Date: July 17, 2024

To: Board of Retirement

From: F. Robert Reveles, Retirement Financial Investment Officer Subject: First Quarter Infrastructure Update and Manager Characteristics

Recommended Action:

Receive and file.

Fiscal and Financial Impacts:

There is no financial impact to receiving this informational item.

Strategic Plan Importance and Risk Assessment:

This report pertains to Goal 1 – Protect the Plan's long-term financial health and Goal 2 – Strengthen Risk Oversight.

Background and Discussion:

Infrastructure investments are essential to efficient operation of society. They provide the backbone for distribution of goods and services throughout an economy. Think of roads, airports, seaports, gas and electric utilities, water distribution systems, telecommunication systems, energy storage systems, and energy pipelines. Specifically, these businesses tend to be monopolistic, have a high barrier to entry (expensive business to get into), use long-lived assets, have stable and predictable revenue streams, and are inflation protected (by linking revenue to CPI or another inflation metric).

In December 2019 the Board approved it's first investment into the infrastructure asset class. A 6% allocation was split evenly between two strategies: The IFM Global Infrastructure Fund (GIF) and the J.P. Morgan Infrastructure Investments Fund (IIF). Both funds offer core, U.S. dollar hedged, global diversified exposure to the asset class. The dollar hedging minimizes currency movements for dollar-based investors.

Infrastructure Outlook:

Over the next decade the infrastructure asset class will be supported, shorter term, by government (local, state, and federal) spending in the U.S. and, longer-term, the global net-zero energy transition. In early 2018 the Congressional Research Service, a nonpartisan public policy research institute of the United States Congress, pointed out the decades long decline of annual government nondefense spending (infrastructure investment spending) and explained the multiple effects that government spending on core infrastructure, defined as roads, railways, airports, and utilities could have on economic output. Trustees can read the short 20-page report here. This report, and others like it, have been cited as helping to shape the recent thinking of the Executive/Legislative branch(s) on

the strength and resilience of the American economy. These realizations have led to multiple efforts to strengthen the U.S. economy by investing in domestic infrastructure, energy production and promoting clean energy. The Build Back Better Plan and Act, the American Jobs Plan, Infrastructure Investment and Jobs Act, and the Inflation Reduction Act are all examples of this effort.

Of particular interest is the Infrastructure Investment and Jobs Act. In November 2021, as part of the Infrastructure Investment and Jobs Act, the Bipartisan Infrastructure Law was signed by President Biden. The law directs \$1.2 trillion of federal funds, through federal year 2026, towards the subsectors of transportation, broadband, clean energy, and water systems. Per the White House press release the law will help deliver clean water by expanding water infrastructure and eliminating lead service pipes, ensure access to reliable high-speed internet through deployment of broadband infrastructure, repair and rebuild roads and bridges, improve public transportation by repairing or upgrading deficient transit vehicles (buses and rail cars), strengthen our supply chains by funding airport and seaport maintenance backlogs (which will reduce congestion and expediting commerce), build a national network of electric vehicle chargers, and upgrade our power infrastructure by building miles of new transmissions lines to facilitate the expansion of renewable and clean energy. If Trustees are interested in a deeper dive into all these programs, you can review the updated Guidebook to the Bipartisan Infrastructure Law for implementation details. (The guidebook is a longer read at 459 pages) Both our managers have significant U.S. exposure and operate companies within each of the subsectors targeted by this law.

Longer term, the global net-zero energy transition will also support the infrastructure asset class through carbon emission reduction targets and investments in asset resiliency. All economies require energy, and that energy has traditionally come in non-renewable forms like oil and coal, which are the two large contributors to carbon emissions globally. Economies require energy to grow, and global demand for energy is only expected to increase in the future. To reduce carbon emissions meaningfully these energy sources need to be (significantly) supplemented. One of the key strategies for success in emission reduction targets is clean energy production, distribution, and manufacturing. In Europe, the European Commission has authorized the Net-Zero Industry Act. The act incentives manufacturing of clean energy technologies (like solar power, battery storage, heat pumps, biogas, carbon capture and other technologies) by providing funding opportunities, streamlining permit processes, expanding public procurement procedures, and lowering administrative burdens on manufacturers. In the U.K. the government has set out a strategy to reduce emissions by fully decarbonizing the power grid, expanding zero emission transport systems, and lowering the emission impact from heating homes and buildings. Japan's Green Transformation, known as GX, aims to decarbonize the country through the issuance of GX Transition Bonds, growth-oriented carbon levies on high carbon emitting importers, provide regulatory support for advanced technologies that reduce reliance on fossil fuels, and creating a cooperative platform to partner with other Asian counties for policy coordination and support on

technology, finance, and human resources. Initiatives like these create investment opportunities for our managers.

