

Traffic Flow in Nigeria

Dan Walsh – School not available

Grade Level (Req.): 7th-10th grade	Content Area (Req.): World Geography	Unit (Opt.):
Connections to Other Disciplines (Opt.):		
<ul style="list-style-type: none"> • • • 		
Time Frame (Req.): 1 class period	Goal (Req.): To understand what traffic is like in Nigeria.	
	Objective (Req.): Students will be able to describe some of the frustrations and problems of traffic in Nigeria.	
Materials Needed (Req.):	New Vocabulary (Opt.):	
<ul style="list-style-type: none"> • Masking tape • Assignments for students • Whistle • Background information • “How to be a Nigerian” by Peter Enahoro (ISBN#: 978-029-021-4) – section 13 “Taxi Drivers” pages 52-53, section 14 “The Maulers” pages 54-56 (Mammy Wagons) • Video clip of Nigerian Bus driving or Traffic Jam • 	<ul style="list-style-type: none"> • • • • • 	
<p>Anticipatory Set/Introduction [Inquiry Question is required] (Req.): How is Nigerian transportation different from the transportation as we know it in the US? SUMMARY: The traffic in Nigeria is controlled but under-controlled and when enforced it still has problems. The biggest problem for Nigerian traffic is the cost and maintenance of traffic lights. Everything in Nigeria has value... Traffic lights, even though their practical value is small to us in America. In a country as economically depressed as Nigeria is, anything that left out has the possibility to be stolen and sold for a profit. This can be seen in our own country as well, so it is a problem that affects everyone. How many stereos get stolen a week from cars parked on the street? If we look at vandalized public property we can see it happens in the US, just the same as any other place in the world. This may be instructive if the students say, “Well, that doesn’t happen here.” Things like this do happen and possibly would more often if our economy were having the same problems as Nigeria’s economy. Not only is the value of objects important, but maybe more importantly the electricity of Nigeria is not always reliable. Traffic lights need sensors and electricity to power them, if the power goes out, the traffic lights will too. The thing to remember about Nigerians can best be described by a quote the staff from the University of Jos repeatedly told us, “Nigerians do the best they can with what they have.” They survive with the things that are available and do not panic about the things they are lacking. PREPARATION: Use masking tap to make a rectangle shaped area about the size of a sidewalk on each side with a median in the center in a size that would fit your entire class comfortably, this will serve as your “road”.</p>		
<p>Instructional Sequence/Procedure (Req.):</p> <ol style="list-style-type: none"> 1. Writing or Oral Brainstorming: What kinds of problems do we face in our own traffic? If the age group that you are working with does not drive ask them to think of problems they have seen 		

riding with their parents or relatives. What kinds of traffic problems could arise in the developing world/Nigeria? Ask questions about driving here in the US and some of the differences around the world. Give examples of different signs and driving laws. British on left hand side, roundabout, and other oddities from US driving ideas. Logical ways to travel on roads. Ask for examples of people breaking the “norm” on driving in the US and ask why these things happen. (Examples: 1) A farmer drives a truck out into a field... Why? To get corn loaded from a combine. 2) A driver decides to make a U-turn... Why? Because they missed their turn or some other reason. 3) Discuss speed limits, why do we follow them? Fear of getting a ticket, fines, etc.)

