Transportation Innovation Through Public Private Partnerships
Building on experience
Transportation Innovation through Public Private Partnerships

When the economy gets tough for citizens, it also gets tough for government agencies. City and government transportation agencies need more services and solutions, but declining revenue and tighter budgets make it harder than ever to construct, rebuild, maintain, and operate public infrastructure. Public officials need innovative means to finance and deliver high priority transportation projects.

Xerox helps public officials build a unique team dedicated to making transportation needs a reality through Public Private Partnership (PPP) practices and proven solutions that help deliver public services faster with higher quality and at less cost.

Creative financing where it’s needed most

We all know that the term “Public Private Partnership” has become widely-used in the transportation industry, but conceptually-speaking, we may not all be talking about the same thing.

The U.S. Federal Highway Administration defines Public Private Partnerships (P3s) as “contractual agreements formed between a public agency and a private sector entity that allow for greater private sector participation in the delivery and financing of transportation projects.”

This definition covers a wide variety of models designed to meet the specific needs of a particular project. All involve some level of private sector participation to help public agencies deliver transportation services faster and better than traditional delivery models.

Traditionally, in the United States, large surface transportation projects have been funded through some combination of federal, state, and local taxes. But these sources of funds are declining and additional taxes become burdensome on the tax-paying public. While public transportation agencies at the state or local level want to improve transportation infrastructure, they just don’t have the money to fund up-front costs. The private sector has stepped in with new sources of revenue and creative ways to design-build and finance projects that are an alternative to the traditional ways through PPPs. And while still somewhat in its infancy in the United States, PPPs have been popular for years in the European market with more than 1,300 PPP contracts signed between 1990 and 2009—with the United Kingdom at the forefront of those signatures.

Many countries in Latin America and the Caribbean have been improving their legal and regulatory frameworks for PPPs over the last few years. Chile, Brazil, and Peru are at the forefront of the movement with favorable conditions for a level playing field for private party participation, while other countries still have a ways to go. But like much of the rest of the world, the Latin American and Caribbean countries are finding PPPs to be a valuable solution to the continual problem of government funding for necessary and needed infrastructure and programs to keep transportation moving.

3 Economist Intelligence Unit. Evaluating the environment for public-private partnerships in Latin America and the Caribbean: The 2010 Infrascope. October 2010.
Why PPPs?

But why choose a PPP over traditional financing? While the PPP model varies from one project to another, they all share three common denominators: less time, less money, and no up-front capital for the public entity.

**Less time:** Private entities bring a skilled knowledge dedicated to the services provided to the public entity.

**Less money:** Because of the knowledge and resources provided by the private sector, there is less wasted costs associated to the project for research, development, or in some cases, a trial and error approach that wastes both time and money.

**No up-front capital:** Most projects require new hardware or infrastructure in order for them to successfully pay for themselves in the long-run. In each of the P3 models, the onus is on the private entity to provide any up-front costs associated with the project. Money is then recouped over time through generated revenue.

Innovation – building the future today

While we primarily see PPPs for their financial benefits, they often bring much more—helping cities solve difficult transportation problems that better serve their citizens with new solutions and often create jobs all while improving operational efficiencies. By partnering with private companies, public agencies benefit from years of expertise, and innovative solutions.

**Just as energy is the basis of life itself, and ideas the source of innovation, so is innovation the vital spark of all human change, improvement and progress.**

Tedd Levitt

Transportation infrastructure has a limited lifecycle—as a functioning machine as well as an innovative and cutting-edge solution. It doesn’t take long before technology catches up to itself. Public agencies install it, and shortly thereafter there’s a new technology to take its place. The benefit to partnering with a qualified private sector provider is knowing the majority of their business is innovation. If they don’t continue to create new ideas, their business is not sustainable in the marketplace. So, innovation becomes their primary drive in the marketplace, and as a partner, you benefit from that. Not only do they take on the benefit of success, they also take on the risk of failure. That risk provides the growing credibility they need to sustain their business in the future. So, it’s a give-and-take relationship.

But innovation isn’t just about the private partner achieving their goals. It’s also about taking your
community to the next level. It’s about providing proven solutions that bring value to your citizens as well as the program through an innovative approach. Because PPPs are often built around long-term contracts (typically five years or more), you’re looking for a solution provider who has grown with technology and values innovation. Just because you implement your project, doesn’t mean the technology has stopped growing.