Manger Strategy Highlights:

The IFM strategy targets transportation, utilities, and energy sectors. The transportation sector includes toll roads, airports, and seaports. The utilities sector includes gas and electric utilities, water/wastewater distribution systems, and telecommunication networks. The energy sector includes liquid natural gas production/distribution, terminals (bulk fuel or other liquid storage facilities), and pipelines (referred to as Midstream). GIF has almost 74% of its assets in the Toll Road, Midstream, and Airport subsectors. Within Toll Roads two assets drive returns: Indiana Toll Road (ITR) and Aleatica. ITR is a 157-mile divided highway in the state of Indiana and runs from the northern Indiana border with Ohio to the Illinois state line near Chicago. Though traffic volumes are down slightly since 2022, favorable toll increases linked to inflation have supported revenues. Aleatica, the largest single asset in the GIF portfolio, owns a network of toll roads across Mexico, Peru/Chile/Columbia, Spain, Italy, and the U.K. Traffic on the Aleatica network is above 2019 levels leading to positive updates to the business plan, driven by a combination of new roadway connections, increased congestion on competing roadways, and concession term extensions. Within Midstream, Buckeye Partners, a U.S. based pipeline and terminal company, contributes meaningfully to returns as it is the second largest asset in GIF. Over the past year, higher than anticipated operating expenses, refinery outages, and lower transport volumes contributed to underperformance. However, divestiture of idled gulf coast assets, distributions from subsidiaries, and the refinancing of loans with more favorable terms helped minimize year-over-year underperformance. Finally, the Sydney Airport (Australia) and Manchester Airports Group (U.K.) continue to be supported by strong leisure travel demand. Sydney Airport demand is nearly back to 2019 levels while the Manchester Airports Group is experiencing record demand.

For the quarter ended March 31, 2024, IFM had a net negative return of -1.10% and a fiscal YTD net return of 2.23%. The current quarter return primarily reflects a net U.S. Dollar appreciation against portfolio currencies. The MCERA's total net return with IFM since our capital call in December 2021 is 20.26%.

Though the J.P. Morgan IIF strategy is has a similar global footprint to the GIF strategy, there are two primary differences between the strategies. First, the IIF fund seeks to invest primarily in companies it can completely control – either through 100% ownership, or significant ownership. Of 19 investments, only two have less than 50% ownership. (GIF has 15 with less than 50% ownership) Second, the strategy focuses on targeting a 5-7% cash yield, distributed to investors each year.

It's worth pointing out that IIF also reports the sectors differently than GIF, even though they represent either the same or similar sectors. IIF targets the sectors as distributed/regulated assets, contracted/power assets, and GDP-sensitive assets. Distributed/Regulated include water systems,

electricity transmission systems, and natural gas distribution systems. Contracted/Power include energy storage, renewable power generation, and conventional power generation. GDP-sensitive include airports, seaports, and rail leasing.

