

# Magellan Infrastructure Fund (Currency Hedged) (Managed Fund)

ARSN: 612 467 580

ASX code: MICH

## Fund Facts

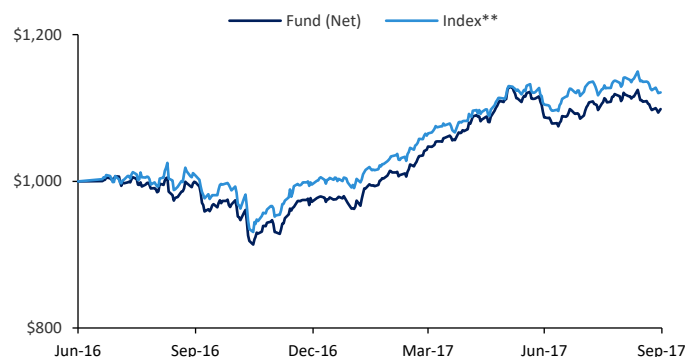
Portfolio Manager	Gerald Stack		
Structure	ASX-quoted Global Infrastructure Fund		
Inception Date	19 July 2016		
Management & Administration Fee <sup>1</sup>	1.05%		
Fund Size	AUD \$110.8 million		
Distribution Frequency	Six Monthly		
Performance Fee <sup>1</sup>	10% of the excess return of the units of the Fund above the higher of the Index Relative Hurdle (S&P Global Infrastructure Index A\$ Hedged Net Total Return) and the Absolute Return Hurdle (the yield of 10-year Australian Government Bonds). Additionally, the Performance Fees are subject to a high water mark.		
iNAV tickers	Bloomberg Thomson Reuters IRESS	MICHIV MICH.AX MICH.AXW	MICHIV Index MICHin.IDCC MICHNAV.ETF

<sup>1</sup>All fees are inclusive of the net effect of GST

## Fund Features

- ASX quoted version of Magellan Infrastructure Fund
- Fund is actively managed
- Minimum administration for investors; no paperwork needed to trade
- Units can be bought or sold on the ASX like any other listed security
- Efficient and live pricing
- Provision of liquidity by the Fund
- Settlement via CHES
- Magellan has significant investment alongside unit holders

## Performance Chart growth of AUD \$1,000\*



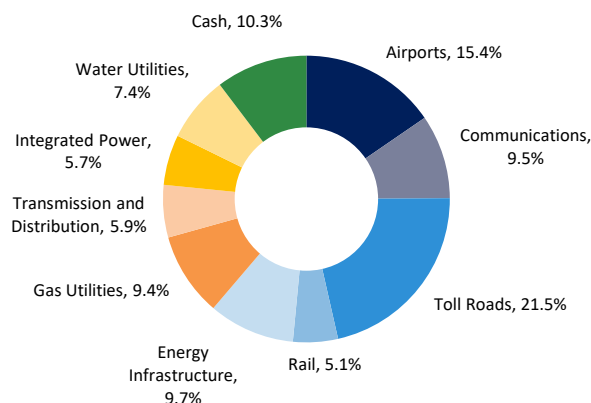
## Fund Performance\*

	Fund (%)	Index (%)**	Excess (%)
1 Month	-2.0	-1.7	-0.3
3 Months	1.0	1.5	-0.5
6 Months	4.9	5.3	-0.4
1 Year	10.0	11.3	-1.3
Since Inception	8.1	10.0	-1.9