Sometimes, it just isn’t wise to continue to invest in aging infrastructure. Equipment that no longer works properly and is approaching the end of its life cycle is often more costly to maintain, demanding greater resources that could be used for other programs. Sometimes, a new solution makes the most sense, but tight budget and dwindling revenues from the existing program doesn’t provide an opportunity to advance the project.

For example, how does a public transit agency without the funds to support a technology upgrade implement a cashless ticket system? They find a private partner dedicated to providing not only the technology and the financing, but an innovative solution that works.

**Taking the Challenges**

Riga, Latvia was losing revenue on fare collections for their transit system because the technology was antiquated and cash was no longer the best solution. Riga Satiksme, responsible for urban transport in the Latvian capital, had been asking itself a question since the turn of the century. How could it finance an ambitious fare collection project that would be profitable in the long term but cost more than it could afford? And even more, how could they implement the technology needed for the future—a completely cashless system?

Funds were preventing the forward movement in technology necessary to grow—so we offered to provide the technology, finance the program, operate the revenue collections, and after 13 years, transfer it back to Riga. This Build Operate Transfer model provided an ideal solution to an increasing problem—the need for new technology to pay for the system, but no way to fund the new technology. A vicious cycle.

With an eye on the future, Riga hoped to equip its 80 bus and trolleybus lines as well as its 11 tram lines (totaling 1,050 vehicles) with fully contactless ticketing—making traffic flow more smoothly and offering greater convenience for passengers. Its six sales offices and 300 retail outlets also needed to be equipped to sell the new tickets. So, in the process of improving technology, we committed to helping make this a reality. We took cash completely out of the system and replaced it with a contactless smart-card ticketing system—simplifying the rider’s experience with one smart-card and guaranteeing more revenue for the City.

The benefit to this model is that Riga was able to establish the objectives for the project while overseeing the program, but the project headaches are handled by us—and with our years of expertise, we know how to handle them.

**Expertise – balance the risk**

Each PPP takes on a certain level of risk—both for the private entity and the public entity. That’s why it’s important to choose a partner with financial credibility and staying power within the market. A partner that knows transportation is important—because you want someone who has the expertise to execute your project with a timely, efficient approach that’s invested long-term in the market and achieved powerful results.

Transportation infrastructure experiences a technology life cycle. We design, we invest, and then we have to re-design and re-invent because the technology is out-dated. Public agencies just don’t have the resources to continue rebuilding. And while traditionally governments have funded transportation projects to create jobs and stimulate growth in a weak economy that simply isn’t a viable long-term solution.
The private sector, on the other hand, is willing to invest in the future—starting projects and creating jobs. Over half of the 2009 Fortune 500 companies were created during a recession or a bear market. The private sector willing to invest might also be the ones with the financial capabilities to move on projects when government funding just isn’t available.

Our knowledge about the transportation industry, coupled with technology and our ability to build the best team for the project, creates an efficient process—requiring less time and less money. As a technology integrator, it allows us to be flexible on our approach, but consistent on our implementation. We also bring the unique ability to provide financial models to help support the project either through revenue-sharing models or financial partners dedicated to helping fund government projects. While financing gets the project off the ground, the team carries it to fruition.

“While the need for increased public-sector productivity is urgent at all levels of government, the case for public–private cooperation may be easiest to make at the city level, where most future global growth will occur.”

McKinsey&Company

Building on Communities

With 3,600 parking spaces, inconvenient payment options, and meter maintenance issues growing, the City of Indianapolis was in need of a major technology update for their parking program. A Long Term Lease Concession model fit the needs of the community—and so did our expertise. We helped create a partnership to meet the needs and parking demands of the City for the next 50 years. Leaving the technology to us, we saved them from conducting time-consuming research and development necessary to implement a program of this magnitude and a team to carry out the plan. But an implementation of this magnitude doesn’t come without cost.

An initial investment of $20 million was provided to make immediate infrastructure improvements around the City to begin an initial update plan—creating a convenient parking system for motorists and businesses of this vibrant city. But our investment doesn’t stop there. We are helping modernize the parking technology to bring the City conveniences and efficiencies never before offered in Indianapolis. Innovative technology upgrades will improve the user experience and simplify overall parking operations while increasing turnover for local merchants.

The Indianapolis modernization will generate an ongoing revenue stream estimated at $600 million and shift costly financial risks to our operating company, ParkIndy, LLC. ParkIndy, not the City, will bear all expenses and financial risk going forward, saving Indianapolis approximately $3 million annually in operating costs. By providing an ongoing, annual revenue stream, the revenue-share structure aligns objectives for citizen service, efficiency, and revenue return over the term of the agreement.

