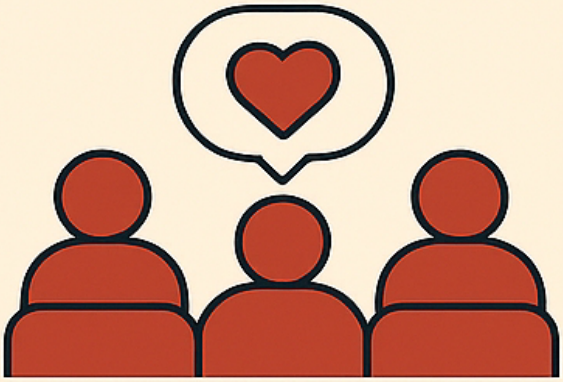
ECONOMIC DEFINITIONS
IN A PERFORMING ARTS CONTEXT

SUPPLY

The quantity of performances or theatrical productions able to be offered

DEMAND



The desire and willingness of audiences to attend performances or productions

COSTS

The expenses incurred in the creation and performance of a show

REVENUE

The income generated from ticket sales and other sources

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Specialist consultants in the entertainment, sports, Arts and venue industries

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Agglomeration - The benefits of clustering or high concentration of businesses and economic activity in a relatively small geographic area. For a venue, this could be the advantages of having multiple performance venues, artists, and theatres concentrated in a precinct, enhancing collaboration, attendance, and cultural exchange (e.g. festivals that allow audiences to 'venue-hop' in an arts precinct within a single evening).

Ancillary spend/Per-capita spend - Average audience expenditure on food & beverage, merchandise and programmes, expressed per attendee. Often used to benchmark commercial potential.

Appraisal - The process of determining the impacts and overall merit of a proposal, including gathering and presenting relevant information for consideration by the decision-maker.

Appraisal period - The number of years over which the benefits and costs of an infrastructure proposal are assessed in a cost–benefit analysis. A default value of 30 operational years plus construction time is generally used for infrastructure proposals.

Base Case - A project appraisal compares the costs and benefits of doing something (a 'project case') with not doing it (the 'base case'). The base case should identify the expected outcomes of a 'do-minimum' situation, assuming the continued operation of the network or service under good management practices.

Base year - The year to which all values are discounted when determining a present value. (See discounting and discount rate).

Benefit–cost ratio (BCR) - This is the ratio of the present value of economic benefits to the present value of economic costs. It is an indicator of the economic merit of a proposal presented at the completion of a cost–benefit analysis. (See cost–benefit analysis). Generally, if the venue has a BCR greater than 1, the project's benefits exceed its costs.

Business case - A document that brings together the results of all the assessments of an infrastructure proposal. It is the formal means of presenting information about a proposal to aid decision-making. It includes all information needed to support a decision to proceed, or not, with the proposal and to secure necessary approvals from the relevant government agency.

In most states, there are two stages of the development of a business case, an early (strategic or preliminary) business case and a final or detailed business case. In some jurisdictions, NSW as an example, the Office of Local Government requires the completion of a Capital Expenditure Review for all major projects undertaken by Council and this document is similar to a business case.

Capital cost - The initial fixed costs required to create or upgrade an economic asset and bring it into operation. This includes expenses such as the procurement of land, buildings, construction, labour and equipment — including theatre-specific fit-out such as rigging, orchestra pit lifts, acoustic finishes and seating banks**.**

Computable general equilibrium (CGE) - modelling CGE modelling traces the flow-on impacts of a policy change in a systematic way, such as indirect impacts on sectors of the economy. The outputs of CGE models do not usually play a role in CBA. CGE models focus on 'economic activity impacts', which are not a measure of efficiency effects. (See economic impact analysis).

Consumer surplus - Consumer surplus is the difference between the price at which a consumer is willing to pay for a particular good or service and the price the consumer actually pays. For a high-demand performance, if patrons are willing to pay $100 but tickets cost $75, the consumer surplus is $25 per ticket; dynamic-pricing data can be used to measure this more precisely over a season.

