

9 emerging trends in 2016

Trends that will change infrastructure globally and in the island regions over the next five years

2016 is already shaping up to be a year of growing momentum for the infrastructure sector. The signs of this momentum are everywhere: in new sources of capital and new funding approaches that promise to unlock trillions of dollars in new equity and debt investment globally; in growing asset management capabilities, cyber security and public procurement, which are ushering in a real step-change in the way operators and owners manage assets; and in the growing boldness of governments seeking to catalyse economic and social benefits.

Over the past 4 years, KPMG International has tracked the key trends that - in our opinion - will influence the world of infrastructure over the coming years. How global trends are likely to impact the island regions and what trends are predominant in the island regions are the focus of Emerging Trends, Island Edition.



Some of the trends that we have identified in the past persist - governments continue to struggle to unclog their pipelines; emerging markets continue to face funding gaps; the optimal relationship between the public sector, the private sector and taxpayers continues to evolve. This is to be expected; massive changes to fundamental problems do not happen overnight.

As this year's Emerging Trends in 2016 suggests, however, the industry is now standing on the cusp of greater change. The development and interaction of many of these trends could very well transform the way governments, businesses and users interact with and invest in infrastructure. More importantly, if managed properly, they also hold the power to solve many of the biggest challenges facing our industry today.



James Stewart Chairman of Global Infrastructure



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Once again, we hope that this year's insights serve to not only highlight major trends but also to help readers see some of the less obvious long-term changes affecting the infrastructure sector and the associated implications both globally and for the island regions.

To discuss these trends and their impacts in more detail, we encourage you to contact your local KPMG infrastructure team.

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Trend 1 The convergence of geo-political interest and infrastructure investment

Last year, we noted that political and regulatory uncertainty was creating challenges for infrastructure investors. Today, however, political and regulatory risks are just the tip of the iceberg. In the island region, there is a re-awakening of interest from traditional allies, such as the United States and United Kingdom, after an extended period of growing diplomatic and investment ties with Asia. Renewed interested comes in the face of China asserting its regional influence through state owned enterprises, thus improving prospects of investment in new infrastructure for economic growth in the Caribbean region.

More equity is entering the global market to the point where competition for 'investable' infrastructure projects has reached fever-pitch. The degree to which island jurisdictions may capitalise on increased supply will depend on the public sector's ability to get sound projects to market. A greater understanding of the island regions, their collective size and traditionally limited liquidity will help in making island projects of interest to international infrastructure investors.

In part, increased flows are being driven by institutional investors eager to put their capital to work. Multiples have soared for regulated assets in mature markets; concerns are rising that some may have already paid too much just to capture a share of the market. In response, a growing number of the more sophisticated and active institutional investors are starting to leverage their deep experience assessing and pricing risk, and implementing operational improvement strategies to take on a

wider range of projects that offer the potential to deliver higher yields. Some are investing in greenfield projects that naturally carry higher levels of development risk. Others are taking a broader view of infrastructure and investing in social and health assets. And some are scouring heretofore smaller and emerging markets. Clearly, this is good news for project owners in the island regions. Indeed, as more equity enters the market and investors gain experience at managing risk in their investments, we expect to see access to equity start to increase and rates start to decrease. However, island governments and owners still need to understand that private capital will only be attracted (and sensibly priced) to markets that create a predictable and stable investment environment.

► The island regions view:

Investor interest in regulated assets, such as utilities, may open up new opportunities for island jurisdictions with a need to replace aging plants and a desire to tap into new technologies and to reduce the burden on overstretched government borrowing facilities. As with any public-private undertaking, island governments will need to advance clear and effective regulation to attract investor interest while protecting public interests. Geopolitical power plays could create fundamental shifts in the world order, trade and investment flows.

Trend 2 Competition for investments heats up

Uncertainty is everywhere: in unexpected election results and political upheaval; in rising protectionist sentiments; in disruptive and fast-moving technological advances; and in geopolitical and social upheaval. Simply put, the conventional wisdom that once underpinned infrastructure planning and investment seems to no longer apply.

While no investor likes uncertainty, it seems that many are currently underpricing the increased risk into their models. In part, this is likely due to the current 'oversupply' of equity in the market which has forced investors to compete more fiercely for investments. But, in time, we expect investors to start becoming much more considered about the way they assess, manage and price this type of uncertainty.

