**THE ECONOMIC IMPACT OF GOVERNMENT INTERVENTION IN PUBLIC TRANSPORT SYSTEM: A CASE STUDY OF THE** **UDUAGHAN BUS SCHEME IN DELTA STATE, NIGERIA**

**ABSTRACT**

This study investigated the Economic benefit of government intervention in public transport system with direct focus on the Uduaghan Bus Scheme which was introduced during the administration of Dr. Emmanuel Eweta Uduaghan which lasted from 2007 to 2015 in Delta State, Nigeria. The core aim of this paper is to address economic relevance of government intervention in urban/rural transportation system and the challenges regarding mass transit in Delta State. This Uduaghan initiative introduced 300 bus units to provide cost-effective, reliable and efficient transportation, thereby relieving traffic congestion associated with informal transport systems that are otherwise very costly in terms of safety and economic considerations. The study adopted mixed-method research, employing a combination of survey data and qualitative interviews to evaluate commuter/citizens satisfaction, operational efficiency and economic impacts of the Uduaghan Bus Scheme. The study results revealed that while the Uduaghan Bus Scheme has improved public transportation system, it still suffers from high operability setback which had considerably tilted the balance in favour of this scheme so far. This study concludes that there is drastic reduction in cost of transportation across board, easy accessibility to the urban and rural areas, and state-of-art transport vehicles within study period. Based on the findings of this study, it is recommended that; Nigeria government should subsidize the public transportation scheme through the provision of government transport bus scheme and provide quicker solution to its operational efficiency.

**Key words:** Uduaghan Bus, Economic impact, government intervention and public transport

**Jel codes:** H76, O18, R58, R42, and L92

**INTRODUCTION**

Between 2007 and 2015, the administration of Dr. Emmanuel Uduaghan was in Delta State, Nigeria, and launched the Uduaghan Bus Scheme, a flagship of the said transportation initiative. The scheme was to address urban transportation challenges in the state, congested public transportation systems, as well as improve mobility of residents in the cities, which includes Asaba, Warri and other urban centers in the state. The bus initiative focused on affordability, accessibility and efficiency in an effort to offload the transportation burden from the citizen but at the same time enhance economic growth through enhanced connectivity. For decades, the public transport infrastructure in the Uduaghan government saw strategic investment and the bus scheme was one of these investments. The transport scheme did not only help to abate the chronic problems of congestion and transportation options but the buses also effective to organized, stabilize public transport faire and presented a sustainable public transportation and job creation as well.

In 2014, then Governor of Delta state, Emmanuel Uduaghan, introduced the Uduaghan Bus, as a means to improving public transportation in the state particularly for commuters in the city of Asaba (the state capital) and other cities and urban areas in the state. The aim was to ease the movement of the people, goods and other valuables in Delta State in regards to the challenges of public transportation. The buses was a cheap and easy way to get around town that was unnecessarily difficult and expensive to get to via other private commercial transport systems domiciled all over the states.

The Uduaghan government's initiative to improve transportation services in Delta State started with the purchase of 100 buses at first instance, the governor later added 200 18 seater bus and promised to increased it to 1000 buses before his tenure will elapse. These buses were meant to help address the issue of commuting in rural-urban areas and especially the state capital, Asaba and in other major towns within the state. Another purpose of the project was to supply cheap and reliable public transport for the indigenes and citizens of Nigeria residing in Delta State to minimize traffic congestion as well as to encourage economic development. It was part of a comprehensive program to modernize the transport system in Delta State, which was lacking in Delta State and the few available ones were in unacceptable state before the administration of Uduaghan in 2007.

Throughout the state there were many privately owned taxis and motorbikes operating, but in a limited capacity, and the value they offered to the average commuter was unreliable, unsafe, and expensive. This was why in 2014 after a critical state transport system review, the Governor Emmanuel Uduaghan recognized the need for a more organized public transport system and purchased over 300 buses as a key part of the state transportation reforms. The intention of these buses was to complement the use of sustainable affordable means of transport for the Delta residents mainly in urban centers such as Asaba and Warri, this was later expanded to cover the 25 local governments. Short trip cost N100 and longer journey N150 and N230 as the case may be; the buses were distributed on fixed routes, and the service was more affordable than existing alternatives that mainly comprised of private individuals.