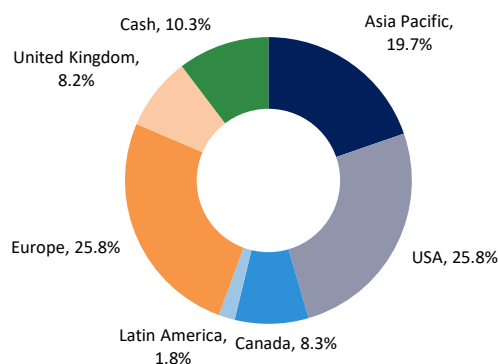
## Top 10 Holdings

	Sector <sup>#</sup>	%
Transurban Group	Toll Roads	7.4
Crown Castle International	Communications	5.4
Atlantia SpA	Toll Roads	5.3
Enbridge Inc	Energy Infrastructure	5.2
Sempra Energy	Gas Utilities	4.8
Aéroports De Paris	Airports	4.8
National Grid PLC	Transmission and Distribution	4.0
Sydney Airports	Airports	4.0
American Tower Corp	Communications	3.9
Macquarie Atlas Roads	Toll Roads	3.6
TOTAL:		48.4

## Sector Exposure<sup>#</sup>



## Geographical Exposure<sup>#</sup>



\* Calculations are based on the monthly ASX released net asset value with distributions reinvested, after ongoing fees and expenses but excluding individual tax, member fees and entry fees (if applicable). Fund Inception 19 July 2016.

\*\* The index is the S&P Global Infrastructure Index A\$ Hedged Net Total Return

<sup>#</sup> Sectors are internally defined. Geographical exposures are by domicile of listing.

## Market Commentary

---

Global infrastructure stocks rose for a third consecutive quarter in the September quarter after US infrastructure companies reported healthy earnings, and concerns about North Korea's nuclear posturing bolstered the appetite for defensive investments. A rebound in US bond yields in September, however, reduced much of the gains recorded in July and August such that utilities was the third worst-performing of the 11 industry classifications within the MSCI World Index over the quarter.

Political tensions and another weak reading of US inflation lowered US 10-year bond yields in July and August, to provide another support for alternative long-duration assets such as infrastructure stocks that offer reliable income streams. But comments the Federal Reserve would start shrinking its balance sheet in October boosted US 10-year bonds yields by 22 basis points to 2.33% in September, 2 basis points over their June close.

Global stocks set record highs as they rose for a sixth straight quarter after US companies posted better-than-expected earnings for the second quarter, reports showed the world's major economies were growing in unison for the first time in a decade, the Federal Reserve reiterated that monetary policy would only likely be tightened gradually, and Angela Merkel won a fourth term in elections in Germany. Utilities stocks were among the 73% of S&P 500 companies that reported 'positive' earnings-per-share surprises for the second quarter, according to FactSet.

## Fund Commentary

---

The portfolio recorded a positive return in the September quarter. At a stock level, the best performers included investments in Atlantia and Societa Iniziative Autostradali e Servizi of Italy as well as France-based Eurotunnel.

Atlantia rose 8.3% as the Italian toll-road and airport operator boosted 2017 profit guidance and took a 29% stake in Bologna airport, and as their proposed takeover of Spanish rival Abertis progressively passed regulatory hurdles. Societa Iniziative soared 40% following the release of its five-year strategic plan that highlighted the growth opportunities within the toll-road operator. Eurotunnel gained 9.2% after the company reaffirmed profit and targets for 2017 and 2018.

Lagging stocks included the investments in Auckland International Airport, Zurich Airport and Vopak of the Netherlands. Auckland Airport fell 9.7% amid concerns building disruptions are affecting earnings, and flights were curtailed due to a break in the pipeline supplying the airport with jet fuel. Zurich Airport lost 6.9% after the half-year results included guidance for stable full-year earnings despite recording strong passenger growth. Vopak lost 8.6% after the oil and storage company said 2017 earnings would be below 2016's result due to lower tank-terminal occupancy rates and spending on storage facilities.

*Movements in stocks are in local currency.*

## Topic in Focus Why invest in toll roads?

---

Toll roads today are a popular way for cash-strapped governments to raise money and improve the quality of, and reduce the congestion on, road networks. They are popular with investors because they offer the reliable inflation-protected earnings usually associated with infrastructure. Given the huge capital costs (toll roads often cost billions of dollars to build), for most investors the listed market is the only viable option. Here we discuss the features of toll roads including their risks so investors can better understand why the best ones are worthwhile investments.