Over the long term, this shift will permanently alter the dynamics of who takes what risks, when they take the risks and how. Ultimately, however, we believe that this may well be the tipping point that ushers in 50 years (or more) of prosperity as capital starts to match up with projects which, in turn, will drive economic growth in the smaller and emerging countries and shore up retirement savings in the mature markets.

► The island regions view:

Investment in the Cayman Islands' tourism sector continues to steadily grow with dove-tailed private sector investment in hotels and infrastructure, e.g., expansion of the Easterly Tibbetts highway. The Caymanian economy has benefited from private sector investment in projects such as the Camana Bay Development, the Kimpton Seafire resort and, most recently, the former Hyatt resort. The viability of hospitality investments has necessitated new public-private partnerships to deliver improvements to local infrastructure as part and parcel of commercial development.



Trend 3

Focusing on the larger benefits to unclog the pipeline

Two years ago, we predicted that governments would move to unclog the pipeline. Last year, we noted a trend towards greater political will by island public sector decision makers to see infrastructure move from the wish list to successful completion. Yet, with the impact of these actions proving largely ineffectual, we expect to see governments move a step further by focusing on getting projects out the door rather than trying to perfect the risk balance. The reality is that many governments are starting to recognise that - by striving to take a minimalist approach to risk or to achieve structural and contractual 'perfection' - they have in fact been missing the point and, in doing so, have been making projects more complicated, less attractive to investors and slower to take to market.

Essentially, governments are starting to recognise that it is the public sector that needs to energise projects and that, to date, they have relied far too much on the private sector to achieve their economic, social and environmental objectives. The reality is that the private sector is looking for commercial returns, whereas governments are seeking to achieve long-term economic benefits and other national objectives. As such, we expect to see governments start to become more active in influencing and catalysing their infrastructure markets.

We believe that 2016 will see governments start to take stronger action to unclog the pipelines by taking the steps required to get the private markets going. Government leaders will recognise that, in many cases, establishing markets and getting projects delivered (and realising the long-term economic and social benefits thereof) is more important than minimising risk or perfecting other variables.

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Island jurisdictions have been similarly transfixed on transferring risks to the private sector without a necessarily complete understanding of the implications in terms of cost and project viability. The reality is that without public-private partnerships, island governments are entirely exposed to risks that they may be inadequately prepared to mitigate. As islands build institutional capacity, an understanding of risk transfer, risk premiums and risk management is likely to be a top priority. Above all, island governments need to make a step change in managing those risks that are retained. Top amongst priorities for island governments to rebalance risk and reward, is seizing opportunities to diversify the economy, e.g., Curacao's commodities market and Cayman's Health City.

Trend 4 Asset management gets sophisticated

As infrastructure owners shift their focus from buying new assets to maximising the performance of the assets they already own, the need for more sophisticated asset management has risen up the agenda. Over the coming year (and more), we expect to see both public and private sector owners and operators become more sophisticated stewards of their assets. In part, this is because owners are keen not only to achieve the full expected lifespans of their assets, but also to get more productivity out of their existing operations.

Advances in technology, including the use of data/analytics, are also adding to the sophistication of asset management. No longer must decisions be made on 'rules of thumb'; today's available technology allows asset managers to carefully monitor their assets in real time and, in doing so, improve decision making and maximise efficiency. And, in the longer term, the increased use of predictive data/analytics will shift the focus from reactive to proactive maintenance. In 2016, we believe that asset management will become a key discipline for asset owners, as they become further enabled by smart technologies, more sophisticated approaches and

greater insight into the actual operations and performance of their assets.

► The island regions view:

Many island jurisdictions are seriously examining their asset portfolios to consider which assets are core and which are non-core to public sector service, or ripe for monetisation. Monetising assets has been used to accomplish multiple policy agendas including reducing national debt, leveraging assistance from multi-laterals and using proceeds from the divestment of noncore assets to fund new infrastructure projects. The adoption of lessons learned from global experience is resulting in island public sector managers capitalising on divestment with more effective auction techniques and longer-term perspectives.

Trend 5

Technology rockets up the infrastructure agenda

Infrastructure has remained largely untouched by the technology revolution underway around the world. With the exception of the telecoms and energy sectors, there has been no fundamental change in the type of infrastructure built compared to that of 50 years ago. We still use the same assets we did 50 years ago. And we still follow the same basic assumptions we did 50 years ago. But the reality is that the technology revolution is now upon us. And it is rapidly and fundamentally disrupting the way we plan, design, develop and operate our infrastructure. Solar power technologies, for example, are not only redefining the way power is generated, they are also disrupting the 'centralised' generation and distribution models that underpin most of the island regions' energy investment strategies. The technology for driverless cars is developed; now the question is how they will be adopted and integrated into society.