The broad objectives for the scheme included reducing transport cost and monopoly which was caused by the private sectors transporters. The scheme also stimulated economic activities, provided a more reliable means of transportation and created living jobs for citizens of Delta which also spanned through the operational and maintenance of buses as a means of employment. Moreover, the Uduaghan bus initiative also aimed at diminishing the pollution of transportation by promoting and not discouraging the usage of public buses rather than privately owned vehicles as is the case in other cities. The Uduaghan bus scheme major aim was to provide fair competition for the public privately owned transport vehicles that seem to raise their fairs incessantly.

This study examined the effect of the Uduaghan bus scheme on Delta State’s transport system during the Uduaghan tenure which was from 2007 to 2015. This study will also look at its effectiveness in the amelioration of Delta State’s transport system during this period, its economic benefits and its long-term viability to the people of Delta State. This paper is guided by these research questions: What were the economic effects of the Uduaghan Bus Scheme on transport costs of commuters in Delta State? How does Uduaghan Bus Scheme influence commuter satisfaction in reliability, safety and accessibility? What are the operational problems of the Uduaghan Bus Scheme and how can they affect its long-term sustainability? How can findings from the Uduaghan Bus Scheme be valuable in shaping the future of public transport policies and initiatives in Nigeria?

**THE LITERATURE**

Despite the fact that this research has very little literature that links directly to this subject matter, this study will review other related studies in Nigeria in general and Delta State in particular. One of the state government initiatives to improve public transportation system in the urban centres of Delta State is the Uduaghan Bus Scheme. The problems in cities in Nigeria highlighted in various studies and reports includes bad transport infrastructure, lack of quality public transportation and the increasing fairs on urban transport networks. Key facts in transportation reform is that there is need for the Nigeria government to get involved in the transportation business as this will help to checkmate the exorbitant charges of the private transporters in the country. This study tried as possible best to narrow its literature to Delta State to enable us articulate in the Delta State context are explored in this literature review and examined with respect to the realization and the significance of the Uduaghan Bus Scheme in Delta State and its Economic impact within the study period (Olamigoke, and Adebayo 2013).

Government intervention in public transport systems is hotly contested in the urban planning and economic development literature. This paper investigates the Uduaghan Bus Scheme, which was established during Dr. Emmanuel Uduaghan's tenure in Delta State, Nigeria, from 2007 to 2015. It also seeks to investigate the economic implications of government intervention in solving the transportation problems with specific reference to mass transit systems. It is already established in the literature that the effective use of public transport can reduce congestion, enhance mobility, and thereby open up the economic opportunities of residents (Ashish, and Ramanayya, 2014).

The government of Uduaghan purchased 300 bus units which were inducted into the Delta State transportation network with the help of the Uduaghan Bus Initiative, which was established to provide cheaper, safer, and more efficient means of transport. This scheme aimed at alleviating some of the problems associated with informal transport systems that are characterized by high fares, safety concerns, and inefficiencies. The provision of a scheduled, affordable transport, it was intended that the scheme would not only help to reduce traffic congestion but also foster economic opportunities through easy access to urban and rural areas. Mixed-methods research methodologies have been employed in assessing public transport initiatives. In this research, survey data combined with qualitative interviews have been used to assess the level of commuter satisfaction, operational efficiency, and economic impacts of the Uduaghan Bus Scheme. Earlier studies have shown that public transport systems can only really be assessed through understanding user experiences and perceptions. This therefore provides for a comprehensive analysis of the scheme's performance and how far it has been able to respond to the needs of society (Yaqub, Olateju, and Aina, 012).