### Toll roads explained

There are two main types of toll roads. These are intra-urban or city-based roads, which can be further divided into radial, orbital and high-occupancy toll (HOT) lanes, and inter-urban toll roads, those between cities.

Each road varies in terms of its dynamics but, in general, this difference stems from the types of users and the trips undertaken. City-based toll roads typically host a higher proportion of cars – that is, people travelling to and from work each day. This means that in an economic downturn traffic will decline as some people take a toll-free route instead. But as long as people have jobs to go to or errands to run the diversion is likely to be minimal. By contrast, roads between cities tend to have higher proportions of commercial traffic and discretionary trips, which are more economically sensitive. Intra-urban roads typically stay busier during economic downturns, as occurred during the global financial crisis in 2008-09.

As is generally the case for transport infrastructure, the revenue for a toll road is a function of volume and price. In the case of toll roads, this can be put simply as:

$$\text{Toll-road revenue} = \text{Traffic volume} \times \text{toll price}$$

As tolls increase, there is generally a temporary switching effect where some users shift to the toll-free alternative. This causes the competing routes to get more congested, which boosts the attractiveness of the tolled route. This results in an increase in total revenue, all things being equal, as the toll increase more than offsets the temporary decline in traffic. Traffic on Sydney's Eastern Distributor, for example, grew 106% over 16 years despite tolls increasing 123% over the same period.

### Pricing mechanism for toll roads

The typical business model for a toll road is that a government agency enters into a concession agreement (contract) that entitles a toll-road operator to collect tolls for a defined period and increase those tolls on a regular basis in a defined way. The basis on which tolls are increased is controlled by the terms of the concession agreement and the level of tolls is generally linked to inflation. Table 1 below shows how contracts differ. In Canada, the owner of the 407 ETR tollway can raise tolls as it pleases, while in Australia toll increases are linked to the consumer price index.

**Table 1: Toll road concession agreements – how they can differ**

Asset	Location	Basis of toll increases	Frequency
407 ETR	Canada	At owner discretion	Discretionary
APRR	France	85% of CPI *	Annually
Atlantia	Italy	70% of CPI *	Annually
Chicago Skyway	USA	Greater of 2%, CPI or nominal GDP per capita	Annually
CityLink	Australia	CPI	Quarterly
Eastern Distributor	Australia	Greater of 4.1% or basket of 67% AWE and 33% CPI	In \$0.50 increments <sup>1</sup>
Indiana Toll Road	USA	Greater of 2%, CPI or Nominal GDP per capita	Annually
M5	Australia	CPI	Annually
M6toll	UK	At owner discretion	Discretionary
Western Harbour Tunnel	Hong Kong	CPI	Annually

<sup>1</sup>The formula is applied to a theoretical toll each quarter but tolls only increase when rounding takes it to the next \$0.50 increment.

\* Plus an additional allowance for capex

Source: Underlying operators. As at 30 June 2017.

Three main factors affect the amount of traffic on toll roads.

### 1. Trip-time certainty

A critical point in the decision-making process for drivers is how predictable travel times are. Drivers will pay a premium for a predictable trip and overestimate average driving times on trips with highly variable conditions. Another way to look at this is to say people value trip-time certainty so they don't have to leave earlier to allow for delays.

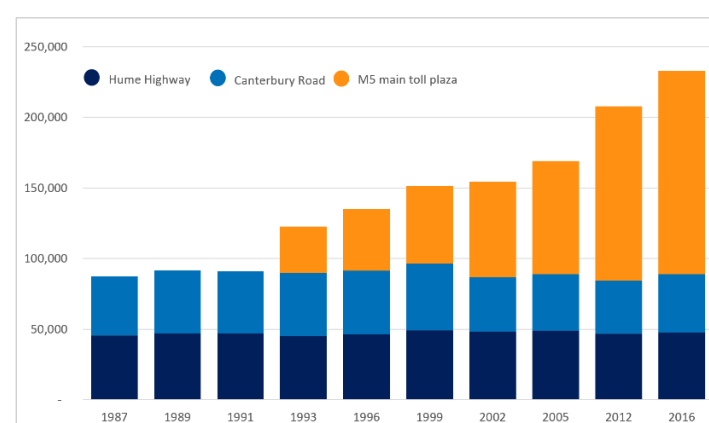
### 2. Demand for toll roads is tied to economic development

Experience shows that the demand for transport is related to economic development. Increases in populations and wealth lead to more demand for transport; in a growing economy, we can expect the number of vehicles on roads to rise over time.

