement of the mobility of heavy vehicles in addition to the normal city traffic, Kimberley experiences typical traffic congestion challenges in its CBD area, particularly during peak hours. Thus, using the city Kimberley as a case study, an investigation was conducted to comprehend the traffic congestion scenario on the roads in and around Kimberley's CBD area with the aim to evolve plausible re-engineering interventions that could alleviate the traffic congestion challenges experienced by the city. The conduction of the study involved the critical review of relevant literature, understanding of the control variables influencing traffic congestion and applying relevant empirical models to assess traffic congestion and evolve policy/strategic measures to alleviate the challenge. A survey research methodology was used for the collection of data, followed by statistical analyses of the data and the application of empirical models to assess the level of traffic congestion on the roads of the study area. Simulated scenarios based on different re-engineering interventions were then evolved, which assisted in engendering policies and strategic interventions that could reduce traffic congestion and improve smooth traffic flow in and around the Kimberley CBD area. In this regards, the following major factors usually causing traffic congestion in and around CBD areas were investigated. They are traffic volume; type and composition of vehicles; specifically plying of heavy vehicles (large trucks); on-road parking facilities; type of junctions; traffic speed; inadequate number of lanes; inadequate turning radii; insufficient lane width/ road width (capacity); inadequate availability of space near junctions; availability of commercial function; availability of traffic nodes such as bus and taxi stops; and availability of civic/administrative functions close to the roads. The study indicated an appreciable level of traffic congestion on some of the roads in the Kimberley CBD area –specifically during peak hours– which needs strategic intervention. The results of the application of empirical models such as Segment delay (Ds), Travel time index (TTI), Q index, Level of Service (LOS) and Queue length suggest that two of the major roads, namely

Long Street and Transvaal Road (impacted by Pniel Road), are experiencing high levels of congestion during both normal and peak hours. Similarly, some of the other roads such as Bishop Road, Carter Road and Barkley Road (impacting Transvaal Road) and Schmidtsdrift Road are a cause of concern during peak hours. Future scenario analyses indicated that these roads – i.e. Long Street, Transvaal Road (Phakamile Mabija Road), Bishop`s Road, Carter Road and Barkley Road – will become severely congested. Besides, junctions connecting Long Street and Bultfontein Road (J1); Bishop-/Lyndhurst Street and Bultfontein Road/Delham Street (J2); Transvaal Road and Cecil Sussman Street (J3); and Transvaal Road and Old Main Street (J5); experience high queuing lengths during peak hours and are seemingly under pressure with regard to congestion. However, the following re-engineering interventions this study envisages for the year projected year 2025 should reduce congestion on the roads in and around the CBD area of the city: appropriate traffic diversion from the congested roads to relatively less congested roads during both normal and peak traffic hours; segregation of heavy vehicles and the diversion of the appropriate proportion of normal cars during peak hours; optimal use of less congested roads for carrying diverted traffic; prevention of use of on street parking facilities during peak hours; and modification of signalling cycle time at major junctions during the peak hours. It has been determined that by adopting a policy of diverting a minimum percentage traffic from Long Street (20.77%), Transvaal Road (28.80%), Bishop Road (15.11%), Barkley Street (12.73%), Barkley section 2 (9.0%), Carter Road (14.10%) and Cecil Sussman Road (20.77%) and assigning all this traffic in the following proportions to Memorial Road (12.23%), Du Toitspan Road (20.77%), Lyndhurst Street (20.77%) and Main Street (25.80%), would appreciably reduce the traffic congestion in the congested roads without increasing the level of traffic congestion on the relatively free roads. Similarly, by adopting a policy, of diverting a minimum percentage of traffic from Long Street (33.71%), Transvaal Road (40.05%), and Bishop Street (17.79%) during peak periods in projected years and assigning this traffic in the following proportions to Memorial Road (25.0%), Barkley Road impacted by Pniel Street (25.0%), Du Toitspan Street (28.43%), Lyndhurst Street (28.43%) and Main Street (28.43%), will not significantly increase the level of traffic congestion on these roads whilst enabling the reduction of traffic congestion on the roads under pressure of traffic. Furthermore, simulated scenarios of traffic diversion based on travel time ratio and change in speed, show that with a reasonable level of diversion of traffic from congested roads to less congested roads, speed can be increased and travel time can be reduced on the roads in the CBD area of the city, thus allowing roads to be optimally utilised. These results also established the following two hypotheses on which this investigation has been based: 1) Segregation of traffic (modal split) will appreciably reduce traffic congestion in terms of improved LOS, less travel time and reduced delay on the roads in the CBD; and 2) Optimal traffic assignment (diversion to alternative roads) will significantly reduce traffic congestion in terms of improved LOS, less travel time and reduced delay on the roads of CBD. It can thus be concluded that re-engineering solutions such as traffic diversion from the congested roads to the under-utilised or least congested roads with appropriate traffic assignment and modal split (segregation of vehicles) could assist in easing the traffic congestion, increasing speed and reducing travel time, resulting in optimal utilisation of all the roads in the CBD area of the city.