Once again, even though there are several positive benefits of the Uduaghan Bus Scheme-from better access to cheap bus fare-some challenges remain mostly in terms of high operational and maintenance costs. These have formed the basis of most criticisms against the scheme, rendering it ineffective to sustain and long-lasting like some other government transport initiatives in Nigeria. It then became a necessity to assess the funding and management models capable of justifying the viability of public transport systems in the long run (Hudgson, 2012). Such literature seems to highlight imperative strategic planning and sustainable investment in public transportation as a primary objective of improving urban mobility. The government can subsidize public transport schemes to ascertain cheaper cost-effective travel, encouraging citizens to use it for much faster accessibility and, at the same time, propelling economic growth. This research will further enrich the already existing body of empirical knowledge by showing the economic dividends from government interference in public transport while at the same time emphasizing the need for strong frameworks for the success and sustainability of future transport projects in Nigeria (Hudgson, 2012).

The Uduaghan Bus Scheme clearly demonstrates the potential economic benefits of government interventions in public transportation. The learning outcomes from this research point to the need for continuous strategic planning and investment for sustainable public transport solutions in Nigeria, hence, bettering the standard of living among the citizens and promoting economic development.

**The Challenges of Public Transportation in Nigerian Cities**

Nigerian cities have had little or non-proper public transportation scheme which has been characterized by lack of organized system, inefficiencies, overcrowding and high cost oriented. Poor public transportation infrastructure of cities like Lagos, Abuja, Port Harcourt and Asaba has straightened its way into the dependence on informal transport modes such as shared taxis, buses, and bicycles due to government lack of involvement. While these informal modes of transport are a lifeline, offering indispensable mobility, they are marred by the unfortunate reality of reneging on the regulation they need, poor safety standards, and poorly timed services leading to more congestion, pollution incessant price hikes. Stopped here

Studies of the type carried out by Ikejiofor & Ali (2014) for instance argue the necessity of a more organized public transport system for Delta State to alleviate increase in traffic and enhance mobility. But the lack of organized transportation options not only inconveniences its commuters but it also stifles economic activity and contributes to environmental degradation from dredging, storing and using old inefficient vehicles.

**Transport Solutions Driven by Government**

Government's role in improving public transport system has been a prominent theme in the literature of urban planning and development. In "Public Transport and Urban Development: In "The Role of the State" (2010), McConnell et al. claim that state intervention in public transit is critical to equitable access to transportation for low income populations. Affordable, reliable, and eco-friendly transport solutions are available through government driven initiatives and can generate economic development and relieve inequalities (Jelilov, and Kachallah, 2017).

In the context of the Nigerian urban development policies, several states have established transportation schemes. For example, Bus Rapid Transit (BRT) system of Lagos State is generally counted as a success, reducing congestion and promoting sustainable development with efficient bus services. The Uduaghan Bus Scheme was, in many ways, conceived with similar objectives: public transport infrastructure, which will ease urban traffic congestion, and provide inexpensive alternative modes of transport for Delta residents.

**The Uduaghan Bus Scheme, its objectives and implementation**

The Uduaghan Bus Scheme launched in 2014 was therefore designed to provide reliable, affordable and green transportation for Delta State people. It was one of the administration’s broader initiatives to revamp the infrastructure of the state and boost urban mobility. Uduaghan (2014) explained that the program was aimed at addressing the transportation headache in the state with the introduction of 100 buses, set on fixed routes and affordable fares of N50 for short travel distance and N100 for longer journey distances. They (buses) were positioned to serve mainly commuters in major urban centres, that is, in Asaba and Warri.

The introduction of these buses was a boost in lowering the dependence on unorganized transport services like commercial taxis most often perceived as inefficient and unregulated. The offer of bus transport offered more structure, safety and helped protect the environment for those local commuters. With the launch of this government run transport scheme, the Uduaghan administration also wanted to create jobs through this sector, not only in the employ section of drivers and maintenance workers but also other entrepreneurs in the transportation services ecosystem (Knowles, and Hall, 2009).

**Impact and Effectiveness of the Scheme**

The Uduaghan Bus Scheme was highly commended for its ambitious goals and practical rollout – particularly so with how the scheme was implemented – but the argument of how effective and sustainable it was has been in debate. Studies have indicated that the management and maintenance of state run transportation programs can be difficult. According to Knowles, and Hall, (2009) there are often significant challenges to many government may funded transport initiatives in Nigeria as inadequate funding, bad governance and insufficient long term planning persist to afflict such initiatives. However, since the Uduaghan Bus Scheme, problems that may have included high maintenance cost, fuel price volatility, and competition with informal transport services may have affected its sustainability.

