

GIVEN THE CONTINUED DISCUSSIONS IN WASHINGTON, D.C., STATE CAPITALS, AND COUNCIL MEETINGS ABOUT THE EXPENDITURES NEEDED TO MAINTAIN AND UPDATE INFRASTRUCTURE SYSTEMS, WHAT OTHER SOURCES OF INVESTMENT SHOULD LOCAL GOVERNMENT MANAGERS BE KEEPING THEIR EYES ON NOW AND IN THE FUTURE? PUBLIC PENSION FUNDS, WITH THEIR NATURAL PREFERENCE FOR LONG-TERM INVESTMENTS AND TRADITION OF "CAPITAL STEWARDSHIP," COULD BECOME KEY INVESTORS IN THIS SOCIALLY BENEFICIAL ASSET CLASS.

In the wake of the 2008 economic downturn, considerable attention has focused on the topic of local government infrastructure investment in the United States, often with an eye toward ensuring adequate funding for maintenance and multimodal expansion. This discussion includes varying opinions regarding the current state of infrastructure assets,1 the roles and relationships of the public and private sectors, and key priorities going forward.

Underpinning local government infrastructure financing are sizable portions of the \$3.7 trillion municipal bond market,2 as well as roughly \$220 billion in direct capital outlay by local

TAKEAWAYS

- > There continues to be the need for increased public and private investment in local infrastructure.
- > While the more traditional funding mechanisms often are the focus of elected and appointed officials, the media, and the private sector, it is important to note the role pension and other public funds play in investing in the many forms of infrastructure.

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governments annually,3 and \$61 billion in transportation grants from the federal government to states and localities,4 among other sources.

While these sources constitute the primary way local infrastructure is funded, it is also important to note the growing role of public pension funds and U.S. sovereign wealth funds in both direct and indirect infrastructure investment (see Figure 1 for a snapshot of the allocations used by several of the funds mentioned in this article). Some nonfederal, public pension and sovereign funds invest relatively small portions of their total assets-typically 5 percent or less—into infrastructure projects outside of municipal bonds, while many others have not yet entered the infrastructure space.

This variation may be linked to the sponsoring government allowing these types of investments (or not), fund officials identifying a useful role for the asset class within their overall asset allocation, or funds having the in-house organizational capacity needed to invest directly in infrastructure assets, or, at the least, to effectively monitor the work of specialized third-party asset managers.

In the context of this article, our definition of public funds will include all public pension, sovereign wealth, and reserve funds at federal and local

(regional, state, and municipal) levels. In the United States, the connections between public fund assets and infrastructure investments and needs are receiving increased attention from government officials (e.g., U.S. Rural Infrastructure Opportunity Fund and Build America Investment Initiative), a range of think tanks and nongovernmental organizations,5 and also private institutional investors, among others.

This article focuses on the increasing role public funds play in helping provide part of the additional financial resources needed for infrastructure, including at the local level.

Pension Funds

While about half of the \$3.7 trillion (Quarter 1, 2014) in assets held by state and local pension funds are in domestic and international equities, about a quarter are in such fixed-income investments as corporate and foreign bonds (\$381 billion), U.S. Treasuries (\$206 billion), federal agency and government-sponsored enterprise securities, for housing and farm credits6 (\$206 billion), short-term credit (\$51 billion), mortgages (\$8 billion), and municipal bonds (\$400 million).7

For more than a decade, in the aggregate, these pension funds increased their overall allocations into alternative and non-listed investments, a portion of which are infrastructure investments, from 5 percent to about 17 percent.8 This unprecedented increase was driven by the belief in expected benefits ranging from increased diversification, potentially superior risk-adjusted returns over long periods, the need for asset versus liability cash-flow matching and, after 2007, the quest for yields in a lowinterest rates environment.9

Here are examples of U.S. state and local public pension systems that had or currently have holdings in infrastructure:10

• The Dallas Police and Fire Pension System (DPFP) had an infrastructure asset allocation of 3.4 percent (\$108 million) in 2012. The 2012 DPFP An-

- nual Report noted these investments included hospital and water treatment plant projects in Asia and managed highway lanes in Texas.
- The Maine Public Employees Retirement System (Maine PERS) had an infrastructure asset allocation of 3.3 percent in 2014 (\$419 million). These investments were in renewable energy, toll roads, seaports, airports, and telecommunications infrastructure projects, among others, in the United States and internationally. This was reported in a Maine PERS "Asset Allocation," June 30, 2014, and a Maine PERS "Private Investment Markets Summary" dated March 31, 2014.
- The Pension Trust Fund of the District of Columbia, managed by the District of Columbia Retirement Board, had 1 percent (\$86 million) of its assets in infrastructure investments in 2014. It has partnerships with firms that invest in ports, natural gas pipelines and distribution, transmission cables, waste services, bridges, toll roads, and rail, among other infrastructure assets, primarily in North America. This was reported in the D.C. Retirement Board's "Quarterly Summary June 30, 2014" and the D.C. Retirement Board's "Private Investments Summary as of December 31, 2013."