Interestingly, much of the demand for technological advancement is being driven by consumers often as a result of concerns about the affordability of conventional technologies. Demand for technology is also being catalysed by a growing alignment between 'macro' infrastructure requirements (such as reducing emissions) and 'micro' consumer decisions (such as investing in smart energy meters). Over the coming year, we expect to see the macro and micro come even closer into alignment as technology costs continue to fall and consumer demand rises.

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Scale has significant implications for the adoption of state-of-the-art technology risks. The public sector is rightfully wary of state-of-the-art technologies which require significant investments in talent and learning curves. For some jurisdictions, harnessing well established technologies may balance risks and rewards while still gaining competitive advantages. In other cases, such as investment in international financial services platforms (e.g., company registries, FATCA and Common Reporting Standards) may be critical to remaining relevant and addressing international regulations.

There are clear reasons for island jurisdictions to invest in the education of their citizens thus ensuring future availability of sufficient knowledge capital. New technologies are also reducing barriers to entry providing island entrepreneurs with opportunities to enter markets that were previously impenetrable because of high barriers to entry.



Trend 6 Security becomes a mainstream issue

Every government, regulator, owner and operator should be worried about the security of their infrastructure. Given the size and frequency of physical attacks, natural disasters and cyber-attacks on critical infrastructure and in public spaces over the past few years, it is clear that there is an urgent need to reduce the vulnerability of infrastructure assets and to protect citizens and users.

For some, this is about responding to a clear and present danger. Terrorism is a very real threat to infrastructure (both physically and through cyber-attack), particularly in densely populated urban areas and during major events where any action can have devastating and far-reaching consequences. For many others, it is about taking the right steps and making the right investments to protect the overall security of their people, assets and economies. The threat of cyberattacks on governments is increasing.

Part of the challenge is that few infrastructure owners truly understand their risk profiles and controls; fewer still fully understand the cyber element of the risk. And as geopolitical tensions grow, the skills of cyber-attackers become more sophisticated, and technology becomes more interconnected, the threat will continue to shift and evolve.

One major challenge, however, is cost. Improving security (particularly for existing assets) will require investment across the lifecycle - from the design and planning phase right through to operations. In 2016, we expect public and

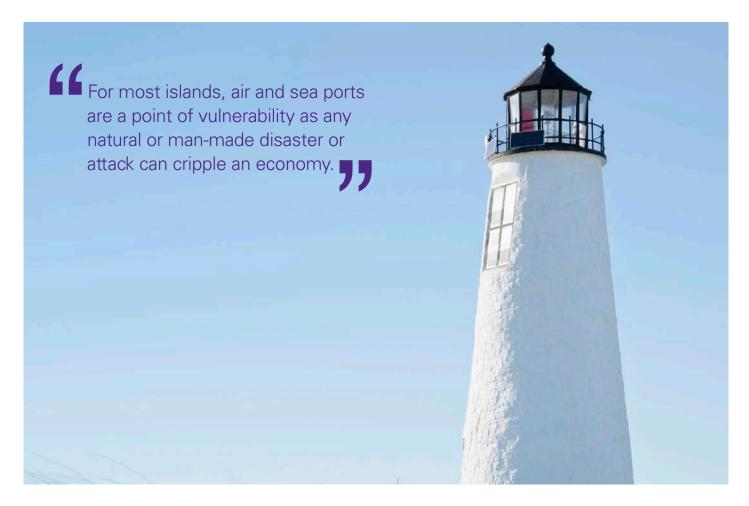
private infrastructure owners to place more emphasis and invest towards developing guiding principles, clearly defined responsibilities and major initiatives designed to enhance both physical and cyber security.

► The island regions view:

Fortunately, to date, for many islands security concerns have been constrained to air and sea ports. Port= security has been driven by international standards and conventions. For most islands, air and sea ports are a point of vulnerability as any natural or man-made disaster or attack can cripple an economy that has limited access to alternatives. Island governments can anticipate there will be a need for increased expenditure on security as a portion of infrastructure budgets.

International Financial Centers (IFCs) are gradually accepting that the threat of cyber attack, the need for robust protections in the form of privacy and intellectual property legislation, and cyber security are a reality.