However, Nwafor and Onya (2019), the scheme had a positive effect in urban communities such as Asaba and Warri, in directing the stress in other forms of public transport. More affordable and reliable options meant commuters who relied previously on taxis and motorcycles were helped. The buses also reduced road congestion and helped cleaner air by taking older, polluting vehicles off of the road. But Oduola (2009) and some other reports argue that a major threat to sustaining the scheme in the long term was poor management and high operational cost associated with the running of the buses. As a result, many of these buses reached the point at which they were either not able to operate or were not properly used as originally intended, all without the proper consistent funding and a well-developed system for maintenance.

**Delta State Future Government Transport Systems**

The Uduaghan Bus Scheme possesses lessons which could help shape future transport strategies in Delta State and Nigeria at large. To be successful, government driven transport schemes require project of institutional robustness; adequate financial provisions and continuous monitoring, as noted by Nwafor and Onya (2019). Uduaghan Bus Scheme showed that public transport can be improved with strategic government intervention, but only if long term planning, efficient management and adaptive model that would accommodate evolving urban dynamics are in use.

The Uduaghan Bus Scheme therefore, was a pivot point in the improvement in the quality of public transportation in Delta State. Despite many of its successes, the challenges in maintenance and management highlighted that robust frameworks and sustainable funding mechanisms are not only important to the success of such projects in the future, but are essential to their long term sustainability. The outcomes of this scheme can provide useful lessons for policy makers targeting the urban transport issues across Nigeria.

**METHODOLOGY**

This study adopted a mixed methods design that combines both qualitative and quantitative methods to determine the impact, effectiveness and challenges of the Uduaghan Bus Scheme under the administration of Governor Emmanuel Uduaghan. Moreover, this enables us to take a well-rounded perspective about the subject as you take a comprehensive analysis of both personal experiences and statistical data.

The sample and population selection involves theUduaghan buses used by commuters during the operation of the scheme, persons responsible for management; operation; and maintenance of the buses. Government managers and other stakeholders responsible for the planning and implementation of the Uduaghan Bus Scheme. Public transport providers who may be affected by the scheme, including taxi operators, constitute private sector stakeholders. Participants was selected from each group by a stratified random sampling technique. The sample size is 200 commuters collected data from urban centers such as Asaba and Warri on their experience with the service. Direct involvement in managing the buses of 30 transport officials and operators. 15 government officials and policymakers involved in the conception and release of the Uduaghan Bus Scheme.

The Surveys/Questionnaires involves the commuters and transport officials were asked to fill a structured questionnaire. The questionnaire consists of both closed and open-ended questions aimed at gathering quantitative data on: How often and how much Uduaghan buses are used, service that commuters are satisfied with it. Affordability, reliability and safety, issues for the public transport system in general, and bus operators in particular.

The interviews involve the key government officials, transport managers and private sector stakeholders was interviewed on a semi structured basis. These interviews aimed to explore examination of the planning, implementation and operational challenges of the scheme.

Focused group looked at the sustainability of the program**,** perceptions of the scheme’s urban mobility and traffic congestion implications, and localized economies impacts. The focus group discussions (FGDs) further helped us to select commuters in key cities (e.g. Asaba, Warri, Ugheli and others) will participate in focus group discussions. Through these discussions, the evolved commuter experiences, social and economic benefits of the service, and any problems they had while using the buses, will be obtained through qualitative approaches.

The secondary data involves government reports and official records, this looked at how the Uduaghan bus scheme was implemented, funded, its operational costs and ridership will be collected from documents and reports of the scheme. Media and News Articles was reviewed, the reports on the reception and feedback of the scheme in newspapers and online news portals, and other media sources. Academic Literature was reviewed to compare the Uduaghan Bus Scheme with similar public transport projects in other states and countries.