Also, several U.S. states have established non-pension trust funds to receive and invest revenue from severance taxes, and related taxes/ fees, from natural resources. Eight of the larger non-pension U.S. funds manage \$123 billion in assets. According to its 2013 Annual Report, the Alaska Permanent Fund (\$50 billion in total assets) had about \$900 million in transportation, water, waste, and other infrastructure investments in the United States and internationally.

The Permanent Wyoming Mineral Trust Fund (\$6.1 billion in total assets), among other investments, provides loans to irrigation, municipal pipeline treatment plants, airports, and other similar projects in Wyoming, as reported in the "Wyoming State Treasurer's Investment Report, Fiscal Year 2013."

Canadian Investment

By investing early on in non-listed assets (private equity, real estate, infrastructure, forestry, and commodities) both domestically and abroad, Canadian public pension and sovereign funds have attracted attention on both sides of the Atlantic: "They own assets all over the world, including property in Manhattan, utilities in Chile, international airports, and the high-speed railway connecting London.... They have won the attention both of Wall Street firms, which consider them rivals, and institutional investors, which aspire to be like them. These giants are Canada's largest public pension-fund groups." 12

Aside from Japan, Norway, Brunei, Singapore, and Gulf nations, Canada is the only large developed jurisdiction where public sector pensions hold more assets collectively than their private sector peers: \$798 billion out of \$1.4 trillion for the pension sector as a whole. In Interestingly, this means that Canadian public pension funds, including local funds, possess the equivalent of the sixth of all

to alternative and non-listed assets¹⁵ (i.e., excluding listed stocks, bonds, and money market instruments), a remarkably high figure by both international and North American standards.

Infrastructure and real estate alone, excluding private equity, commodity, forestry, and hedge funds, typically account for approximately two-thirds of their average allocation to alternative and non-listed assets, which represents roughly more than 20 percent of their overall asset mix.¹⁶

Relative to the United States, the research and consultancy firm Preqin in a February 2014 analysis noted that "As of Q1 2014, U.S. public pension funds, which invest in infrastructure, had an average current allocation of 1.9 percent and a target allocation of 4 percent. On the other hand, Canada-based public pension funds had an average current allocation of 5.9 percent and a target allocation of 8 percent. Stated simply, Canada-based public pension funds on average plan to invest more, and actually do invest more than their U.S. counterparts."

Several Canadian public pension and sovereign wealth funds have sizable

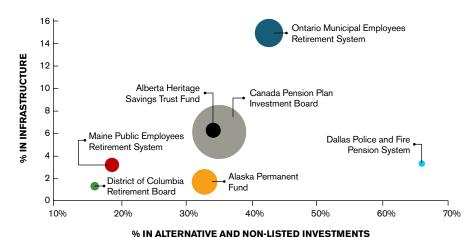
IT IS IMPORTANT TO NOTE THE GROWING ROLE OF PUBLIC PENSION FUNDS AND U.S. SOVEREIGN WEALTH FUNDS IN BOTH DIRECT AND INDIRECT INFRASTRUCTURE INVESTMENT.

assets held by their U.S. public pension peers, a remarkable feat considering Canada's economy is 11 times smaller than the United States in GDP terms.¹⁴

Large Canadian public pension funds at both federal (e.g., Canada Pension Plan Investment Board, Public Sector Pension Investment Board) and provincial level (e.g., Ontario, Quebec, Alberta, British Columbia) generally allocate *at least* a third of their total investments

holdings in infrastructure. Firzli and Bazi have previously analyzed the investment policy of Canada's largest provincial public pension fund, the Ontario Municipal Employees Retirement System, which co-owns—with the Ontario Teachers' Pension Plan—some of the UK's most valuable transportation and energy distribution assets. Notably the 67–mile HS1, the high-speed rail that connects the UK's Channel Tunnel to London.¹⁸

FIGURE 1. Public Funds: Infrastructure versus Overall Alternative and Non-Listed Investments. (Circle size represents size of fund.)



Source: Information based on 2012-2104 fund documents referenced in this article.

Another key example is the Alberta Heritage Savings Trust Fund. This fund, managed by the Alberta Investment Management Corporation (AIMCo), a hybrid public pension and sovereign wealth asset management organization, collects and invests a portion of the province's oil revenues.

According to its 2013-2014 Annual Report, the fund had an infrastructure asset allocation of 6.3 percent (C\$1.1 billion) at the end of FY 2014 (3/31/2014), with 18.4 percent of assets allocated to real estate (C\$ 3.22 billion) and 2.2 percent to timber or a 26.9 percent overall allocation to real assets.