Jurisdictions, such as Bermuda and the States of Jersey, are bell-wethers for island cohorts. For those island jurisdictions seeking to enter or expand as IFCs, the barriers to entry have just gotten steeper.



Trend 7 The gap between public and private narrows

Ever since the rise of privatisation and public-private partnership (PPP) models in the 1980s, mature markets, such as Australia, UK, US, Canada, have developed public sector capability and capacity has - in many places - significantly improved. Recognising they are now being benchmarked against private sector performance measures, many have learned valuable lessons and have now incorporated private sector practices into their own organisations. While public sector appetite for investing in sufficiently skilled and appropriately compensated resources - whether it be for project management or operations - remains a significant concern, the gap between the public and the private sector is starting to narrow.

► The island regions view:

With established methodologies, business models, and benchmarks, the learning curve has been moderated. The public sector can leverage learning from jurisdictions with mature infrastructure markets and asset management capabilities. Already, islands are adopting contractual models that incorporate lessons learned by other jurisdictions. Just one example is participation in upside rewards where performance or the benefits of refinancing may be captured. Bermuda Hospitals Board announced that as a result of its private partner refinancing senior debt its annual service payments for the King Edward Memorial VII Hospital PPP would be reduced by over \$500,000 per year for the remaining 29 years of the agreement.

While economic stimulation and development is still a focus area for island regions' governments, social and environmental infrastructure projects are also receiving attention. Most recently, the Cayman Islands government commissioned outline business case studies for a waste management project and a long term residential mental health facility project.



Trend 8 Innovative new ways to fund infrastructure emerging

Globally, governments increasingly see asset monetisation as a smart way to recycle capital in order to fund new services and assets. Prompted by fiscal necessity, island governments have utilised asset monetisation to reduce government debt. Government divestment has led to notable commercial successes, e.g., the National Commercial Bank of Jamaica. The challenges for island governments are: harnessing not just current value but future value and to translate current value into funding new development.

Yet, to achieve this, a clear and compelling logic for the use of the proceeds of monetisation - well articulated to the population - is an absolute prerequisite. Australia is leading the way on this but many other countries are beginning to follow, albeit on a smaller scale.

► The island regions view:

The competition for funds at the island level, particularly as the social agenda becomes more pronounced, for education and healthcare, continues to present challenges. Further development of universal healthcare through the introduction of National Health Insurance (NHI) in The Bahamas is an example of how one island government is responding to the social agenda in order to provide health insurance for the 70% of Bahamians that do not currently have insurance. The Government of The Bahamas intends to enter into a PPP for the management of a public insurer to support its Universal Healthcare vision. Primary care will be offered under the first phase of NHI coverage with future expansion dependent on the identification of funding.

Trend 9 The institutional debt market takes off

Over the past year, we have seen a significant uptick in the volume and size of institutional debt deals. And all signs indicate that 2016 will see institutional debt markets really start to take off. Much will depend on how the multilateral banks choose to use their capital. Many have now recognised that their current lending models are insufficient to drive the scale of change required. Most now believe that their capital would be better put to work by leveraging multiples of private sector capital through financial instruments that enhance the credit of the senior debt portion of the financing and, in doing so, give access to the full extent of the capital markets.

► The island regions view:

The big question is whether the multilaterals will be able to take the right steps at the right time to truly unlock private investment. If the recent launch by the UK Government of its £300 million Caribbean Infrastructure Fund to finance projects in eight jurisdictions, gets it right, the Caribbean island regions should enjoy the benefits that will flow from greater liquidity and expanded geo-political attention.





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We help clients to ask the right questions that reflect the challenges they are facing at any stage of the lifecycle of infrastructure assets or programs - from planning, strategy and construction through to operations and hand-back. At each stage, KPMG's Global Infrastructure professionals focus on cutting through the complexity of programme development to help member firm clients realise the maximum value from their projects or programs.

Infrastructure will almost certainly be one of the most significant challenges facing the world over the coming decades. That is why KPMG's Global Infrastructure practice has built a team of highly-experienced professionals (many of whom have held senior infrastructure roles in government and the private sector) who work closely with member firm clients to share industry best practices and develop effective local strategies.

By combining valuable global insight with hands-on local experience, KPMG's Global Infrastructure practice understands the unique challenges facing different clients in different regions. And by bringing together numerous disciplines such as economics, engineering, project finance, project management, strategic consulting and tax and accounting, KPMG's Global Infrastructure professionals work to consistently provide integrated advice and effective results to help member firms' clients succeed.

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