IIF has 79% of its assets in the Renewables, District Heating/Natural Gas Utilities, and Energy Storage sectors. Within the Renewables the two largest investments are GETEC and Nadara. GETEC is European energy infrastructure solutions provider operating in Germany. The company operates more than 12,000 energy generation assets that provide green steam, green heating, and green consulting services to businesses and investors. The company has been meeting expectations due to acquisitions in Switzerland and Italy. Nadara is an energy group that provides some 4.2 GW of onshore wind and solar energy to 10 European countries and the U.S. Operational performance at Nadara has been below expectations due to low wind resources in the U.K. and adverse power prices predominantly in Spain. Within the District Heating/Natural Gas Utilities sector, South Jersey Industries, a New Jersey energy (Natural Gas) holding company, serves over 725,000 customers across 10,000 miles of distribution and transmission pipelines. The company is currently developing a series of Renewable Natural Gas (RNG) projects utilizing various feedstocks, including anaerobic digesters at dairy farms, a landfill RNG project, and a food-waste-to-RNG project. The projects are expected to be complete in 2026. The recent valuation for the company was above expectations due to favorable macroeconomic updates and the RNG projects. Another natural gas utility, Summit Utilities, which operates in Arkansas, Colorado, Maine, Missouri, Oklahoma, and Texas, has contributed positively over the past year to IIF by increasing gas throughput and gross revenues. In Maine the company has focused on a RNG project converts dairy manure into biogas and this gas is now being injected into the Summit system. Finally, within the Energy Storage sector, two bulk liquid storage companies are worth noting: BWC Terminals and Koole Terminals. BWC Terminals operates in the U.S. and Canada and have more that 20 million barrels of storage capacity across 22 terminals. BWC has continued to see favorable contract renewal rates and commercial leasing interest which, over the past year, have helped drive up revenue over 43%. Koole Terminals operates 21 terminals across the Netherlands, France, Spain, the U.K., Portugal, Italy, and Poland. In addition to fuels and specialty chemicals, Koole stores a variety of other liquid products including edible oils and minerals. Lower than expected operating costs and ongoing renegotiation of several customer contracts have contributed to greater than expected performance for IIF. Both companies continue to see increased demand for low carbon fuels and biofuels within their storage networks.

For the quarter ended March 31, 2024, J.P. Morgan had a net return of 2.87% and a fiscal YTD net return of 9.25%. MCERA's total net return with J.P. Morgan since our capital call in April 2021 is 33.62%.

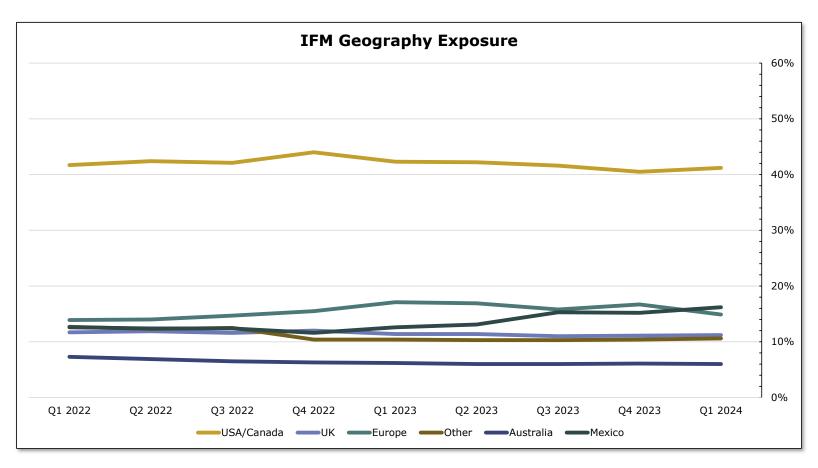
Attachment(s):