The fund invests both directly in assets (more than 50 percent of the total and most new investments) and through externally managed mandates.

The Alberta Heritage Savings Trust Fund has a clear predilection for highincome, developed jurisdictions recognized as having stable political, legal, and fiscal regimes (for example, U.S., United Kingdom, Belgium, Denmark, and Chile) in such steady sectors as traditional transportation, with midsize stakes in central, hub airports located near capitals (Copenhagen or Brussels), and small to midsize stakes in various toll roads and U.S. energy infrastructure companies investing locally in

central Canada, notably in the strategic pipelines bringing Albertan oil to Seattle and the Great Lakes.

Over the years, the fund has invested in several infrastructure and private equity assets directly dependent on the fortunes of the Albertan oil sector, the backbone of the province's economy and a rather volatile boom-and-bust industry.

To those who have criticized such pro-cyclical investments in the past, the Alberta Heritage Savings Trust Fund has argued that "this is not an aid project, this is an investment,"19 insisting that, to avoid any potential conflict of interests that may arise, the province's finance minister himself is never told about a financial choice until the decision has already been made by the fund's investment officers. PM

ENDNOTES AND RESOURCES

- Shafer, J. "Infrastructure rhetoric is a bridge to nowhere." Reuters. February 15, 2013. http://blogs. reuters.com/jackshafer/2013/02/15/infrastructurerhetoric-is-a-bridge-to-nowhere.
- 2 U.S. Securities and Exchange Commission. "The State of the Municipal Securities Market." May 13, 2014. http://www.sec.gov/spotlight/ municipalsecurities.shtml.
- 3 U.S. Census Bureau. "State and Local Government Finances" (2010-2011). August 14, 2014. https://www.census.gov/govs/local.
- 4 U.S. Census Bureau, "Table 432, Total Outlays for Grants to State and Local Governments-Selected Agencies and Programs: 1990 to 2011" (2011

- estimate). https://www.census.gov/compendia/ statab/2012/tables/12s0432.pdf.
- 5 Examples: CGI America "Investment and Training for American Infrastructure, 2011"; CAP Action Fund 'Rebuild America's crumbling Infrastructure' (2013); and Milken Institute 'Catalyzing Pension Fund Investment in the Nation's Infrastructure - A Roundtable Discussion' (2013).
- 6 Budget of the United States Government, Fiscal Year 2015. "Appendix: Government-Sponsored Enterprises." 2014.
- 7 Board of Governors of the Federal Reserve System, "Z.1 Financial Accounts of the United States." June 5, 2014 (pg 82).
- Franzel, J. "Presentation: State and Local Government

Pensions in the United States." World Pensions Council Summit, November 7, 2013, http://slae. org/wp-content/uploads/2014/06/WPC Summit Nov 7 2013 Franzel.pdf.

- 9 Firzli, M.N., and V. Bazi. "Infrastructure investments in an age of austerity: The pension and sovereign funds perspective." Revue Analyse Financière 41 (2011): 34-37.
- 10 (1) "Public Plans Data, Center for Retirement Research at Boston College, Center for State and Local Government Excellence, and National Association of State Retirement Administrators, and (2) investment fund websites.
- 11 Firzli, M.N. and J. Franzel. "Non-Federal Sovereign Wealth Funds in the United States and Canada: Public Asset Accumulation and Investment in Developed Economies." Revue Analyse Financière 52 (2014): 6-8.
- 12 "Maple revolutionaries: Canada's public pension funds are changing the deal-making landscape," The Economist, March 3, 2012.
- 13 Towers Watson. "Global Pension Assets Study 2014." January 2014. Pgs. 6, 28, and 38. 14 Ibid.
- 15 "The asset mix of major Canadian pension funds," Globe and Mail, 22 August 2014; various reports and surveys conducted by the Pension Investment Association of Canada (PIAC); the annual reports of large Can. public pension funds (Federal Government, Ontario, Quebec, Alberta, British Columbia), and the Pregin database.
- 16 Ibid.
- 17 Pregin. "Comparing Infrastructure Investments among US and Canadian Public Pensions - February 2014." https://www.preqin.com/blog/101/8338/ us-canada-public-pensions.
- 18 Firzli, M.N. and V. Bazi (2011) pg. 36.
- 19 Ottawa Citizen. "Alberta boost for Precision is investment, not aid: AIMCo." April 19, 2009. http://www.ottawacitizen.com/business/story. html?id=1514986.





JOSHUA FRANZEL,

Ph.D., is vice president of research, Center for State and Local Government Excellence,

Washington, D.C., and director of policy research for ICMA (jfranzel@slge.org). M. NICOLAS FIRZLI, J.D., is cofounder and director-general, World Pensions Council (WPC), the Paris-based international association of chairmen and CIOs of public and private retirement schemes and social security institutions (nic@worldpensions.org).