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FEEDBACK TUTORIAL LETTER

2ND SEMESTER 2020

ASSIGNMENT 1 & 2

**Transport Operations and Costing
(TOC621S)**

Feedback Tutorial Letter
Transport Operations and Costing (TOC621S)
Assignment 1

Question 1

Using figure one below as reference, discuss how the modes are complementing & competing with one another? 12 Marks

Instruction

The figure one below illustrates how transport modes complements and compete with each other. The green colour represents the complementarity line, while the red colour represent the competition line.

Tip

Upon answering this activity, you should examine the three conditions and present practical answers with examples making reference to the diagram below (i.e. figure 1).

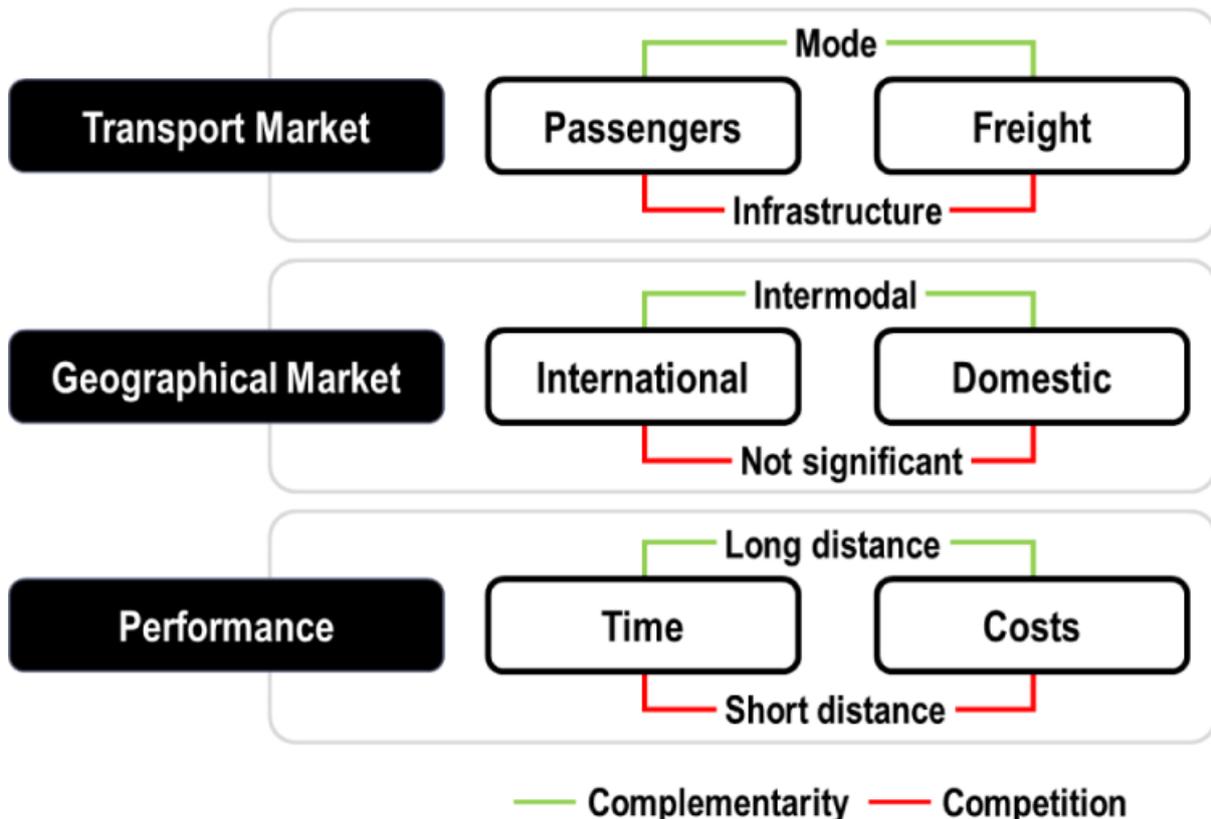


Figure 1: Modal Competition and Complementarity. Source: (Rodrigue, 2020).