2. Before starting the activity with your students be sure to emphasize safe speeds.
3. The first activity will show what traffic might be like in an uncontrolled situation. A) Each student will be given an assignment to do once the whistle has been blown. Some will be assigned to stop, slow down, turn to the left or turn to the right, or turn around. B) Once this has been tried, do it again to see if the students can find an alternative to running into each other, such as communication (hand signals, horns, talking), waiting for each other, taking turns, going outside of the “road” area, etc.
4. Ask the students to think about what is used to control traffic in the US. Traffic lights and stop signs do some of the work, but as we know, some people still do not always follow them. Try this activity using only one direction of traffic and then try two directions of traffic if the group cooperates on the first activity. This activity is to show how traffic lights aid in the flow of traffic.
5. An additional activity you could do would be to stop selected students and give them a “shakedown”, asking questions like, “Why is your tail light out?” “May I see your driver’s license?” This also leads to problems along the roadside and disrupts the flow of traffic.
6. The next activity is to experiment with a four way intersection. This can also be done using a taped out area in a gym or playground. A) Choose four students to begin the activity. Allow the four students to approach the intersection (at safe speeds) all at the same time. They will either collide in the center or slow down to allow others to pass through the middle. Then add four more students, for a total of eight. Keep adding four more students until the entire class is participating. Again ask what things we use to control traffic at intersections.
7. Choose one person to serve as a traffic officer and allow them to direct how the traffic will flow. Notice how orderly the traffic can flow with a traffic officer. If the traffic is still not flowing well suggest things they could do to improve traffic flow and safety.
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Formative Evaluation (Req.): Class discussion and participation

Assessment (Req.): After the activity debrief the class by asking them to write about the activity. Ask them what their role in the activity was, what they thought was hard to do, what was frustrating, what could be done to make it easier or safer... etc.

Iowa Core Curriculum Standards Used (Req.):

- Geography, grade 9-12: Understand the use of geographic tools to locate and analyze

information about people, places, and environments.

- Geography, grade 9-12: Understand how physical and human characteristics create and define regions.
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Common Core Curriculum Standards Used (Opt.):

- Speaking and Listening, grade 9-12: Engage effectively in a range of collaborative discussions (one-on-one, in groups and teacher-led) with diverse partners on specific grade level topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.
- Writing, grade 9-12: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
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NGS Standards Used (Req.):

- How to analyze the spatial organization of people, places, and environments on Earth's surface
- The physical and human characteristics of places
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Five Themes of Geography Used (Req.):

- Place
- Movement
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School District Standards and Benchmarks (Opt.):

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21st Century Universal Constructs (Opt.): Collaboration, Complex Communication

Other Disciplinary Standards (Opt.):

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Other Essential Information (Opt.):

Other Resources (Opt.):

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Transportation and the Movement of People in Nigeria

some tentative notes

By Brennan Kraxberger

There is some variation by region. This is at least partly due to income differentials between the North and the South. Since the Southern part of the country is generally more prosperous, people typically have more budgetary income to devote to transportation. Another indicator of this regional difference in the movement of people is the frequency of scooters and small motor-bikes in the northern part of Nigeria. Informal, intuitive observations in Jos and Kano (northern cities) and Abeokuta, Ibadan, and Benin City (southern cities) as well as discussions with Professors Mike Filani and Stanley Okafar at the University of Ibadan indicate that scooters and motorcycles are much more commonly used in the northern half of the country. These observations on motorized bikes are also relevant to non-motorized bicycles. Rural people in the North are much more likely to rely on bicycles for part of their transportation needs. This reliance on bicycles is influenced by a complex set of economic, cultural, and environmental factors. As mentioned earlier, economic inequality and poverty are more pronounced in the North, making bicycles much more affordable when compared with cars. Also, the physical environment of the North is savanna. Savanna regions have widely spaced trees and less dense undergrowth when compared with the forested regions of the South. These characteristics make the North more amenable to the use of bicycles. This is not to say that people in the northern part of the country do not make use of cars, only that they have a relatively greater reliance on bicycles for their daily transportation needs.

With respect to road travel, it is important to evaluate the extent and quality of the road network. In terms of the extent of the road network, the federal government has done much in the last fifteen years to improve the coverage of Nigeria's road system. One outstanding example is the work of the Directorate of Food, Roads, and Rural Infrastructure (DIFFRI), which in the late 1980's embarked on a campaign to construct approximately 60,000 kilometers of new rural roads. As can be seen from a tour of rural areas, many roads that have been constructed are in a terrible state of disrepair. As with so many things in post-oil-boom Nigeria, many rural (and urban) roads have not received adequate maintenance. Poorly-maintained roads are particularly problematic in the rainy season (approximately March to October). In fact, some rural areas are only accessible by car in the dry season. July field trips on Nigeria's Jos Plateau proved these points well enough. Many rural roads in the Plateau region cannot be safely travelled at speeds exceeding 25 to 30 miles per hour. The slow rate of travel is necessary given the large and frequent potholes that mark the many rural roads. Certain stretches of rural roads are so bad that motorized vehicles have bypassed the original roadway to form new dirt tracks. Other portions of rural roads have been reduced to one lane. The road network of the Jos Plateau is indicative of the poor state of maintenance of many rural roads. Even though a good network of colonial-era roads existed (partly due to the intensity of mining activity on the plateau), many of these roads have not been maintained in the post-independence period. Proper maintenance is critical

