

## Economic Vitality

### 1 Tourism

#### 1.1.1 Visitors and Expenditure

##### *Indicator Overview*

Tourism is an integral part of the Northern Territory's economy and was identified in initial stakeholder consultation in 2021 as a value to be included in the Darwin Harbour Integrated Report Card (DHIRC). Tourism is assessed using a combination of visitors and their expenditure in the greater Darwin region.

##### *Methodology*

Tourism Northern Territory (Tourism NT) currently records annual tourism data in the Northern Territory, including the number of visitors and their expenditure in the 'Greater Darwin' region (see Figure 1-1). The 'Greater Darwin' region is the most localised reporting region relevant to Darwin Harbour and is used to represent tourism for the DHIRC.

The 2023 DHIRC uses the most recently published data available for the Greater Darwin region from Tourism NT at the time of this memo's preparation, which is Year Ending June 2023 (Figure 1-1).



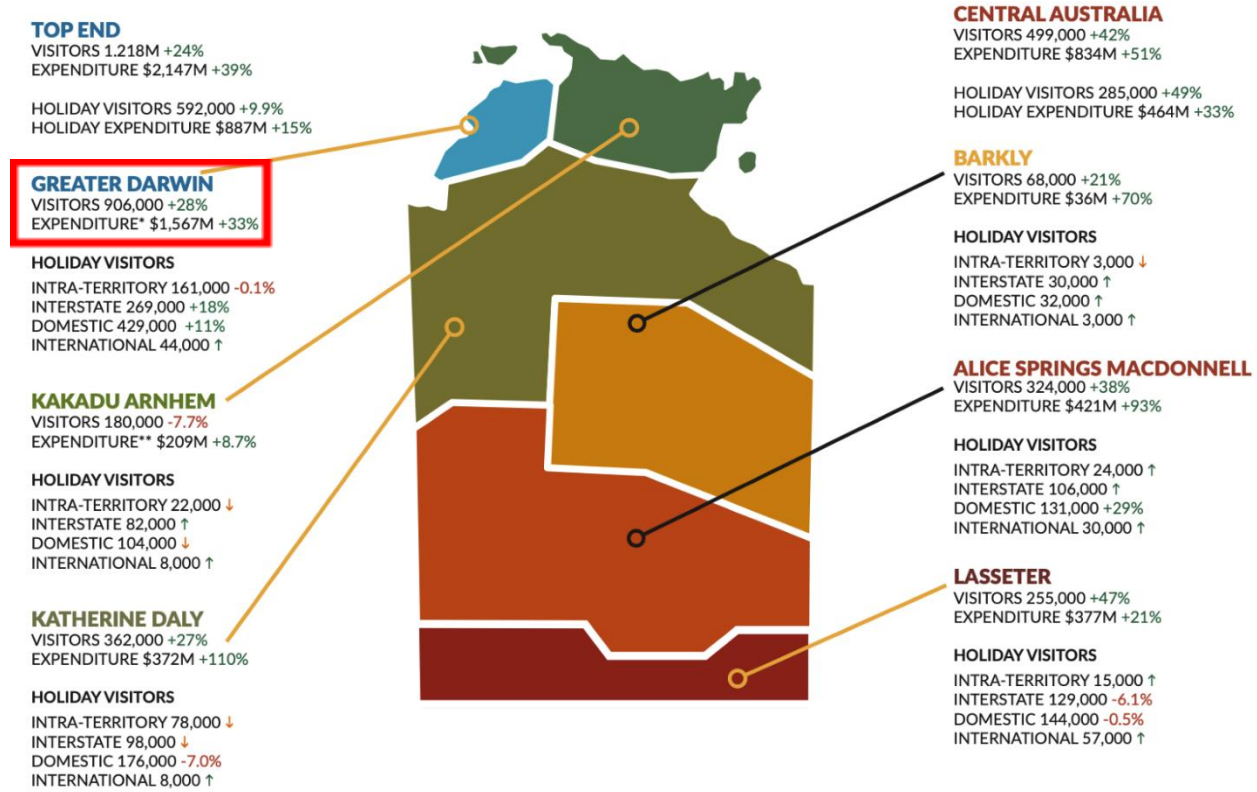


Figure 1-1. Graphic depicting visitors and expenditure in different regions across the Northern Territory. Source: [NT Tourism Domestic Snapshot Year Ending June 2023](#).