Please use the following book to answer this question:

Rodrigue, J.-P. (2020). *The Geography of Transport Systems* (5th ed.). New York: Routledge.

https://transportgeography.org/?page_id=1797

Feedback

Rodrigue (2020) explains that the circumstances on transport modes will be competitive or complementary over the transport market, the geographical market and also the expected performance as follows:

- **Passengers and freight.** Since each systems cowl totally different markets ar| they're} perceived as complementary since specific modes are designed to hold solely passengers or freight (with a number of exceptions like transport wherever planes will carry each passengers and freight). In easy terms, a truck doesn't contend with a bus. traveller and freight modes will but contend for the usage of infrastructure like terminals and routes. during this case a truck can contend with a bus for the usage of road infrastructure, notably in things of congestion wherever every vehicle can impair the quality of others.
- **International and domestic.** Domestic transport modes don't seem to be designed to service international markets and the other way around. there's no important example of competition between domestic and international markets. this is often notably the case if international transportation involves a maritime phase. Intermodal transportation contribute to geographic complementarity by facultative a better level of interaction between each systems of circulation.
- **Performance.** Performance criteria sometimes covers a time and value perspective that is tough to reconcile. For long distances, complementarity prevails, notably for freight as time sensitive shipments area unit sometimes routed through transport (some instances of long distance trucking) whereas price sensitive shipments area unit routed through maritime or rail transport. For passengers, there's neither competition or complementarity for long distances because the solely sensible mode remains transport (it becomes a matter of integration international and domestic segments). For shorter distances, competition prevails as totally different modes area unit doable for the involved traveller and freight traffic.

Question 2

Compare and contrast the Private limited company and public limited companies business ownership enterprises? Give one example of each company operating in the Namibian transport Sector?

12 Marks

Private limited company

The private limited companies are considered the most widespread form of business ownership and they consist of **at least two shareholders and a maximum of fifty shareholders**. It is mandatory to have **at least one director and a company secretary who must be a separate person from the director** (Gubbins, 2008, p. 55). **Private limited**

companies cannot sell their shares to the general public and for that reason they cannot be listed on stock exchange. E.g. FP Du Toit Transport

Public limited companies

The public limited companies should consist of **at least seven shareholders and unlimited shareholders**. Unlike the private limited company, it should have **at least two director** and it **is allowed to sell the company shares to the general public through the stock exchange**. E.g. TransNamib Holdings Limited Company.

Question 3

Mention the transport regulatory bodies of Namibia in all four modes of transport (Sea, Rail, Road and Air)?

12 Marks

Sea

The Namibian ship registrations are regulated by the Ministry of Works and Transport under the Directorate of Maritime Affairs.

International maritime organizations (IMO)

IMO is that the global organization specialised agency fashioned in 1948 and cherish the International Civil Aviation Organization. United Nations agency aims at promoting the security and security of shipping and, therefore, the interference of marine pollution by ships. United Nations agency develops a good and effective restrictive framework for the shipping business that's universally adopted and enforced (International Maritime Organization, 2020).

Namibian Ports Authority Act of 1994

To provide for the establishment of the Namibian Ports Authority to undertake the management and control of ports and lighthouses in Namibia and the provision of facilities and services related thereto, and to provide for matters incidental thereto.

Rail

There is no international regulating body for railway transportation; thus, Railway is regulated on the country level and may differ from country to country. The Namibian Railway has regulated through the Ministry of Works and Transport under the Directorate: Railway Infrastructure Management regulated through the National Transport Services Holdings Company Act (NTSHCA), 1998. The railway system is obliged to ensure compliance with the following legislation:

- Labour Act, 11 of 2009
- Petroleum Products and Energy Act, 1990 (13 of 1990)
- Explosive Act 1956 (26 of 1956)

- National Railway Regulatory Act of the RSA (16 of 2002) regarding cross-border operations in conjunction with Transnet.
- SARA Standard; TransNamib Rules and Regulations, Rail Safety Authority & Policy, Road Traffic Act.

Road

Road haulage is regulated through the Road Traffic & Transport Act of 1999 (RTTA); the Road Traffic & Transport Regulations of 1999 (RTTR) and the Criminal Procedure Act of 1977 (CPA) through the Roads Authority statutory body, which is held responsible for the regulator of overloading thereby reducing road damage, enforcing road safety by implementing quality systems; enforce road transport permit regulations and road user charges.