Contingent Valuation - A survey-based method to determine individuals' willingness to pay for a good or service. If the venue is considering introducing a new type of performance, they might use this method to gauge potential ticket prices.

Cost–benefit analysis (CBA) - An economic analysis technique for assessing the economic merit of an infrastructure proposal. It involves assessing the benefits, costs, and net benefits to society the proposal would deliver. It aims to attach a monetary value to the benefits and costs wherever possible and provide a summary indication of the net benefit. (See benefit–cost ratio).

Cost escalation - Cost escalation is used to adjust cost estimates so they account for changes in technical, economic and market conditions over time. Costs are escalated using price indices, such as construction industry price indices, to a new base year.

Demand forecasting - The activity of estimating future demand (such as future ticket sales or attendance for specific performances or seasons) in a particular year or over a particular period.

Depreciation - The amount that an asset reduces in value due to wear and tear, or environmental factors. Specifically, it could be defined as:

- Economic depreciation: A decline in the value of an asset over time due to general wear and tear or obsolescence.
- Financial depreciation: The allocation of the cost of an asset over a period of time for accounting and tax purposes.

In an economic appraisal (using cost–benefit analysis), residual values are sometimes estimated based on the effects of economic depreciation. (See residual value).

Direct Effects - The immediate economic effects of the project. In a venue example, this could be the jobs created at the venue, the venue's immediate spending, and ticket sales.

Discount rate - The interest rate at which future dollar values are adjusted to represent their present value (that is, in today's dollars). This adjustment is made to account for the fact that money today is more valuable than money in the future. Cost–benefit analysis should use real social discount rates.

Discounted cash flow (DCF) - An analytical technique for converting a monetary impact at one point in time to a monetary impact at another. Project performance measures (such as internal rate of return and net present value) are based on this technique.

Discounting - The process of converting money values that occur in different years to a common (base) year. Adjusting future ticket sales or venue revenues to present-day values. This is done to convert the dollars in each year to present value dollars. (See discount rate).

Distributional effect - A change (positive or negative) in the economic welfare of a group of individuals or firms caused by a venue. For a venue , the prime example is its influence on the surrounding businesses such as restaurants and bars.

Do-minimum - A base case reflecting the continued operation of the network or service under good management practices. It should assume that general operating, routine and periodic maintenance costs will continue to occur, plus a minimum level of capital expenditure to maintain services at their current level (e.g. maintaining access or reliability) without significant deterioration. This may include asset renewals and replacement of life-ending components on a like-for-like basis, as well as committed and funded projects and smaller scale changes required to sustain viable operations under the base case. (See base case).

EBITDA - Earnings before interest, tax, depreciation and amortisation — a common measure of operating performance for commercial venues.

Economic efficiency - A measure of the extent to which economic gains (also referred to as increases in societal welfare) have been or could be achieved. Economic efficiency is improved whenever those who gain from a change could compensate the losers out of their gains and still have some gain left over. Maximum economic efficiency is said to be obtained when no further changes of this type are possible (i.e there are no unexploited opportunities to improve everybody's welfare).

Economic Impact Analysis - A form of economic analysis aimed at establishing the effect that a proposal will have on the structure of the economy, or on the economic welfare of groups of people or firms. Economic impacts are usually expressed in terms of employment and income effects, broken down by economic sector and/or region. The assessment that identifies the change in economic activity in a specified region, resulting from a particular action or decision (like opening a performing arts venue).