The thresholds adopted for visitors and expenditure were derived from [Tourism NT’s 2030 Tourism Strategy](#), which sets growth targets for visitors and expenditure between FY2019 and FY2030 for the Northern Territory (Table 1-1).

Table 1-1. Growth targets for visitors and expenditure between FY2019 and FY2030 for the Northern Territory

Northern Territory	2019 Actuals	2030 Target
Visitors (million)	1.018	1.442
Expenditure (\$ billion)	1.09	2.626

The annual growth rates required to achieve the FY2030 targets were calculated for the Northern Territory using Equation 1 and presented in Table 1-2. These Territory-wide growth rates were adopted for the Darwin Region and used to derive annual visitor numbers and expenditure targets through FY2030 based on growth from FY19 (Table 1-3).

Equation 1. Annual growth rates for achieving the FY2030 visitor number and expenditure targets.

$$\text{Annual Growth Rate} = \frac{\left( \frac{\text{FY2030 target value} - \text{FY2019 value}}{\text{FY2019 value}} \right) \times 100}{11 \text{ years}}$$

Table 1-2. Growth rates for visitors and expenditure between FY2019 and FY2030 for the Northern Territory

Northern Territory	Annual growth rate to reach FY2030 targets
Visitors	3.79 %
Expenditure	12.81 %

Table 1-3. Calculated annual targets for visitor numbers and expenditure required to achieve Tourism NT's 2030 Tourism Strategy targets.

DARWIN REGION	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30
Visitors (million)	1.018	1.057	1.095	1.134	1.172	1.211	1.250	1.288	1.327	1.365	1.404	1.442
Expenditure (\$ billion)	1.09	1.230	1.369	1.509	1.649	1.788	1.928	2.067	2.207	2.347	2.486	2.626

Equation 2. Method for calculating visitor and expenditure scores to a standardised 0-100% report card scale.

$$\text{Visitor / Expenditure Score} = \left( \frac{\text{Actual FY23 Value}}{\text{Target FY23 Value}} \right) \times 100$$

### Report card score and grade

Data for visitors and expenditure were converted to a 0-100% report card scale by calculating the FY23 visitor and expenditure values as a percentage of the 'target' visitor and expenditure values, as shown in Equation 2, with results shown in Table 1-4.

Table 1-4. Actual and target visitor and expenditure values for FY23 and corresponding report card scores.

Darwin Region	FY23 Actual Value	FY23 Target Value	Report Card Score (%)
Visitors (million)	0.906	1.172	77
Expenditure (\$ billion)	1.567	1.649	95

In 2023, Tourism received an 'A' grade, a significant improvement from 2021, where a 'D+' grade was received (Table 1-5). This improvement is attributed to increased domestic and international travel post Covid-19.

Table 1-5. Report card scores and grades for 2021 and 2024 report cards.

	DHIRC 2021	DHIRC 2024
Report Card Score	38.0	86.2
Report Card Grade	D+	A

## 1.1.2 Fishing Tour Numbers

### Indicator Overview

Fishing tour numbers are reported by fishing tour operators in Darwin Harbour who log the number of fishers and effort for each trip. This data is provided to Fisheries Northern Territory (Fisheries NT) and used to assess fishing effort and tourism in the region. The indicator has been included in the 2024 Darwin Harbour Integrated Report Card (DHIRC) to report on fishing tourism leaving from Darwin Harbour.

### Methodology

Fishing tour numbers record the number of domestic and international visitors. This provides a measure of fishing tourism leaving from Darwin Harbour.