Possible answers:

National Road Safety Council and Motor Vehicle Accidents Fund.

Air

The International Civil Aviation Organization (ICAO) - a United Nation dedicated agency, formed by States in 1944 to oversee the administration and governance of the Convention on International Civil Aviation (Chicago Convention).

The Namibia Civil Aviation Authority (NCAA) under the directorate of civil aviation is the Namibian regulatory public service provider aiming to assure a safe, orderly, regular and efficient civil aviation system.

The International air transportation Association may be a trade association of the world's airlines supported in 1945. IATA supports aviation with world standards for airline safety, security, potency and property (IATA, 2020).

Namibia Airport Company (NAC)

Question 4

There are three elements (operator, driver, and vehicle) considered in forming up legislation to regulate the safety of transport operations in all modes of transport. These elements interact to form the total transport system. The reason of accidents can be traced to the boundary between these sub-systems. Discuss the safety regulations incorporating these elements (operator, driver, and vehicle) in the following modes of transportation.

a) Road Transport

7 Marks

The students may be guided by the following regulations:

- a) Road haulage: operator's licence guarantee safe & correct operation of serious product vehicles by appropriately qualified folks. Laws cowl product over three.5 tonnes gross vehicle weight, i.e. weight of the vehicle & its load
 1. Restricted licence: carriage of own product in own vehicles for own business & trade
 2. customary national: carry for rent and reward inside a rustic

3. customary international: carriage of products for rent and reward for each country and abroad.

- b) Applicant should influence the licencing authority that:
- a) Good name
 - b) Appropriate monetary standing to run and maintain the vehicles
 - c) Professionally qualified
- c) Licensing authority can:
- a) Refuse AN application on the grounds of not meeting the initial conditions
 - b) Attach extra conditions to the licence concerning the operation of the licence
 - c) Grant a licence for fewer vehicles than the somebody requested
 - d) Grant a license for a shorter amount than the standard five years
 - e) Withdraw or suspend the licence if the operator stops to satisfy the initial provision conditions.

Road Transport Operator like Namibia Construction Authority should also ensure Routine Maintenance of the road infrastructures as follows:

Routine Ad-hoc

Routine maintenance is also outlined as those treatments that ar applied to a pavement, so as to stay the pavement functioning properly. As such, routine maintenance is typically said as "reactive maintenance." this means that it's work that's performed as a reaction to a selected problems. Routine maintenance is made on pavements as they start to indicate signs of decay, however is mostly thought of to be a wasted effort on pavements that ar severely distressed.

Filling a hollow is associate degree example of a routine maintenance activity: It can't be regular before the hollow seems and it mustn't be left unattended once the hollow has developed. However, if there ar too several potholes gift, a a lot of comprehensive repair is also required. additionally to hollow repair, routine maintenance treatments applied to pavements embrace edge mend, crack waterproofing and filling, and shoulder repair. Routine maintenance works ar divided into the subsequent works types:

- **NON PAVEMENT (N):** These embrace all the activities that ar accomplished outside of the paved surface, like clearing facet drains & culverts, vegetation management, line-marking, road signs repair, guard rail repair, etc.
- **PAVEMENT (P):** These ar works responding to minor pavement defects caused by a mix of traffic and environmental effects, as an example, crack waterproofing, patching, edge repair; shoulders re-gravelling and grading.

Routine Opérations

Routine operations is also outlined as those activities that ar conducted on Associate in Nursing annual basis to make sure that the road is functioning properly. Routine

Operations isn't solely restricted to pavement connected treatments, however conjointly embody alternative operational activities.

Driver:

- The driver is someone that want to drive a automatically propelled vehicle on the road should have a driving licence, for each significant product vehicles and public services.
- When applying an important product vehicle, person must:
- Past case history, with current medical certificate from the doctor.
- History of any previous traffic convictions.
- Type of normal licence presently command.
- Public service vehicle/lorry product vehicle licence as is also applicable.