Elasticity - A mathematical measure used in economics to describe the strength of a causal relationship between two variables. It measures the responsiveness of the dependent variable to the changes in the independent variable (e.g. the price elasticity of demand). An elasticity value can be interpreted as the percentage change in the dependent variable in response to a 1% change in the independent variable. As an example, if an unknown play at the venue sees a small hike in ticket prices, it might cause a large drop in attendance. Ticket demand for blockbuster musicals typically shows **low (inelastic) price elasticity**, whereas contemporary dance seasons often exhibit **high (elastic) responses**

External cost - A cost imposed on third parties, including time lost from delays, accident risks and environmental impacts (valued at resource costs where applicable). Examples include crowd noise spilling into neighbouring residential streets after a late curtain-down or increased parking demand on show nights

Expected Value - The mean value of the cost distribution. If the cost distribution is symmetrical, the Expected Value will be equal to the P50 value. Where the cost distribution is positively skewed, the mean will be above the P50 value and may lie closer to the P90 value. (See P50 cost and P90 cost)

Externality - An effect that one party has on another that is not transmitted through market transactions.

- Positive Externalities: When the production or consumption of a good or service benefits a third party not directly involved. If our venue's performances inspire local youth, improve mental health, or foster community spirit, these are positive externalities.
- Negative Externalities: When the production or consumption of a good or service harms a third party. If late-night events at the venue lead to noise pollution or increased traffic, these would be negative externalities.

Financial analysis - The evaluation of the benefits and costs, measured in financial cash-flow terms, to a single entity (that is, not the community or the economy).

First-year rate of return (FYRR) - Benefits minus operating costs in the first full year of operation of a proposal discounted to the start of the evaluation period, divided by the present value of the investment costs, expressed as a percentage. The first-year rate of return is used to determine the optimum timing of proposals.

Gross domestic product (GDP) - A monetary measure of the market value of all the final goods and services produced in a period of time, often annually or quarterly.

Impact - A generic term to describe any specific effect. Impacts can be positive (a benefit) or negative (a cost).

Income Effect - The change in consumption resulting from a change in real income. For example, if the local community experiences an economic boom and incomes rise, there might be increased ticket sales at the venue as people have more disposable income.

Indirect Effects - These are secondary effects, often involving suppliers. For instance, if the venue buys sound systems from a local store, the store might then purchase more goods from a local manufacturer. This cascading effect is considered indirect.

Induced Effects - These arise when employees from the direct and indirect effect spend their income. If a performer at the venue spends her wages at a local restaurant, that's an induced effect.

Inelastic Demand - When the quantity demanded does not respond strongly to changes in the price. If a venue hosts a key Australian Performing Arts Company, even if ticket prices rise, demand might not fall significantly because of its popularity.

Internal rate of return (IRR) - The discount rate that makes the net present value equal to zero. The IRR must be greater than or equal to the discount rate for a proposal to be economically justified. The discount rate is therefore also known as the hurdle rate. (See discount rate). For a venue, IRR might be used to compare the potential profitability of different investment opportunities, such as a new lighting system versus a new seating arrangement.

Investment costs - The costs of providing the infrastructure before operations commence (e.g. costs for planning and design, site surveying, site preparation, investigation, data collection and analysis, legal costs, administrative costs, land acquisition, construction costs, consequential works, construction externalities). In some cases, investment costs can recur throughout the appraisal period (e.g. asset replacement or renewal costs). For cost–benefit analysis, these should all be expressed in economic cost terms (also known as resource costs).

Investment Logic Map (ILM) - a visual representation or tool used in strategic planning to define and validate the logic behind a proposed investment. It's typically employed in the early stages of project development to ensure that the reasoning behind the investment is sound and that it aligns with strategic objectives. The ILM provides a clear illustration of the problem being addressed, the benefits expected from the investment, and the strategic responses or actions required to realize those benefits.

Leakage - The portion of economic value, typically income or revenue, that "leaks out" of an economy instead of being retained and re-spent within that economy. Leakage can occur for various reasons, including the need to purchase goods and services from external sources or the profits being repatriated to foreign stakeholders. If the venue sources costumes, sets, sound systems, or other equipment from outside the local economy or abroad, the money spent on these items leaves the local economy.