Motorized Public Transportation to Reduce Traffic Congestion Mar 11 2022 [Encode value for abstract or summary of thesis on hand (Change 1st indicator to 3 if abstract, leave blank otherwise). If thesis has no summary or abstract, as an alternative, use conclusion instead. If using conclusion, place the text inside quotation marks.]

Gastonia, Measures to Reduce Traffic Congestion in the Vicinity of Eastridge Mall, Gaston County, State Project 9.8121368, U-1162G

Jan 09 2022

Traffic Congestion Jan 17 2020

Traffic Congestion Feb 10 2022 The General Accounting Office (GAO) investigated the strengths and weaknesses of federal transportation system management (TSM) planning efforts by conducting a nationwide survey of 119 metropolitan planning organizations (MPOs), using a stratified random sample of metropolitan statistical areas. The response rate was 100%. Additionally, GAO conducted site visits in Minneapolis, San Francisco, and Tampa and interviewed key decisionmakers involved in TSM implementation and local air quality planning.

A Preliminary Study to Formulate Multimodal Transportation Strategies to Alleviate Traffic Congestion in Small Urban Areas of New England Nov 26 2020

The Optimal Mix of Pricing and Indfrastucture Expansions to Alleviate Traffic Congestion and In-bus Crowding in Grand Casablanca Mar 19 2020 Like in many large cities in developing countries, traffic in Grand Casablanca, Morocco, is congested and public buses are crowded. These conditions are alleviated by a combination of supply-side infrastructure expansions, such as more buses and new road capacity, and demand-side pricing instruments, such as parking and fuel taxes. Using an empirical urban transportation mode choice model for Casablanca, this study finds a mix of these expansion policies and pricing instruments to alleviate congestion and maximize aggregate social welfare. The optimal mix is sensitive to the marginal costs of the infrastructure expansions. If the city were to spread out in its periphery where land constraints do not exist and land is available at lower prices, a supply-side instrument, particularly the optimal expansion of roads, would be far more effective in achieving welfare gains than the use of optimal pricing instruments without new roads. By contrast, if the city were to densify in already built-up areas, land and other physical constraints and the high price of land may leave expensive “elevated roads” as the only option. In this case, demand-side instruments together with the elevated roads would equally contribute to reduce traffic congestion and in-bus crowding.

Balancing the Need for Tourism with the Need to Reduce Traffic Congestion Oct 06 2021

Stuck in Traffic May 13 2022 Peak-hour traffic congestion has become a major problem in most U.S. cities. In fact, a majority of residents in metropolitan and suburban areas consider congestion their most serious local problem. As citizens have become increasingly frustrated by repeated traffic delays that cost them money and waste time, congestion has become an important factor affecting local government policies in many parts of the nation. In this new book, Anthony Downs looks at the causes of worsening traffic congestion, especially in suburban areas, and considers the possible remedies. He analyzes the specific advantages and disadvantages of every major strategy that has been proposed to reduce congestion. In nontechnical language, he focuses on two central issues: the relationships between land-use and traffic flow in rapidly growing areas, and whether local policies can effectively reduce congestion or if more regional approaches are necessary. In rapidly growing parts of the country, congestion is worse than it was five or ten years ago. But Downs notes that the problem has apparently not yet become bad enough to stimulate effective responses. Neither government officials nor citizens seem willing to consider changing the behavior and public policies that cause congestion. To alleviate the problem, both groups must be prepared to make these fundamental changes. Selected by Choice as an Outstanding Book of 1992 Co-published with the Lincoln Institute of Land Policy

Evaluating Traffic Congestion Mitigation Strategies Nov 14 2019 In 2010, traffic congestion cost commuters in the U.S. approximately $101 billion in lost time and wasted fuel. Local governments and transportation agencies have used a variety of mitigation strategies to reduce the cost

of traffic congestion. However, many of these mitigation strategies can be equally as costly to implement, maintain, and administer. With the federal government, and many local and state governments facing large budget deficits and dwindling tax revenues, it is imperative that these governments pursue mitigation strategies that are most cost effective. This thesis examines five traffic congestion mitigation strategies ranging from expanding roadway capacity to using toll-ways, to determine which ones are most and least cost effective. Using quantitative regression analysis, interviews with transportation policy and decision makers, and criteria alternative matrix analysis, I ranked each traffic congestion mitigation strategy from least to most cost effective, based on three cost criteria. I found that ramp metering was by far the most cost effective strategy, followed by toll-ways. Meanwhile, I found that expanding transit capacity was the least cost effective of the five strategies. As a result of my findings, I made three policy recommendations: Make full use of ramp metering, convert underutilized High Occupancy Vehicle lanes with High Occupancy Toll lanes, and expand roadway capacity only after more cost effective mitigations strategies have been exhausted.