The vehicle

- The dimension, height and length of the vehicle and trailer and also the load, diameter of wheels, width, nature and conditions of tyres.
- The emission of smoke, vapour, ash sparks and grit
- Vehicle noise
- The minimum weight unladen of all vehicles, most weight to be transmitted to the road and also the condition beneath that these weights is also needed to be tested.
- The particulars that ought to be marked on vehicles and trailers
- The towing or drawing of different vehicles by the motorcar
- Number and nature of brakes
- The testing and examination of vehicles by licensed persons
- The appliances fitted for sign the approach of a motorcar.

b) Rail Transport

7 Marks

Operator

The operator for rail transport especially in Namibia also oversee the operational activities, maintenance and development of rail infrastructure. TransNamib is a legislation body that monitor safety on the Railway by:

- Approve and monitor all new railway works and rolling stock to ensure they meet acceptable safety standards
- Considering, accepting and monitoring railway safety cases as suggested by the train operating companies

- Develop a programme of planned inspections of the Railway to ensure that organizations involved in constructing, maintaining and operating Railway are complying with health and safety regulations
- Investigating accidents and dangerous occurrences on the Railway
- Reports on trends in accidents and incidents on the Railway

Driver

The driver of the train (also called locomotives engineers) must comply with the following requirements:

1. *Meet the general qualifications.*
 - He/she must be at least 18 years of age.
 - He/she must pass a background check and a drug screen.
 - He/she should be able to work alone for long periods of your time, handle emergency things and assume for yourself.
2. Attend formal coaching, which is able to accommodates room study and active expertise. coaching might take many weeks or many months. The program should be approved by the Railroad Administration. Most train drivers attend faculties operated by the railroad company, however some might value more highly to attend a junior college Associate in Nursingd earn an associate's degree in railroad operations.
3. Get Associate in Nursing entry-level job with a railroad company, like a working man, rail yard employee, railroad man or conductor. Gain further skills and skill. The human has to drive commuter trains, he/she may need to start by driving buses
4. The individual ought to pass the qualifying exams for varied positions and work your high to driver. Before the individual will drive a train, he or she should pass a federal licensing test. The individual got to attend more coaching job among the room, in simulators and on the duty before you will be able to take the licensing test. The individual are required to periodically pass further tests to stay up his or her license.

Vehicle

Trains must meet essential requirements can be summarised as safety, reliability and availability, health, environmental protection, technical compatibility and accessibility.

Technical specification of trains includes:

- Signals and Controlling command
- Fuel consumption
- Railway infrastructure
- Noise Management
- Locomotives and Traveller Wheeled Stock
- Freight Wagons
- Railway Tunnels Safety

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Feedback Tutorial Letter
Transport Operations and Costing (TOC621S)
Assignment 2

Questions

1. Discuss the factors that influence the aircraft fleet selection? 10 Marks

According to (Cook & Billig, 2017), an airline chooses the aircraft it operates to meet the demands of its route structure and passengers, using the following factors:

a) Range and Payload

- Aircraft range capability varies greatly.
 - ✓ For example, the Boeing 717 is a short-haul mainline jet with an economic range of approximately 1,000 nautical miles and not capable of non-stop trans-continental U.S. service. In contrast, the Airbus 340, 350, and 380 and Boeing's 747, 777, and 787 have range capability in excess of 8,000 nautical miles
- An airline must operate aircraft with capabilities suited to its route structure.
 - ✓ For the network carrier, this often requires several aircraft types from regional jets to wide-body, long-range aircraft. As new medium-sized planes with long-range capabilities, such as the Boeing 787 Dreamliner, have entered the market, airlines have been able to expand their route structure with non-stop international flights in thinner markets that would not previously have been profitable.
- Payload, the weight of passengers and cargo, varies directly with aircraft size.
 - ✓ Larger aircraft can carry more passengers and cargo, but there may be a trade-off between the weight of fuel carried, and thus range, and passenger and cargo weight. If an aircraft is fuelled to its maximum capacity, its payload will be restricted. Conversely, if an airline chooses high density, single class seating in its fleet, then payload will restrict fuel what can be carried so that range is limited.
- Ambient temperature, take-off runway length, and en-route winds also limit aircraft range.
 - ✓ On most days, the A-321 might be capable of coast-to-coast service but would be forced to make a stop for fuel on some occasions.
- In addition to range, an airline must consider limitations of the airports it serves.
 - ✓ Many airports are not capable of handling the largest commercial aircraft because of limited terminal and taxi-way space and inadequate runway length and weight bearing capability. The Airbus 380 requires wider taxiways and tailored terminal facilities.

b) Aircraft Operating Costs

Aircraft operations and maintenance comprise about half of total airline costs, so understanding and managing these costs are critical to airline success. Direct operating costs (DOC) are those incurred only when the aircraft is flown. Major

direct costs are fuel, maintenance and a portion of crew wages. Fixed costs such as depreciation or lease fees and insurance, on the other hand, are incurred each month regardless of how many hours the aircraft is flown.