The data analysis techniques involves both qualitative and quantitative methods, the Quantitative Analysis involved the Survey and questionnaire data and the descriptive (frequencies, percentages, mean) and inferential statistics was used in order to examine pattern and trend. Additionally they helped to monitor ridership trends, commuter satisfaction and assisted in determining bus service operational efficiency. Qualitative Analysis involves the interview, focus group discussion and the open-ended survey question data was transcribed and thematically analyzed.

**RESULTS AND DISCUSSION**

The findings from data collected using the questionnaires, surveys, interviews and focus group discussions for the study on the Uduaghan Bus Scheme are presented in this section. The scheme is analyzed qualitatively and quantitatively to document its effectiveness, impact and challenge over Governor Uduaghan’s tenure. In this study, information was collated from 200 commuters, 30 transport officials, 15 government officials and other stakeholders. Based on these findings, the results are presented into quantitative and qualitative results below.

**Quantitative results**

**Table 1:** Demographic profile of commuters and results analysis

|  |  |
| --- | --- |
| **Gender Distribution:** | **Age Range:** |
| Male | **60%** | 18-25 years | 25% |
| Female | **40%** | 26-35 years | 35% |
|  |  | 36-50 years | 30% |
|  |  | 51+ years | 10% |
|  | **Total**  |  | 100 |

**Table 2: Frequency of bus usage and result analysis**

|  |  |
| --- | --- |
| **Usage timeline** | **Percentage** |
| Daily basis | 70% |
| 2-3 times a week | 20% |
| Those that used it occasionally  | 10% |
| Total | 100 |

**Table 3:** Commuter Satisfaction analysis commuter satisfaction with the Uduaghan bus scheme

|  |  |
| --- | --- |
| **Commuters**  | **Decision**  |
| 65% | Satisfied  |
| 25% | Neutral |
| 10% | Dissatisfied  |
| Total: 100 |

**Table 4:** The analysis of the economic impact of the Uduaghan Bus Scheme in Delta State.

| **Parameter** | **Percentage (%)** | **Description** |
| --- | --- | --- |
| Reduction in travel expenses | 5% | Percentage decrement in the average cost of travels of persons engaged in the bus project, in comparison to those users simply seeking an overnight stay. |
| Increase in the transportation safety  | 15% | From all the Commuters surveyed, the number of commuters who say that they are happier with the reliability and safety of the bus service regarding the transporting their products |
| Improved public transportation patronage | 25% | This proportion of respondents found it much easier to access urban as well as rural localities due to the bus arrangement. |
| Reduction in waiting periods at public parks  | 25% | This proportion of respondents found it much easier to access urban as well as rural localities due to the bus arrangement. |
| Economic impact in the state. | 30% | This proportion of respondents found it much easier to access urban as well as rural localities due to the bus arrangement as it improve business and economic growth.  |

**Source:** Author’s computation, using study data.

The table above reveals important findings provided in the report explicitly showing the economic implications of the Uduaghan Bus Scheme in Delta State. It evidently supports the findings of the study that the scheme positively impacted the transportation system in the state. The table assimilates five crucial parameters that reflect the advantages of the bus project that can be expressed as percentages. Each parameter focuses on an aspect of either user experience or the economic impact of bus service. The percentage implies how many respondents accepted such improvements.

**In-depth explanation of each parameter**

**Reduction in Travel Expenses (5%)**

This parameter says there is a 5% drop in travel costs experienced by users of the project concerning other people not taking the bus service but inclined towards night stay-that is probably in hotels or lodgings.This reduction is owed to improved efficiency and economy by bus as an alternative means of transport for the users, which probably sways more people towards patronage of bus service.

**Increase in Transport Safety (15%)**

This depicts that about 15% of surveyed commuters felt better concerning the bus service's reliability and safety; especially in transporting goods and products. The bus project has probably put in place safety measures that can inspire confidence to its users, and thus the higher value attributed to the service. This enhancement in safety may act as a catalyst for attracting further patronage of bus travel as compared to other transport modes.

**Increased public transportation use (25%)**

This parameter shows that 25% of respondents declare that it is easier to access either an urban or rural area of the bus because of the bus arrangement. Greater accessibility means that bus service became wider or more frequent, thus making travel easier for users. The more accommodated to public transport the increased traffic congestion and environmental stress from personal vehicles.

