IQM4008

LEVEL 4 · INDIVIDUAL OPEN-RESOURCE COURSEWORK

INTO QUALIFICATIONS

Microeconomics

Sample applied microeconomics case report: urban congestion and a peak access charge

STAFF ONLY · Staff marking and administration guide

Assessment
IQM4008 A1

Sample set
2026-S

Status
SAMPLE ASSESSMENT

Response length
1,200 words ±10%, excluding references

Total marks
50

AI condition
AIAS Level 2 planning only: brainstorming, outline and initial research planning; assessed analysis, evaluation and final report must be candidate-authored. Declare permitted use.

Release timing
at coursework release

Administration and delivery

- Provide the synthetic case on the candidate brief; do not add unsupported facts during delivery.
- Check word count, references and the AI-use/no-use declaration under the local coursework process. Ensure candidates retain planning notes, their source-selection record and relevant working files, and complete at least one supervised progress checkpoint. Where necessary, the assessor must conduct a short verification discussion about the candidate's understanding, analytical choices and authorship. Any unresolved authenticity concern must be managed under the Academic Regulations and the authorised centre academic-integrity route.
- Marker records marks by five criteria and reconciles to 50; moderation follows centre policy.

Mark scheme and indicative content

Selective indicative economic content [See rubric marks]

- This is selective indicative economic content for marker discussion, not a complete candidate submission. Marked submissions must include references and an AI-use/no-use declaration; assess these separately under the rubric and the local coursework process.
- Executive recommendation Northmere should retain a peak-period access charge for a further monitored year, but only as part of a transport package that gives people realistic alternatives and protects essential users on low incomes. The trial is consistent with a behavioural response: entries fell by 2,160, from 18,000 to 15,840, which is 12%. Bus travel rose by 9%. These observations do not by themselves prove that the charge caused all the change or that total social welfare improved. The council should use the next year to test additionality, distribution and displacement, publish results, and revise the charge if evidence shows that costs exceed benefits. The economic problem Peak road use is a scarce resource. A driver deciding whether to make a journey may consider fuel, parking, the value of time and the charge. The decision does not necessarily include the delay imposed on other road users, local air pollution, noise or disruption to pedestrians. The estimated £3.20 external cost for each additional peak car trip represents costs borne by people outside the transaction. In the standard negative-externality model, private marginal cost is below social marginal cost, while drivers' private benefit is represented by demand. The unregulated quantity is therefore likely to exceed the quantity at which marginal social benefit equals marginal social cost. The difference can create a deadweight welfare loss. A labelled diagram should put trips on the horizontal axis and costs or benefits per trip on the vertical axis. Demand (marginal private benefit) slopes down; private marginal cost lies below social marginal cost. The market quantity is greater than the socially efficient quantity. The £3.20 estimate is useful as an indication of scale, but is a supplied estimate: congestion costs may be higher on crowded central streets and lower at the edge of the zone. A precise corrective charge would equal marginal external cost at the efficient quantity, not necessarily the reported figure. The data do not provide enough information to calculate an optimal charge. Effects of the trial and stakeholders The change from 18,000 to 15,840 entries is 2,160 fewer cars: 2,160 divided by 18,000 equals 0.12, or 12%. At an average occupancy of 1.2 people per car, the initial flow represents approximately 21,600 car occupants and the trial flow approximately 19,008, a difference of 2,592 occupants if occupancy remained unchanged. That is an illustrative conversion, not a measured passenger count. The £4 charge could encourage a driver with a low value of a peak trip to travel earlier or later, car-share, take a bus, walk, cycle or cancel a journey. Fewer cars can reduce delay and pollution exposure, and faster traffic can benefit remaining drivers and bus services. These gains are not automatic: traffic could divert to boundary roads, while new road space may attract later trips. Bus travel rose by 9% during the trial, which is consistent with substitution toward public transport. The £1.8 million expenditure on priority and frequency may also have increased bus use; the supplied facts cannot separate the effects. Better reliability and more frequent service can benefit current riders and make the charge fairer to those without a car. Bus operators and the