### 3. Capacity constraints on the existing network

A new toll road is typically supported by governments to add capacity to a network that is at, or approaching, capacity. If alternative routes to the toll road are congested, traffic growth on toll roads is likely to be higher for longer periods of time. This is displayed in Chart 1, which shows the traffic along a key corridor in Sydney, Australia. It shows that, despite the addition of the M5 toll road in 1992, the average daily traffic on the existing network remained unchanged and traffic growth was via the toll road.

**Chart 1: Average daily traffic on Sydney's M5 toll road 1987-2016**



Source: RMS Traffic Data

## What are the risks?

### 1. Misalignment of incentives

A misalignment of incentives of management and advisers is the most fundamental risk to the financial success of a toll road. This is one of the reasons we place so much emphasis on the governance or agency risk of these businesses. (It represents 30% of our quality score.) Incentives drive behaviour. A management team with incentives that align with the needs of long-term asset owners is less prone to such errors.

### 2. Congestion charges

Eight cities including Milan, London, Singapore and Stockholm have congestion charges that increase the cost of a trip into the charged area, which would be expected to shift people to other modes of transport; in particular, public transport. Other solutions such as Washington DC's dynamic pricing on parking meters may also reduce traffic at the margins.

### 3. Technological disruption

We expect autonomous vehicles and driverless cars to prove positive for the earnings of toll roads over the next 10 to 20 years, particularly for city-based toll roads.

Toll roads today typically can handle about 2,200 vehicles per lane per hour. A recent study by the University of California<sup>1</sup> concluded that full penetration of self-driving cars could double this capacity. This is because computer-driven vehicles will be able to travel much closer together, at much higher speeds and in much thinner lanes.

The long-term impact on toll roads will depend on the balance between additional trips created by driverless cars minus the additional capacity that is created on the free roads through the growth of driverless cars.

## Conclusion

Toll roads can generate growing and inflation-protected income streams for long-term investors. While the risks are low compared with most equities, the risks of these assets are nonetheless real – particularly when they pertain to agency risk. However, in-depth research and a good understanding of the drivers of the business and incentives of management teams should allow us to reap the benefits of these largely misunderstood assets.

<sup>1</sup> Lewis Center. "Getting ready for the rise of autonomous vehicles." UCLA Luskin School of Public Affairs. 2016. <https://www.lewis.ucla.edu/2016/11/autonomous-vehicles/>

**Important Information:** Units in the fund(s) referred to herein are issued by Magellan Asset Management Limited (ABN 31 120 593 946, AFS Licence No 304 301). Past performance is not necessarily indicative of future results and no person guarantees the future performance of the fund(s), the amount or timing of any return from the fund(s), or that the investment objectives of the fund(s) will be achieved. This material has been provided for general information purposes and must not be construed as investment advice. It does not take into account the investment objectives, financial situation or particular needs of any particular person. Investors should consider obtaining professional investment advice tailored to their specific circumstances and should read the relevant Product Disclosure Statement (PDS) applicable to the fund(s) prior to making any investment decisions. The PDS for the fund(s) is available at [www.magellangroup.com.au](http://www.magellangroup.com.au) or can be obtained by calling 02 9235 4888. Any trademarks, logos, and service marks contained herein may be the registered and unregistered trademarks of their respective owners. Nothing contained herein should be construed as granting by implication, or otherwise, any licence or right to use any trademark displayed without the written permission of the owner. No part of this material may be reproduced or disclosed, in whole or in part, without the prior written consent of Magellan Asset Management Limited.

MICH43008