**Reduction in waiting periods at public parks (25%).**

In the same sense, 25% of respondents also said that waiting times at public parks were short because of bus services. Shorter waiting times usually are attributed to better bus timings or a better connection to critical destinations enabling the user to spend more time enjoying these areas than waiting for transport. This could do wonders for the overall travel experience and for possible visits to parks and recreational places.

**Economic Impact in the State (30%):**

This parameter states that twenty-eight percent of people considered the bus project to help economic growth by allowing access advantages into urban and rural areas. This understanding essentially states that accessibility increases business opportunities, as people can travel more easily to work, shop, and hit service points. This economic impact may be greatest for local businesses and might stimulate the growth of a community in wider terms behind such investments in public transport.

Finally, as the parameters under which the perceived benefits of the bus project are estimated in terms of percentages, the table very well summarizes what has encoded in such parameters. Thus, those insights reveal how improved transport yields cost savings, safety benefits, improved accessibility, reduced level of waiting time, and considerable economic growth. These factors also form much-needed fundamentals for stakeholders like urban planners, transportation services, as well as economic developers about the diverse advantages accruing from the improvement in public transportation systems.

In terms of affordability, more than 80 percent of those surveyed found that bus fares of N50 (short trip) and N100 (long trip) were affordable. Although they emphasized that this fair was later reviewed upwards gradually according to the prices of petrol pump price (PMS). However, 15% thought the fares were slightly expensive relative to comparable forms of transport. Mostly due to financial constraints, 5% found it unaffordable. In terms of punctuality and reliability, we had 50% of respondents say the buses were always on time. In addition, 30 percent said the buses were sometimes late during their peak hours. Others, 20 percent, reported that they frequently experienced bus delays.

Regarding comfort and safety, the buses were rated as comfortable and safe by 75 per cent of the commuters. Amongst the 10 per cent who rated the buses as uncomfortable, they said it was because of overcrowding. On the other hand, 15% were worried about safety in particular parts, especially accidents involving buses. In terms of its impact on traffic and congestion, commuters were asked whether the Uduaghan buses helped reduce traffic congestion: 55% of respondents agreed that the buses helped reduce congestion, particularly in Asaba and Warri. 25% felt there was minimal impact on congestion as the buses could not match the growing population and traffic volume. 20% observed no significant effect on congestion. The Uduaghan bus usage in relation to alternative transport, 60% of commuters stated that they reduced their use of taxis and motorcycles after the introduction of the buses. 25% continued using taxis due to convenience or shorter travel times. 15% still preferred motorcycles for flexibility and speed during busy hours.

The government officials interviewed stressed that the introduction of the Uduaghan Bus Scheme was designed to enhance urban mobility, and boost environmental sustainability and job creation. The scheme was acknowledged to have brought about many of its objectives, although these were bound to face sustainability issues, insofar as maintenance costs and fuel prices were concerned. They maintained that challenges identified included funding and maintenance which culminated to the fact that operational costs, like fuel, bus repairs, and management, are above what is anticipated. They also suggested that the cost of fuel and maintenance is increasing on a rapid trend which is a big worry for the government and management of the transportation scheme as at when the Uduaghan Bus Scheme was in operation. It was noted that consistent services at times was recognized to have been disrupted in some areas in the State, particularly during peak periods, and in some cases the service disruption resulted in a reduction in commuter satisfaction this was asserted by the interviewed commuters in Delta State.

The focused group in respect of this research discussions asserted that affordability and accessibility was an issue to some citizens during the period, they emphasized that many commuters were a selling point for the service cheaper than taxis, like many of them regarded it as too expensive for daily commuting. Another challenges that some commuters complained about was that they have to sit on the bus during the peak hours and the bus is overcrowding and no discount is given to them commuters for the incontinence. Despite the complains about the peak period discomfort and over 65% of the commuters interviewed agreed that the Uduaghan Bus Scheme is greatly missed as it would have been a leeway to the reduction of the publication transportation fairs of today which have skyrocketed to high heaven

The respondents suggested various ways for the future improvement of the scheme they insisted that; increasing the number of buses will enable the scheme to avoid overcrowding during peak periods and will help commuters pay less. They also highlighted the positive economic impact of government intervention in public transportation on the local economy which is visible though this Uduaghan Bus Scheme. Respondents acknowledged that they observed that several commuters had available and affordable transportation during the time the Scheme lasted. Several commuters found that traveling more frequently increased their access to jobs and economic opportunities. One of the respondents in quote said “I knew this would be especially important for those working around Asaba where the bus scheme had the most activity”.