The threshold adopted for tourism numbers were derived from Tourism NT's 2030 Tourism Strategy, which sets growth targets for visitors between FY2019 and FY2030 for the Northern Territory (Table 1-6).

Table 1-6. Growth targets for visitors and expenditure between FY2019 and FY2030 for the Northern Territory

Northern Territory	2019 Actuals	2030 Target
Visitors (million)	1.018	1.442

The annual growth rates required to achieve the FY2030 targets were calculated for the Northern Territory using Equation 3 and presented in Table 1-7. These Territory-wide growth rates were adopted for the Darwin Region and used to derive annual visitor numbers through FY2030 based on growth from FY19.

Equation 3. Annual growth rates for achieving the FY2030 visitor number and expenditure targets.

$$\text{Annual Growth Rate} = \frac{\left( \frac{\text{FY2030 target value} - \text{FY2019 value}}{\text{FY2019 value}} \right) \times 100}{11 \text{ years}}$$

Table 1-7. Growth rates for visitors between FY2019 and FY2030 for the Northern Territory

Northern Territory	Annual growth rate to reach FY2030 targets
Visitors	3.79 %

Data for fishing tour numbers were converted to a 0-100% report card scale by calculating the FY23 visitor values as a percentage of the 'target' visitor values, as shown in Equation 4, with results shown in Table 1-8.

Equation 4. Method for calculating fishing tourism scores to a standardised 0-100% report card scale.

$$\text{Fishing tourism Score} = \left( \frac{\text{Actual FY23 Value}}{\text{Target FY23 Value}} \right) \times 100$$

Table 1-8. Actual and target visitor values for FY23 and corresponding report card scores.

Darwin Region	FY23 Actual Value	FY23 Target Value	Report Card Score (%)
Domestic	1344	-	-
International	40	-	-
Total Fishing Tour Visitors	1384	1385	99.9

### Report card score and grade

Darwin Harbour has attained an overall 'A' grade for fishing tour numbers in the 2024 Report Card. This represents strong recovery to the sector from any Covid-19 impacts.

Table 1-9. Overall results for fishing tour numbers

	DHIRC 2024
Report Card Score	99.9
Report Card Grade	A

## 2 Shipping Activity

### Indicator Overview

The Port of Darwin represents the entirety of Darwin Harbour including Darwin Port, two natural gas facilities owned by INPEX and SANTOS, HMAS Coonawarra, barges and other commercial operators. The harbour acts as a key connector for the Northern Territory’s economy and facilitates the movement of imports, exports and trade. This was identified in early stakeholder engagement (2021) and led to the Port of Darwin being included as a value in the 2021 Darwin Harbour Integrated Report Card (DHIRC). Although an indicator of port health was not established in 2021, a method has been established for the 2023 DHIRC, based on the annual gross tonnage of ships into and out of Darwin Harbour.

### Methodology

Darwin Port is the main provider of designated pilotage services in Darwin Harbour, responsible for tracking the number and size of vessel movements in Darwin Harbour. Darwin Port have provided data on annual shipping movements represented as ‘annual gross tonnage’ (AGT) for the period FY13-FY23 (Figure 2-1). Gross tonnage refers to the volume of all enclosed spaces on a vessel and is calculated from the formula  $GT = K_1V$ , where  $V$  is the volume of a ship’s enclosed spaces in cubic metres and  $K_1$  is a constant.