Using Pricing to Reduce Traffic Congestion Nov 19 2022 Explains how congestion pricing works. Reviews the best available evidence on projects that make use of such pricing to assess its benefits and challenges. Discusses Federal policy options for encouraging congestion pricing.

Traffic Congestion Oct 26 2020 Traffic Congestion: Activities to Reduce Travel Demand and Air Pollution Are Not Widely Implemented

Traffic Congestion May 01 2021 The U.S. Government Accountability Office (GAO) is an independent agency that works for Congress. The GAO watches over Congress, and investigates how the federal government spends taxpayers dollars. The Comptroller General of the United States is the leader of the GAO, and is appointed to a 15-year term by the U.S. President. The GAO wants to support Congress, while at the same time doing right by the citizens of the United States. They audit, investigate, perform analyses, issue legal decisions and report anything that the government is doing. This is one of their reports.

Building Roads to Reduce Traffic Congestion in America's Cities Dec 08 2021

Traffic Congestion Dec 20 2022

Road Traffic Congestion: A Concise Guide Sep 05 2021 This book on road traffic congestion in cities and suburbs describes congestion problems and shows how they can be relieved. The first part (Chapters 1 - 3) shows how congestion reflects transportation technologies and settlement patterns. The second part (Chapters 4 - 13) describes the causes, characteristics, and consequences of congestion. The third part (Chapters 14 - 23) presents various relief strategies - including supply adaptation and demand mitigation - for nonrecurring and recurring congestion. The last part (Chapter 24) gives general guidelines for congestion relief and provides a general outlook for the future. The book will be useful for a wide audience - including students, practitioners and researchers in a variety of professional endeavors: traffic engineers, transportation planners, public transport specialists, city planners, public administrators, and private enterprises that depend on transportation for their activities.

Generated Traffic Implications for Transport Planning Dec 16 2019 Roadway improvements that reduce traffic congestion tend to increase total vehicle travel, due to latent demand. This is called generated or induced traffic. Generated traffic consists of trips that are shifted in time, route and mode, and new or longer vehicle trips. Recent research indicates that a typical roadway improvements can generate significant amounts of traffic. Generated traffic has three implications for transport planning. First, generated traffic reduces predicted congestion reduction benefits of incresing highway capacity, particularly over the long term. Second, generated traffic increases external costs (costs imposed on others) of automobile use. Third, generated traffic provides relatively small user benefits, because it consists of vehicle travel that consumers are most

willing to forego if congestion increases. It is important that all three of these impacts be considered when evaluating roadway capacity expansion projects. Failing to do so tends to overstate the benefits of roadway capacity expansion, and undervalue other transportation improvementrs. Alternative congestion reduction strategies that make more efficient use of existing capacity may provide greater social benefit in many situations. This paper summarizes recent research on generated traffic, describes different types and their impacts, provides recommendations for incorporating generated raffic into transportation decision making and describes ways to encourage more eficient use of existing roadway capacity.

A Strategy to Reduce Traffic Congestion and Improve Air Quality Jan 21 2023

Incentives to Reduce Traffic Congestion and Air Pollution Sep 17 2022

Moving Los Angeles Jul 23 2020 Los Angeles has the worst traffic congestion in the country. Excessive traffic congestion detracts from quality of life, is economically wasteful and environmentally damaging, and exacerbates social-justice concerns. The authors of this book recommend strategies for reducing congestion in Los Angeles County that could be implemented and produce significant improvements within about five years.

The Optimal Mix of Pricing and Infrastructure Expansions to Alleviate Traffic Congestion and In-Bus Crowding in Grand Casablanca Apr 19 2020 Like in many large cities in developing countries, traffic in Grand Casablanca, Morocco, is congested and public buses are crowded. These conditions are alleviated by a combination of supply-side infrastructure expansions, such as more buses and new road capacity, and demand-side pricing instruments, such as parking and fuel taxes. Using an empirical urban transportation mode choice model for Casablanca, this study finds a mix of these expansion policies and pricing instruments to alleviate congestion and maximize aggregate social welfare. The optimal mix is sensitive to the marginal costs of the infrastructure expansions. If the city were to spread out in its periphery where land constraints do not exist and land is available at lower prices, a supply-side instrument, particularly the optimal expansion of roads, would be far more effective in achieving welfare gains than the use of optimal pricing instruments without new roads. By contrast, if the city were to densify in already built-up areas, land and other physical constraints and the high price of land may leave expensive "elevated roads" as the only option. In this case, demand-side instruments together with the elevated roads would equally contribute to reduce traffic congestion and in-bus crowding.