Longlist of options - A comprehensive list of potential options to address the problems and realise the opportunities identified. The longlist includes all options that are identified for a proposal and should represent a range of reasonable alternatives, including capital and non-capital options, as well as demand-side and supply-side options. These are generally outlined in the development of an Investment Logic Map.

Market failure - When markets allocate resources inefficiently, they are said to exhibit market failure. There are four main causes: abuse of market power, typically markets where there is a monopoly or oligopoly; unpriced externalities, where the market does not take into account impacts on third parties; public goods, which are non-rivalrous and non-excludable; and asymmetry of information or uncertainty, where one side of the market systemically knows more than the other.

Market prices - The price at which assets or services are sold. Market prices provide a great deal of information concerning the magnitude of costs and benefits, as well as where they exist, and if there is not a market failure. Market prices should be used as they provide more reliable estimates of benefit values compared to non-market valuation techniques.

Marginal Cost - The additional cost incurred by producing one more unit of a product or service. If the initial cost of a show is $15,000 and a venue can add one more show to its schedule at an additional cost of $5,000, that's the marginal cost.

Marginal Benefit - The additional benefit derived from producing one more unit of a product or service. If one additional performance brings an additional $6,000 in revenue, that's the marginal benefit.

Monetised - Where a quantified impact has a corresponding dollar value attached to it. (See impact).

Multiplier Effect - This represents how many times money circulates within the local economy. For a venue, if it brings in visitors who then spend money on local hotels, restaurants, and shops, the overall economic benefit to the local area can be several times the original expenditure at the venue. Touring productions can lift hotel occupancy and late-night food sales, so every $1 in box-office revenue might generate a $2.50–$3.00 local spend, depending on visitor mix. If $1 spent leads to $2.50 in local economic activity, the multiplier is 2.5.

Net present value (NPV) - The monetary value of benefits minus the monetary value of costs over the appraisal period, with discount rates applied (See discount rate and appraisal period).

Night-time economy (NTE) - Economic activity occurring between 6 pm and 6 am; performing-arts venues are recognised drivers within city night-time-economy strategies.

Nominal prices - A value or price at a given time. Nominal prices rise with inflation. In contrast, real prices are prices after the effect of inflation has been removed. (See real prices).

Non-market valuation (NMV) - Often, valuations for goods or services are not reflected in market prices. Where this is the case, approaches for non-market valuation should be applied, including revealed preference, stated preference, or a number of other rapid valuation techniques. In the context of a performing arts venue, non-market valuation could be used to determine the worth of cultural enrichment, community identity, or the intrinsic value of the arts to the public.

For example, while you can easily determine the cost of a theatre ticket (a market value), the intangible experience of attending a performance, the joy it brings, the memories created, or the community cohesion fostered by a local arts scene do not have direct market prices. Non-market valuation methods, such as contingent valuation or travel cost methods, can help estimate these intangible values. This kind of valuation can be crucial when arguing for funding, grants, or community support for arts venues, as it quantifies the broader societal benefits that these venues bring beyond mere ticket sales. (See market prices).

Arts agencies in Australia often rely on NMV studies when assessing Regional Arts Fund or Funding applications.

Non-use benefits - The value that individuals place on a good or service even if they never use it or intend to use it. It reflects the benefits that people derive simply from knowing that a particular resource exists and will continue to exist for future generations. In the context of a performing arts venue, non-use benefits can be substantial and include:

- Existence Value - This is the value individuals place on the mere existence of a venue, even if they never intend to visit or use it. Someone might never attend a performance at a theatre, but they still appreciate knowing that such a cultural institution exists in their community.
- Bequest Value - This is the value associated with preserving the performing arts venue for future generations. People might place value on the idea that their children, grandchildren, or even future community members will have the opportunity to experience and enjoy the venue.
- Option Value - While slightly different from a pure non-use value, option value is the value derived from the possibility that one might use the venue in the future. Even if someone has not attended a performance, they might like the option of being able to do so someday. This is the perceived value held by attendees or potential attendees of a performance venue for the possibility of attending a show in the future, even if they don't currently have plans to do so. For instance, even if someone hasn't purchased tickets to any performances this season, they might still value the opportunity to do so at a later date

Measuring non-use benefits can be challenging since they don't manifest in market transactions. Methods such as contingent valuation (where individuals are directly asked their willingness to pay to preserve an asset they don't use) are often employed. For a performing arts venue, surveys or questionnaires might ask community members how much they'd be willing to contribute to a fund to renovate and maintain a historic theatre, even if they never plan to attend a show.