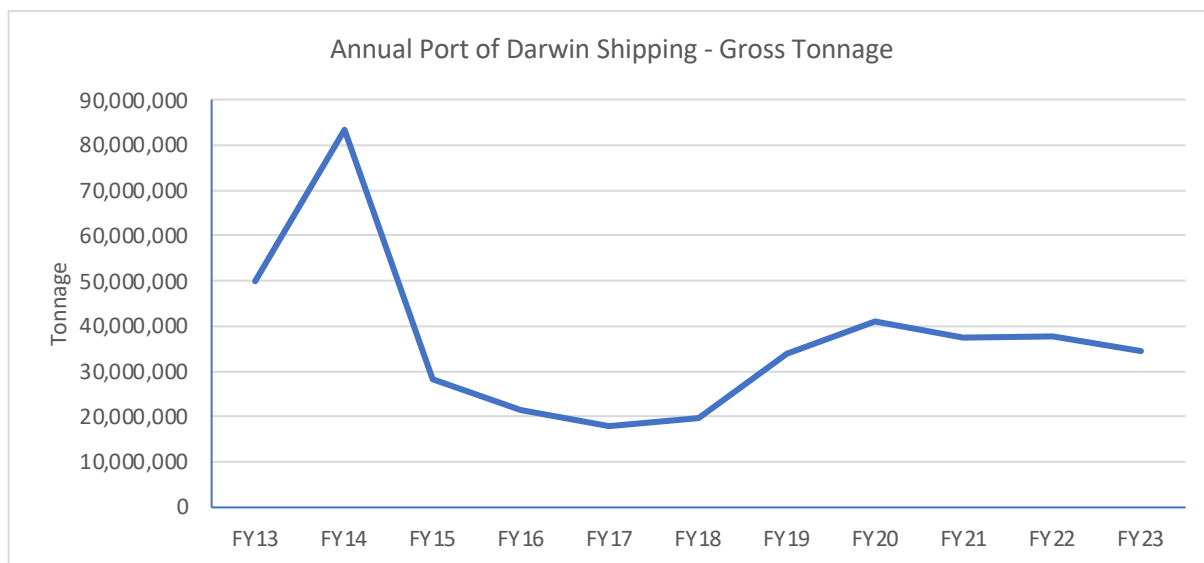


Figure 2-1. Gross tonnage of ship movements in Darwin Harbour from FY22-FY23. The peak in activity in FY13 – FY14 was related to the Ichthys project.

The threshold adopted for the Port of Darwin has been developed using eight years of historical data between FY13 and FY20. This period was adopted as a representative baseline of shipping activity in the harbour, against which changes in current and future years can be assessed. AGT for each year between and inclusive of FY13 – FY20 were ranked into 20<sup>th</sup> percentiles (Table 2-1), resulting in 5 ‘category bins’ that align with the standard report card “category bins” shown in (Table 2-2). The relationship between AGT and threshold bins is shown in Figure 2-2.

Table 2-1. Annual gross tonnage for FY13 to FY20 ranked by percentiles.

Percentile rank	Annual Gross Tonnage (AGT)
100	83,483,596
80	46,234,176
60	35,256,677
40	26,851,420
20	20,377,041
0	17,934,873

Table 2-2. Report card threshold bins based on percentile ranks for FY13 to FY20 annual gross tonnage (AGT). All report card indicator results are standardised to a common scale of 0 – 100% and categorised into five categories ranging from 'Very Poor' to 'Very Good'. A score of 100% for the Port of Darwin indicates that the three-year average AGT has met or exceeded the highest level recorded in the harbour between FY13-FY20, whilst a score of 0% indicates the three-year average AGT was at or below the lowest level recorded in the harbour between FY13-FY20.

Percentile	Threshold Category Bin (AGT)	Report Card Grade and Score
80 - 100	46,234,177 - 83,483,596	A (80-100%)
60 - 80	35,256,678 - 46,234,176	B (60-80%)
40 - 60	26,851,421 - 35,256,677	C (40-60%)
20 - 40	20,377,042 - 26,851,420	D (20-40%)
0 – 20	17,934,873 - 20,377,041	E (0-20%)