because rainstorms can be tremendously intense. Thus, small areas of road decay can very rapidly expand under the forces of erosion and weathering in the rainy season. Much of the problems associated with the erosion of roadways are compounded by the lack of adequate drainage infrastructure (which also makes driving hazardous during heavy rains). While Nigerians are not forced to address maintenance problems derived from recurrent freezing and thawing (like temperate areas of the United States), they do have to deal with intense seasonal rain.

Although urban roads are in better condition than most rural roads, maintenance of roads is also a problem in the cities. Since the collapse of oil prices in the early 1980's and implementation of a Structural Adjustment Program in 1986, state budgets have been extremely tight. Fiscal austerity has also been exacerbated by corrupt military regimes that have funnelled state revenues into non-productive projects (often contracted to firms owned by military leaders) or foreign bank accounts. Although almost all urban roads are paved (Nigerians often say "tarred"), many have large pot holes or large sections where pavement has been eroded. An interesting scene in the city of Ibadan is the activity of informal road repair crews. Young men can often be seen filling city pot holes with dirt and rocks. In return for their unsolicited service, road users often tip these unofficial public workers. The work of these brave maintenance crews notwithstanding, Nigerian urban roads can still be very rough. The important point to note is that aside from uncomfortable travel, poor urban roads can cause bottlenecks in traffic and contribute to traffic congestion.

Another issue that directly relates to urban transportation is city planning. While the extent and effectiveness of planning in Nigerian cities varies to some extent, most urban areas are forced to deal with city regions where no formal planning was conducted. Hence, transportation routes are often confined to pre-existing routes that may not always follow optimum courses. A dramatic example of planning done after development occurred in the city of Ibadan in the 1980's. Under military direction, city workers bulldozed swaths of houses and businesses, making way for new streets. While this action probably improved traffic flow in certain parts of the city, it clearly violated the human rights of the people affected by the removal process.

One final area will be discussed on the issue of urban transportation. It is that of cost of transportation. Relative to the early 1980's when cars were relatively inexpensive, many people in Nigeria have trouble purchasing cars. As a result, there is presently a thriving market in Nigeria for used cars, many of them imported from other parts of the world (like Europe). Given the cost of new cars (and imported used cars), many people fix cars that would be discarded in more affluent societies (see pictures of "Mechanic Village" in Jos). One other aspect of Nigerian urban transportation is the notable lack of public transportation. While there have been several different programs and agencies established in the post-1988 period, government efforts to provide public transportation have been mostly failures. Thus, those without cars requiring long-distance urban transportation are forced to turn to the private sector. Taxis, "danfos" (small vans that hold about 10-15 people), and scooters provide urban transportation for many urban residents. One final issue to consider with respect to cost of transportation is the cost of fuel. It is ironic indeed that an oil-rich country such as Nigeria often has a scarcity of fuel. Two factors contributing to a discontinuous supply of oil are the reduced production capacity of Nigerian refineries and price controls imposed by the federal government. Low refining capacity means that Nigeria often has to import much of its petrol. Artificial price controls have led to the

expansion of a black market in gas, making it difficult to find gas in certain places (especially the North) and at certain times.

It now remains to say a few words about inter-regional and inter-city transportation. First, most internal transportation is via land. Internal air traffic is low relative to a country like the United States. Second, many inter-urban land linkages are in good condition relative to rural-rural linkages.