city incur operating and capital costs. Residents may gain from less noise and poor air quality, though local exposure needs monitoring rather than assumption. Retail effects are ambiguous. The survey suggests 62% of small retailers support lower congestion while 48% fear customer avoidance. Those figures can coexist: respondents may value a more pleasant centre and still worry about access. A retailer dependent on customers arriving by car may lose sales, whereas a walkable street may increase dwell time and visits. The survey is not a representative sales series and does not show actual turnover, so it should inform engagement, not be treated as a measured economic impact. Drivers who continue to enter pay £4; some may have few substitutes because of disability, caring duties, shift work, tools or delivery needs. A uniform charge can therefore take a larger share of a low wage. Evaluation and alternatives A charge has a direct link to the externality because it changes the marginal private cost of peak travel. A peak-only design targets the time when congestion costs are likely greatest. It can be adjusted as evidence improves and revenue can support alternatives. However, compliance systems cost money, privacy and enforcement safeguards are required, and drivers may reroute to avoid payment. An exemption for every sympathetic category would weaken the signal and complicate administration. A narrowly defined, time-limited concession for verified essential low-income trips is more defensible, with public criteria, an appeal route and annual review. The council should also provide an accessible alternative before expecting people to change mode. Bus priority and service frequency complement the charge: the price discourages some car trips while better services expand the feasible choice set. Safe walking and cycling routes can serve short journeys, but not all journeys or users. Delivery windows, loading controls and employer travel plans can address specific sources of peak demand. Parking restrictions alone may move parking into residential streets; road widening may induce additional demand and consume land. Any comparison should include implementation and operating costs, effects on those unable to switch, and what the fixed public budget would otherwise fund. Revenue is not a free social benefit: it is a transfer from drivers to the city, while administration, bus spending and the resources used by travellers have real costs and benefits. Recommendation, evidence and limitations Retain the £4 peak charge provisionally, direct net receipts to reliable bus service, accessible stops and safe walking/cycling links, and provide a limited essential-user concession. Do not promise that the charge is optimally priced from the current evidence. Publish a baseline and quarterly dashboard showing entries by time and vehicle type, boundary-road traffic, bus patronage and reliability, air-quality indicators, retailer footfall and available sales indices, complaints, concession use and administration costs. Compare like seasons and account for other changes; where feasible, phase a complementary intervention or use a suitable comparison area. Disaggregate impacts carefully and protect personal data. Set a review point after twelve months with explicit tests: sustained reduction in peak entries without damaging displacement; improved bus reliability; no disproportionate harm to low-income and disabled users; and benefits that justify collection and service costs. This recommendation is conditional. The £3.20 figure may be uncertain; the trial is short; the 9% bus rise may reflect investment or other changes; occupancy is assumed constant in the illustrative calculation; and the retailer survey reports views rather than realised turnover. There is no supplied revenue total, cost-effectiveness estimate, emissions time series or distributional dataset. If monitoring shows that boundary traffic rises, bus service fails to provide a practical substitute, or burdens are concentrated among essential low-paid travellers, redesign the charge and improve alternatives before extending it. The aim is not simply fewer cars, but a more efficient and fair allocation of scarce peak road capacity.

Assessment rubric

Criterion	Marks	Marking focus
Knowledge and understanding	10	Accurate use of externality, private/social cost and benefit,

Criterion	Marks	Marking focus
		equilibrium, welfare loss and intervention concepts.
Analysis	15	Coherent causal chains connecting congestion, trip decisions, the charge, mode/time substitution, stakeholder consequences and welfare; correct interpretation of 12% and 2,160-trip reduction.
Evaluation	10	Balanced judgement on charge level, distribution, enforcement, displacement, data uncertainty, alternatives and complementary bus investment; conditional, justified conclusion.
Application	10	Specific and accurate Northmere application; distinguish provided facts from inferences; correct use of all relevant supplied data.
Communication and academic practice	5	Clear report structure, precise terminology, relevant diagram/data and appropriate acknowledgement of any external sources and permitted AI planning.

Standardisation guidance

- Credit any defensible intervention or conclusion (including a time-varying charge or trial extension) when supported by accurate economics and case evidence. Do not require one diagram or a single recommendation.