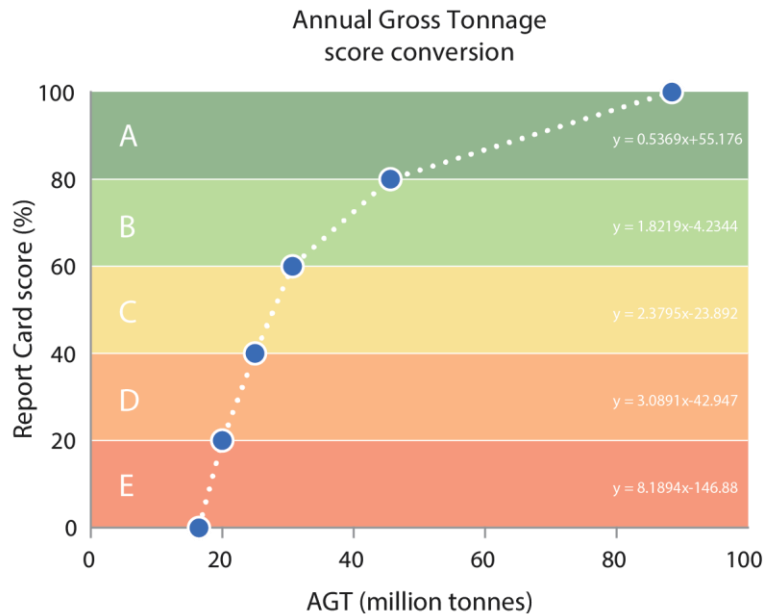


Figure 2-2. Relationship between AGT and threshold bins and corresponding report card grades.

### Report card score and grade

The 2024 DHIRC compares the most recent 3-year (FY21 – FY23) average AGT (Table 2-3) against the percentiles calculated from the FY13-FY20 AGT (Table 1-9). The most recent 3-year average was adopted to ‘smooth out’ year-to-year variability and resulted in a report card score of 62%, which equals a B- for the Port of Darwin in the 2023 DHIRC (Table 2-4).

Table 2-3. Average gross tonnage in Darwin Harbour between FY 2020 and FY 2023

	Gross Tonnage
FY21	37,305,709
FY22	37,685,438
FY23	34,621,980
3 – year Average	36,537,709

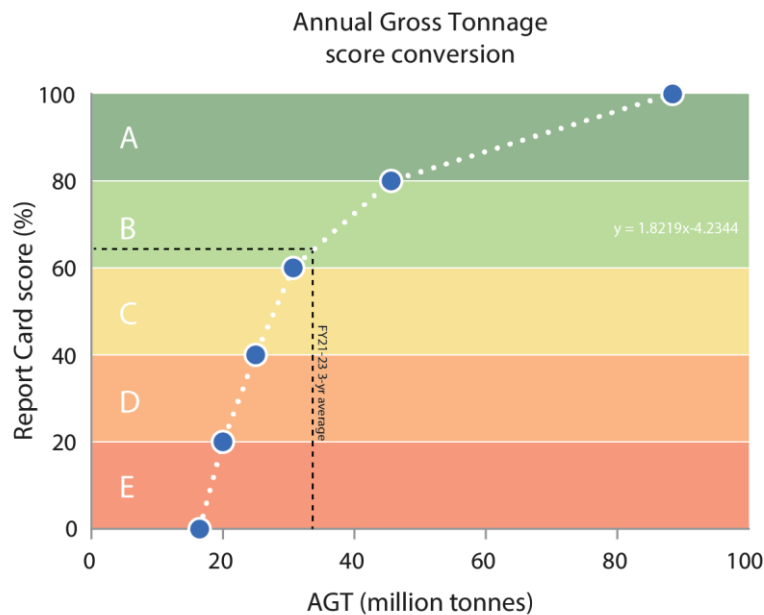


Figure 2-3. Relationship between AGT and threshold bins, showing the FY21-FY23 AGT average and the equation for that slope of the curve that is used to calculate an exact score for the metric.

Table 2-4. Port of Darwin AGT for the period FY21-FY23 and corresponding report card score and grade.

	AGT	Equation	Report Card Score	Report Card Grade
3 – year Average	36,537,709.07	$y = 1.8219x - 4.2344$	62.3%	B-