Market Research Evaluation of Actions to Reduce Suburban Traffic Congestion Aug 04 2021

Reducing Traffic Congestion Feb 22 2023 In major United States metropolitan areas, traffic congestion is costing Americans billions of dollars every year in terms of lost time and productivity, air pollution, and wasted energy. States and localities are seeking innovative and effective approaches to reduce traffic congestion and improve air quality. Many in the U.S. and worldwide are implementing and evaluating the potential of congestion pricing. This strategy involves pricing roadways during peak-travel periods.

Incremental Capacity Needed to Reduce Traffic Congestion Nov 07 2021

Reducing Traffic Congestion and Improving Traffic Safety in Michigan Communities Oct 18 2022

Traffic congestion Jul 03 2021

Traffic Congestion Jul 15 2022 Reviewed federal efforts to promote more efficient management of America's roadway systems through transportation systems management (TSM) techniques. Also examines the extent to which air quality concerns affected the inclusion of TSM

activities in the local transportation planning process. Charts & tables.
Draft Implementation & Operations Plan Jun 02 2021
Reducing Traffic Congestion in Los Angeles Aug 16 2022
Expanding Telework and Flexible Work Hours Programs to Help Reduce Traffic Congestion and Improve Quality of Life Aug 24 2020
Traffic Congestion Sep 24 2020 Pursuant to a congressional request, GAO reviewed federal efforts to promote more efficient transportation management systems and the extent to which air quality concerns affected transportation systems management (TSM) activities. GAO found that: (1) 96 percent of all metropolitan planning organizations planned TSM activities for their regions; (2) organizations placed more emphasis on supply than demand; (3) when organizations planned demand management activities, the greatest emphasis came from areas with a population of 1 million or more; (4) planning alone failed to ensure implementation of demand management activities because of the lack of consensus among implementors, and the absence of a link between planning and funding; (5) only 26 percent of all metropolitan planning organizations indicated that their short-term plans included some demand management or related activities for air pollution reduction; and (6) the planning and implementation of demand management or related activities for air quality improvement required the involvement of many agencies.
Adaptive Traffic Congestion Control in Smart Vehicular Network Jan 29 2021 A smart vehicular network is a system of connected vehicles and infrastructure that uses advanced technology to improve transportation efficiency, safety, and sustainability. These networks use a variety of communication technologies, such as V2V (vehicle-to-vehicle) and V2I (vehicle-to-infrastructure) to enable vehicles to share information and coordinate their actions. This allows for a variety of intelligent transportation systems (ITS) such as traffic management, real-time traffic monitoring, adaptive traffic control, active traffic management and so on. One of the key features of smart vehicular networks is the use of wireless networks, such as cellular and WiFi networks, to enable communication between vehicles and with the infrastructure. This allows for a wide range of applications, such as real-time traffic monitoring, traffic control, and incident management. Smart vehicular networks also make use of sensor fusion, which combines data from multiple sources (e.g. cameras, lidar, radar, etc.) to provide a more complete and accurate picture of the traffic and road conditions. Another important aspect of smart vehicular networks is their potential to support the development of autonomous vehicles. By providing vehicles with real-time information about traffic, road conditions, and other vehicles, smart vehicular networks can enable autonomous vehicles to make safer and more efficient driving decisions. Traffic congestion control refers to the various techniques and strategies used to manage and reduce traffic congestion in urban areas. The goal of traffic congestion control is to improve the flow of traffic, reduce travel time, and improve air quality. One of the most common strategies for traffic congestion control is the use of intelligent transportation systems (ITS), which use advanced technology to monitor and control traffic flow in real-time. This can include systems such as traffic management centers, advanced traffic management systems (ATMS), and intelligent traffic lights. These systems use data from a variety of sources, such as cameras, sensors, and connected vehicles, to provide real-time information about traffic conditions and adjust traffic signals, speed limits, and other traffic management strategies as needed. Another important strategy for traffic congestion control is active traffic management (ATM), which uses various techniques such as variable speed limits and lane control to dynamically manage the flow of traffic and reduce congestion. ATM can also include incident management systems, which can quickly respond to accidents or other incidents on the road to minimize disruptions and get traffic flowing again as quickly as possible. Another approach for traffic congestion control is congestion pricing,

which charges drivers a fee to enter congested areas during peak hours. This strategy aims to reduce the number of cars on the road during peak hours, which in turn can reduce congestion and improve air quality. Additional techniques for traffic congestion control include public transportation optimization, rerouting, carpooling, park and ride systems, and travel demand management. These strategies aim to encourage more efficient use of the road network and reduce the number of single-occupancy vehicles on the road, which can help to reduce congestion and improve air quality.

Citizens' Guide to Initiative 985 Feb 27 2021

Bumper to Bumper! Feb 16 2020

tmcd.com