1. Infrastructure Portfolio Characteristics – 3/31/24

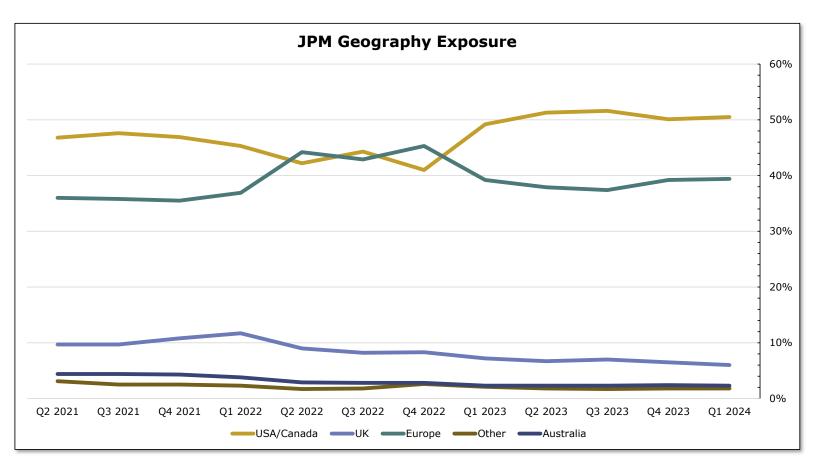


Infrastructure Characteristics

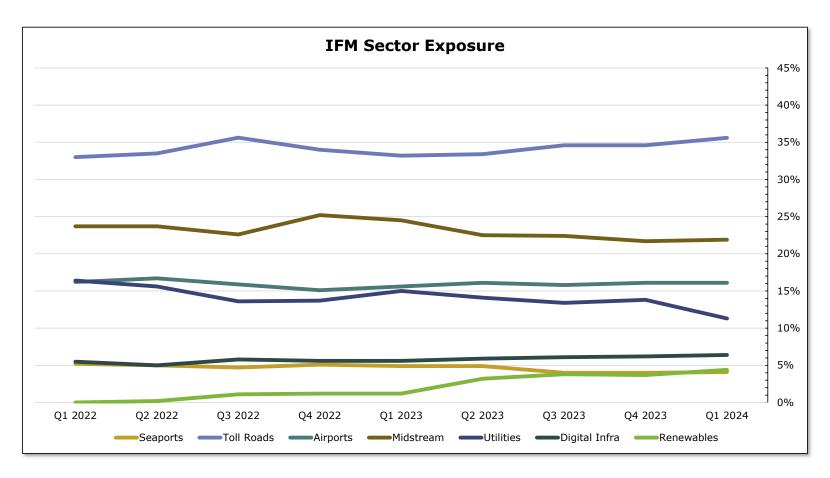
IFM Geographies - 3/31/24



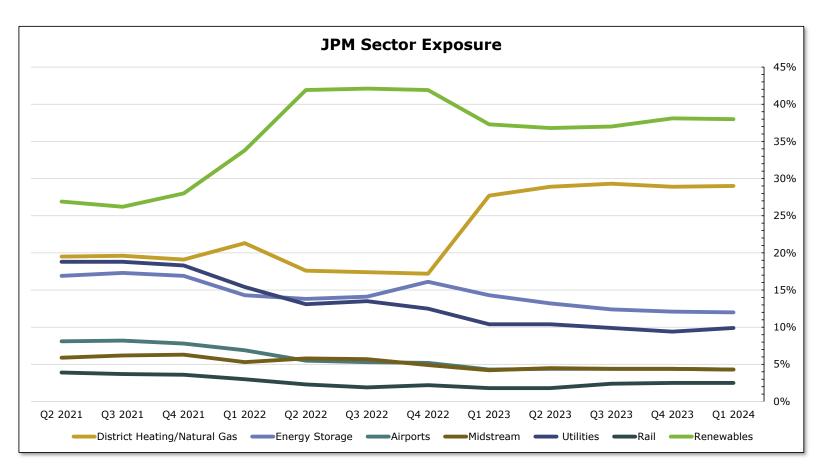
JPM Geographies - 3/31/24



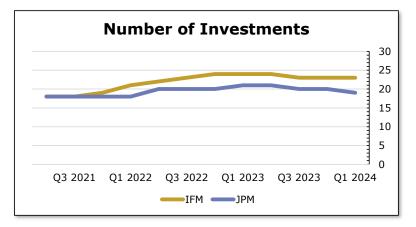
IFM Sectors – 3/31/24

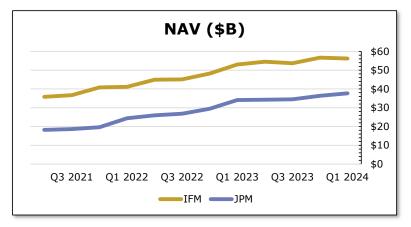


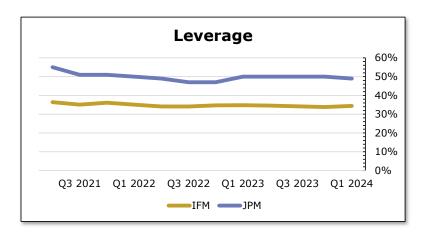
JPM Sectors - 3/31/24



Investments, Leverage, NAV - 3/31/24







Other Metrics- 3/31/24

For the period Q2 2021 through Q1 2024	IFM GIF	JPM IIF	<u>Composite</u>
Net Asset Value (\$B)	\$ 56.2	\$ 37.7	
Leverage	34.4%	49.0%	
Fiscal YTD Net Return	2.22%	9.25%	5.72%
Inception Net Return	20.26%	33.62%	29.34%
Average Annualized Net Return	7.70%	10.15%	8.97%
Trailing 12 Month Distribution Yield	0.86%	5.04%	2.97%
Annualized Standard Deviation	2.87%	1.38%	1.62%
Correlation with S&P 500	0.1790	0.3023	0.2059



Thank you