- *Aircraft size versus CASM*

Block hour cost increases with aircraft size. A large aircraft burns more fuel per flight hour than a smaller aircraft. For example, Boeing's smallest aircraft, the B-737-700 burns about 680 gallons per block hour whereas the B-747-400 consumes 3,300 gallons per hour (The Airline Monitor, 2015). Maintenance costs per block hour are similarly higher for the B-747.

CASM is more important for most decisions as it represents the cost of providing air

transportation for a single passenger. Large aircraft cost more to operate per hour, but CASM decreases as aircraft size increases because maximum seating capacity increases faster than aircraft operating costs. Thus, the higher DOC of larger aircraft is spread over an even greater number of seats. An aircraft with 150 seat capacity has about a 17% lower CASM than one with a 100 seat capacity (Swan, 2002).

Larger aircraft have higher seat capacity, but the number of seats installed on an aircraft is the choice of the airline. The number of cabins and seating density depends on the passenger segments targeted, markets served, and competition. This is a purchase option on new aircraft, but can also be changed during the aircraft's service life.

- *Segment length*

Cost per available seat mile (CASM) decreases with longer segment length (also called stage length) for several reasons. First, longer segment lengths result in more time spent at efficient cruise altitudes and speeds, equating to fuel savings per average hour of flight. Second, take-offs and landings require additional departure and arrival time for sequencing with other traffic. This additional time not only cuts into aircraft utilization but also increases the fuel burn. There are also maintenance costs that are attributable to the number of take-offs and landings, called aircraft cycles. Fewer cycles equate to lower maintenance costs. Finally, airport and passenger handling costs are spread over more mileage.

- *Yield*

Yield is more than 50% higher in low density, short-haul markets compared with high-density markets. If you are flying to or from a small city, expect to pay much higher fares. In competitive markets, including most U.S. domestic city-pairs, average fares follow operating costs.

- *New versus older aircraft*

Just as consumers purchase cars, airlines can choose new or used aircraft for fleet expansion. Used aircraft are available for nearly all airline requirements in both capacity and performance. The exception is the mid-size, long-range aircraft where the choice is between the new Boeing 787 Dreamliner and the Airbus 350. While most airlines have elected to upgrade their fleets with large orders for the latest generation aircraft, there are exceptions.

New aircraft have lower DOC arising from lower maintenance expenses and more fuel-efficient engines. Maintenance costs are reduced through longer design life of new components, improved reliability, and automated diagnostic tools. New aircraft components do not require overhaul or replacement for several years. State-of-the-art engines burn significantly less fuel than those of older technology. *The lower acquisition price of used aircraft, however, may offset the lower DOC of new aircraft.*

Older aircraft will incur higher maintenance expenses. Time limited parts must be replaced or overhauled. Likewise, the airframe requires periodic major overhaul. This extra maintenance limits availability for revenue service. Older aircraft also suffer a higher rate of mechanical failure which can adversely impact customer service. In turn, a higher level of spare parts is needed to maintain required service levels.

Determining whether a new or used aircraft is better suited to an airline's needs requires careful financial analysis. Aircraft utilization may be the deciding factor. Because of differing business models, Spirit Airlines obtains about twice the daily utilization of Allegiant. This fact alone likely explains Spirit's choice of new aircraft versus Allegiant's used plane fleet.

- *Commonality*

Substantial cost savings result from operating a common aircraft type such as an all-Airbus A-320 or Boeing 737 fleet as is typical for LCCs. Crew training and qualifications costs are reduced. The airline must develop and maintain only a single training program. Similarly, mechanics must learn and qualify on a single aircraft. Both groups gain more experience and benefit from learning curve efficiencies. Spare parts inventory is also reduced with a single fleet type.