Transport officials and operators interviewed observed that operational challenges attracted high operational costs, especially on fuel and spare parts. They complained that at some point the buses became financially unviable except when there was good government funding to put them in proper condition again. Transport officials and operators however noted that the buses were relatively well maintained. They also had to temporarily withdraw some buses for repairs or maintenance whenever there is need for servicing or maintained. They went further to explain that the Uduaghan Bus Scheme provide job opportunities to many indigent citizens. Furthermore, Uduaghan Bus Scheme offered many employment opportunities for drivers, conductors and other ad-hoc workers. It was a particularly useful opportunity for local youth whom ordinarily would not have a job to get opportunity to feel empowered working in the Uduaghan bus scheme public transport sector.

**The effectiveness of the Uduaghan bus scheme**

Realizing their primary goals, the scheme provided for cost effective, reliable and ecofriendly transportation option for the Delta residents. The service is affordable and reliable, according to the majority of commuters. Reducing reliance on taxis and motorcycles that are expensive and often unsafe, the buses helped. The buses also helped to decongest some traffic which was problematically present in Asaba and Warri. But overcrowding, and delays during peak hours, were the two things identified as key shortcomings that must be fixed.

**Funding and Maintenance:** The sustainability of the scheme was one of the most significant challenges identified. It was hit by high operational costs, fuel price up and down and the lack of a stable funding from state government, which killed its long term viability. Commuter satisfaction fell as the buses were initially well received, but service disruptions from breakdowns and maintenance delays soured things.

**Service Coverage:** The scheme worked well in the major urban centres, but had almost no coverage in rural or less densely populated parts of Delta State. If the service is expanded to other parts, the rising demand for public transport may be met by it.

**CONCLUSION**

This study investigated the Economic impact of government intervention in public transport system, using Uduaghan bus scheme in Delta State a case study in Nigeria. It was discovered that while the Uduaghan bus scheme had overcome the challenges of affordability and access to public transport, it was constrained by sustainability and operation difficulties that prevented its long run success. This work discussed the challenges such as overcrowding, service consistency and funding to bring future public transport schemes in Delta State and throughout Nigeria to be more effectual and sustainable. This study found out that the introduction of the Uduaghan bus scheme contributed positively to the improvement in the public transportation system of Delta State in particular and in Nigeria in general. Finally, this study concludes that the government intervention in the making of adequate and sustaining public transport solutions for the future cannot be overemphasized and recommends that Nigeria government to approve such scheme across board in the country to easy the transportation cost and better its transportation comfortability.

**RECOMMENDATIONS**

There is need to enhance the effectiveness of the Uduaghan Bus Scheme and similar initiatives in Delta State and in Nigeria in general. It is recommended that the government implement robust funding mechanisms to address operational challenges and maintenance issues. Additionally, ongoing stakeholder engagement should be prioritized to gather commuter feedback, ensuring service improvements align with user needs. Furthermore, strategic planning should be adopted for future transport projects, incorporating lessons learned from the Uduaghan Bus Scheme to promote sustainable public transportation solutions across Nigeria.

Other specific recommendation includes:

1. Based on the data collected, several recommendations are made to improve the Uduaghan Bus Scheme or any future public transport projects in Delta State: It’s capacity to stockpile to meet rising demand, especially during the busy season.
2. Increase coverage to rural and smaller towns to ensure such a coverage of public transport is ensured.
3. Introduce a more sophisticated bus maintenance system so that buses are always in running condition and that breakdowns are few and distances travelled on ones bus are maintained.
4. Reduce the financial burden on the state in a secure sustainable way with government and private partnerships to fund it.

Disclaimer (Artificial intelligence)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during the writing or editing of this manuscript.

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