Opportunity cost - The value lost to society from using a resource in its next best alternative use, represented in dollars. This is also called the 'resource cost' or 'social cost'. This cost reflects market prices where there is an absence of market failure. Where market failure exists, appropriate adjustments are required to estimate the true opportunity cost.

Option - A possible solution to a problem, including base case options such as 'do nothing' or 'do minimum'. (See base case).

Options analysis - The analysis of alternative options for solving an identified problem or realising an identified opportunity. (See option).

Price elasticity - An economic measure to describe the sensitivity of a relationship between price variables. (See elasticity). For example, how much the quantity demanded of theatre tickets changes in response to a change in ticket prices.

Probabilistic project cost estimates - These estimates identify cost components, determine the probability distribution for each cost component and then undertake a simulation (often a 'Monte Carlo' simulation) to generate a probabilistic distribution of project costs. (See cost distribution, expected value, P50 cost and P90 cost).

Producer surplus - The difference between the price at which a producer is willing to supply a particular good or service and the price the producer actually receives. If the venue was willing to sell a ticket for $50 but ends up selling it for $70, the producer surplus is $20.

Productivity - The efficiency with which the economy as a whole convert inputs (labour, capital and raw materials) into outputs. Productivity grows when outputs grow faster than inputs, which makes the existing inputs more productively efficient.

Project - An infrastructure intervention. A project will move through the stages of project initiation, planning, delivery and completion. A suite of related projects to address a common problem or opportunity will create a program.

Program - A proposal involving a package of projects that are clearly interlinked by a common problem or opportunity. The package presents a robust and holistic approach to prioritise and address the projects, and there is a material opportunity to collaborate and share lessons across states, territories or agencies. The projects can be delivered in a coordinated manner to obtain benefits that may not be achieved by delivering the interventions individually. (See project).

P50/P90 cost - An estimate of project costs based on a 50%/90% probability that the cost estimate will not be exceeded.

Qualitative - A description of an impact that does not rely on quantitative or monetised information.

Quantitative/quantified - A description of an impact that utilises, presents or references values, numbers or statistics.

Real prices - Prices that have been adjusted to remove the effects of inflation. They must be stated for a specific base year, for example '2016 prices'. (See base year).

Residual value - The value of an asset at the end of the appraisal period. Residual values are used in cost– benefit analysis calculations involving long-lived assets whose life extends beyond the end of the appraisal period. (See appraisal period and cost–benefit analysis).

Resource cost - The value foregone by society from using a resource in its next best alternative use. Also known as 'opportunity cost' and 'social cost'. (See opportunity cost). Economic appraisals use resource costs, which do not include taxes and subsidies. Taxes and subsidies are financial transfers between individuals in an economy, and do not lead to an increase in net economic benefits. Resource cost = market price – indirect taxes + subsidies.

Risk - Events that have probabilities of occurrence that are predictable and outcomes that can be estimated with some confidence.

Scenario analysis - Scenario analysis provides a framework for exploring the uncertainty about future consequences of a decision, by establishing a small set of internally consistent future scenarios and assessing options against each of them. This form of analysis is especially useful for decision-makers faced with forms of uncertainty that are uncontrollable or irreducible (e.g. future technology change or increased climate variability).

Sensitivity analysis - Changing a variable, or a number of variables, in a model or analysis to test how the changes affect the output or results.

Shortlist of options - The set of options determined as most likely to benefit the community using a structured, quantitative and unbiased analysis. The shortlist of options is initially developed in a preliminary business case and then further expanded in a Final Business Case.