There are great advantages to commonality, but, as we have seen previously, comprehensive network carrier route systems require more than one aircraft type to

fit the market. Regional jets operated in partnership with regional airlines connect smaller cities with the network carrier's hub airport. Long-range, wide-body aircraft are best suited to many international routes. Operating a fleet with a mix of aircraft ages also offers some flexibility. Airlines can choose to operate older aircraft that are nearing the end of their economic lives when the

economy is strong, or these aircraft can be parked or scrapped at relatively low cost during economic slowdowns.

2. **Compare and contrast the types of the charter party in sea transport?** 10 Marks

Charter parties are classified into three categories, (Burns, 2015):

- i. **A voyage charter party** pertains to a contract for a particular voyage, where a predetermined freight payment is paid to the shipowners per metric ton of cargo (i.e., \$30 PMT). In this short-term contract, the shipowners assume the greatest possible commercial, financial, and operational control over the vessel. The ship must be redelivered to its owners within a certain time frame, after which the charterers should indemnify the shipowners with special reimbursement, the payment of which is calculated as per the C/P clause stipulations.

Because of its short duration, this contractual arrangement is suitable (i) when carrying irregular cargo volumes, and the future cargo flow cannot be predicted, or (ii) in a volatile market that lacks visibility necessary for long-term planning.

- ii. **A time charter party (TCP)** stipulates the terms and conditions in which the charterers will hire the vessel for an agreed period—anywhere from a few months to multiple years. In this arrangement, the charterers assume a greater control of the ship's operations and directly give operational and commercial orders to the master under copy to the owners. Under a TCP, the charterers typically undertake the voyage costs: Voyage costs = ship's bunkers (i.e., fuel and diesel oil) + port charges (i.e., port, light, and canal expenses; tugs and pilots; cargo handling; agency fees; etc.)

Meanwhile, the shipowners cover the running—or fixed ship's costs:

Running or fixed costs = overhead costs + crew wages, navigational + insurance + maintenance, spare parts, and repairs + bonded stores + lubricants.

The shipowners' administration and insurance costs are still covered by the company. Payment in time C/Ps is reimbursed by multiplying the daily hire by the months or years of the contract. Typically, the charterers pay a monthly hire to the owners. Because of its longer duration, this charter party is suitable (i) to carry large and regular volumes of cargoes, for example, within a trade agreement between governments, or import/export agreements and the subsequent distribution of raw materials, or manufactured goods. In this case, the charterers already have multiple year contracts with cargo buyers (importers) and are looking for a regular, reliable means of transport.

- iii. **A bareboat or demise charter party** enables the charterers to become the vessel's disponent owners for an agreed time—typically multiple years. In this agreement, the shipowner agrees for the ship to be administered, recruited, technically maintained, and run by its new disponent owners. The shipowners will not be informed about the ship's operational or commercial activities and will not be informed about the ship's itinerary and ports of call.

The charter party allows for certain exclusions, that is, (i) geographical areas where its actual owners wish to be excluded from the ship's trade routes, for example, war zones, piracy zones, or areas of political or trade conflict; and (ii) cargo types to be excluded, either because of its potential safety hazards (i.e., HAZMAT cargoes) or because of the difficulty in properly cleaning the ship's holds, and the future commercial complications

(e.g., cement in bulk, whose residues are difficult to clean, and would disable the ship to carry edible bulk cargoes in the future, such as sugar, grains, etc.). Except for these two exceptions in cargo and ports, its new owners will be free to select any cargo type, berth, and port in the world. The bareboat C/P is frequently associated with ship management agreements, new building contracts, and, more frequently, the sale and purchase option, during or at the end of the bareboat C/P contract. The C/P should stipulate which party, that is, the shipowners or the disponent owners, oversees the ship's hull and machinery, protection and indemnity, crew, war, and piracy insurance.

3. What is the purpose routing and scheduling?

10 Marks

The key objective of most routing and programming issues is to reduce the entire value of providing the service. This includes vehicle capital prices, mileage, and personnel prices. However alternative objectives additionally could inherit play, significantly within the public sector .

Other Objectives

- ✓ Maximise payload
- ✓ Maximise utilisation
- ✓ Minimise distance
- ✓ Minimise time
- ✓ to minimize the inconvenience for all customers.
- ✓ minimizing response time to an incident

4. Discuss the five mechanisms that can be used to provide funds for the roads? 10 Marks
Lay, (2009), discusses these mechanisms as follows:

(a) Taxes on the benefits caused by the road.

For arterial roads, taxes can be applied to the increases that the enhanced accessibility provided by the new road produces:

- * land values,
- * local employment, and/or
- * economic output.

Such taxes play an important role in letting market forces and economic rationality influence land development, thus avoiding cross-subsidisation.

(b) Direct tolls on road users.

Tolls are charges placed directly on each road user. They may be applied for one or more

of the following reasons:

- * to finance the maintenance of the facility,
- * to repay the cost of constructing the facility, e.g. a toll bridge,
- * to promote economic efficiency in road provision,
- * to help efficiently allocate resources within the transport sector,
- * as a rent for the use of road space that is in high demand (e.g. congestion pricing, & value pricing), and
- * to compensate for social costs of operation (e.g. environmental costs).

(c) Usage-related charges

Various charges are levied on vehicle owners and operators and on road users. Pedestrians are the only road users generally immune, as even cyclists will pay some form of sales tax. The particular usage charges on vehicles fall into three categories:

- * acquisition, e.g. sales tax,
- * ownership, e.g. annual vehicle (registration) and driver licence fees, and
- * operation, e.g. fuel tax and tax on vehicle maintenance.

(d) Impact fees

These are fees levied on property developers and reflect the transport costs of the extra traffic caused by the impact of their new development on the external transport system that serves their development.

(e) Direct grants from government

In this system, the government allocates grants from its general revenue to the Road Authority, often on the basis that a benefit-cost analysis has indicated that the project will return various benefits to the community which will sum to many times the cost of grant. Such a charging system can be economically efficient if the road can be used by everyone, has excess capacity, and has no unfunded social costs

5. Evaluate the factors that determine the port pricing and tariff setting mechanisms? 10 Marks

Port valuation and also the tariff setting mechanism are dependent to a good extent on the following (Burns, 2015) :

a. Expenditures, that embody all expenses undertaken by the port entity, terminal operators, and provision and transportation corporations that offer services within/for the port. Expenditures or prices are distinguished into accounting, chance, and economic value.

- Accounting value reflects the general expenditures of capital or resources, invested with in an exceedingly specific venture, for instance, port operations. This expenditure was spent within the past and also the pertinent accounting transactions are recorded as journal entries.
- cost pertains to the unmaterialized rewards that are rejected or declined, so as to pursue a additional enticing investment. the chance value demonstrates the benefits a port may have gained ought to another investment be designated.
- Economic value, that is that the total of the accounting value and the chance value.

b. *financial gain* could be a port's portion of the revenue generated for shipowners and consignment homeowners that the port authority will receive in exchange of services provided. financial gain ought to be closely associated with the worth of those services offered. within the case of overcharging their shoppers, ports might even see their business conclude business with competitive ports and even modification their original trade routes in explore for a more cost effective various.

c. *Profit* is calculable by the distinction between input (factors of production, overall service costs) and output (cost of services provided, and variable and stuck expenses) prices.

NB: Bonus points will be awarded to an assignment report adhering to the assessment criteria provided below.

ASSESSMENT CRITERIA

Content: knowledge and understanding of topics, use and understating of transport concepts and theories, use of relevant information

Structure: logical flow of ideas; introduction, body and conclusion, citation and references

Presentation: appropriate layout and length, use of diagrams, Cover, title, table of contents & pagnumbers

Language: Correct grammar, spelling and Punctuation

Total Marks: 50

Prescribed Readings:

Gubbins, E. J. (2002). *Managing transport operations*. Kogan Page Publishers. ISBN-0749439289, 9780749439286.

Recommended Material

Verhoef, E., Bliemer, M. C., Steg, L., & Van Wee, B. (2008). *Pricing in road transport: A multi-disciplinary perspective*. Edward Elgar Publishing. ISBN-13: 9781845428600 (ISBN-10: 1845428609)

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