Social discount rate - Discount rates translate future costs and benefits to a common time unit, comparing costs and benefits that accrue at different times by expressing them as an equivalent amount in today's dollars. In the economic appraisal, a real discount rate should be used that considers societal resources. (See appraisal and real discount rate).

Social, economic and environmental impact - The positive and negative effects of a proposal, with regards to:

- social: quality-of-life effects, such as social exclusion and access to services, employment and safety
- economic: productivity effects, such as productive capacity, economic capability, global competitiveness
- environmental: effects such as greenhouse gas emissions, waste treatment, noise pollution, visual intrusion, heritage impacts.

Socially beneficial - Something is socially beneficial if you can demonstrate an evidence-based improvement that will change the quality of life of Australians. For example, through improved health outcomes, access to services/employment, and improved environmental outcomes.

Social Return on Investment (SROI) - A framework that monetises social outcomes (e.g. community cohesion, wellbeing) relative to investment costs, complementary to CBA.

Substitution Effect - This occurs when consumers replace more expensive items with less costly alternatives. If ticket prices for a venue's prime seating become too high, some patrons might choose cheaper seats instead.

Sunk cost - A cost that cannot be retrieved by resale in the market. More specifically, a sunk asset is one which, once constructed, has no value in any alternative use. If the venue had earlier invested in an outdated sound system that no longer meets needs, that's a sunk cost.

Threshold Effect - A situation where a small change in external conditions causes a rapid change in an economic or ecological system. If ticket prices at our venue increase slightly but cause a dramatic drop in attendance, it indicates a threshold effect.

Travel Cost Method (TCM) - A valuation technique used in environmental economics to estimate the potential economic use values associated with sites that are used for recreation. The main idea behind TCM is that the time and travel cost expenses that people incur to visit a site represent the "price" of access to the site. Thus, if people are willing to incur these costs to visit the site, they must derive some benefits from the visit. To understand the value of a show held at a specific venue, TCM would take into account the expenses visitors are willing to bear to attend the show or festival. These expenses can include transportation costs (petrol, bus fare, train tickets), accommodation (if they stay overnight), meals, and the opportunity costs of time spent traveling.

By gathering data on how often individuals visit and at what varying distances and costs, a demand curve can be created, showing how attendance might change with different costs. The area under the demand curve can provide an estimate of the total recreational value of the performing arts venue or event. This method can be particularly useful for arts venues in assessing the broader economic impact of their events, especially when advocating for funding or showcasing their importance to the community.

Travel time savings - The benefit of less time spent travelling as a result of a project. The number of hours saved is typically modelled for both personal and business travel across a network, then converted to a monetary value for use in cost–benefit analysis.

User costs - Costs incurred by a transport user in addition to the money price. For example, waiting time, time in transit, unreliability, damage to freight, passenger discomfort, additional costs to complete the door-to-door journey. In cost–benefit analysis, quality attributes such as time and reliability need to be expressed in dollar terms based on user valuations.

Value Added - The net output, after subtracting intermediate inputs. It's the real contribution to an economy, akin to GDP. For our venue, it would be the total output minus costs like utilities, services, and materials purchased from outside.

Value of time - A standardised parameter for valuing time.

Willingness-to-pay (WTP) - The maximum amount a consumer is willing to pay for a given quantity of a particular good or service (rather than go without it). It is measured as the total area under the demand curve up to the given quantity. It is often employed in cost-benefit analyses and in gauging consumer value for non-market goods or services.

It is critical in economic impact assessment as it provides an opportunity to "value" the venue from the perspective of those who don't attend performances. It is a standardised and accepted (Treasury) way to value non-use benefits. (See Non-use benefits). Surveys and questionnaires directly ask non-attendees what they would be willing to pay for the venue to continue to exist. This method, however, is often subject to hypothetical bias where people may not be entirely truthful or realistic about what they would actually pay.