Flexibility

Your solution requires financing and innovation, but it also requires a practical approach. Flexibility gives PPPs their unique ambiguity and explains why defining a PPP can be so difficult. There’s not a “one-size-fits-all” approach. It’s a partnership, and just like any true marriage of the minds, it requires

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flexibility. Not just in the financing portion of the partnership, though we often think PPPs are simply a matter of finance. But it could also be in how much influence each partner plays in the daily functions of the program once it’s running, or how long the partnership will last. It could also mean replacing infrastructure immediately verses a phased approach. Whatever the reason behind the need, the need should guide the flexibility within the project.

PPP is just the concept—it isn’t the end goal. The end goal is the project, the program, or the solution. The PPP acts in such a way to get you to the next level. A level which, in some cases, is simply not achievable without this particular piece of intervention. But because it acts as a catalyst, it’s important that flexibility play a primary role in the process.

It’s not always “all or nothing”

The Design Build Operate model is an integrated partnership that combines the design and build responsibilities with operations and maintenance—and in the case of the Maryland State Highway Administration (SHA), financing a program to enhance motorist and worker safety in work zones. These projects transfer the project responsibilities to a private sector partner for a specified time. With the financial risk transferred to the private sector, it allows communities to advance in technologies and programs at an accelerated rate—in this case, the SHA.

We helped them put on the brakes with no up-front costs. By deploying mobile speed enforcement vehicles in highway work zones, SHA was able to capture images of violators’ license plates as they sped past vulnerable workers—making roads safer, not only for the workers but also the drivers. Our solution includes an end-to-end photo enforcement program, encompassing maintenance of photo and detection equipment, violation processing, customer service, evidence management, public awareness campaigning, and program management. We were able to finance the up-front costs of the program and the SHA was able to continue supporting the project on a day-to-day basis by leveraging revenue streams dedicated to the project.

Choosing your partner

Finding a partner willing to invest is one thing, but it’s just as important to find one that understands your business and your customers. A partner that has taken the risks, invested in research and development, and implemented their solutions around the globe making the world a better place. This leads to solutions with the best hope for long-term success.

Do they understand your business? Do they understand your needs and your customers’ needs? Have they proven themselves as a trusted leader in the industry with the ability to constantly adapt and integrate solutions?

You have a clear goal in mind—can you meet them with this partner? Can you foresee real results with this long-term partner? A solution isn’t valuable to you if it doesn’t provide results for your most pressing challenges. Don’t just consider the cost—think about how you could help make people’s lives better. Consider how this partnership will take you from unavailable means to sustainable solutions that increase your mobility both now and years to come by the benefits you’re bringing the society today.
Who we are

We are a global leader in business process and information technology services. We bring our experience in the transportation market to help build the right team for the project. As a technology integrator, we’re not restricted to one solution. And with sales approaching $23 billion, we offer you the immense resources of 140,000 employees in more than 160 countries across the globe. We have the financial capability and innovative technology to be responsive to the unique business needs of a PPP – no matter the model.

For more than 40 years, we have worked hand-in-hand with transportation clients in over 35 countries delivering reliable solutions, consistently achieving results... performing beyond expectations. We’re the largest provider of Innovative Mobility Solutions to governments worldwide. From fare collection to toll solutions, from back-office processing to infrastructure installation, we provide systems and services that help solve major transportation problems.

With four percent of our revenues (about $1 billion) spent on R&D every year, more than 1,600 patents in 2010 and scientists dedicated to transportation projects in our different research centers all over the world, we are a global recognized leader of innovative transportation solutions while improving the experience of our clients and their customers.

Our transportation solutions include:

Transportation Systems & Services: providing intelligent transportation that create operational efficiencies for Electronic Toll Collection, Commercial Vehicle Operations and Motor Vehicles Services.

Public Transport: Fare Collection Solutions for advanced technologies including smart card applications, ticket vending machines, and bank card solutions for mass transit.

Parking & Safety Solutions: Customized for On and Off-Street Parking and Photo Enforcement to efficiently manage programs and strategies for municipal programs.

We Touch People’s Lives Every Day by…

- Enabling travelers to get to their destinations by processing more than 4 billion electronic toll transactions every year
- Managing 37 billion public transport transactions annually on buses, tramways and subways in 400 cities worldwide
- Processing 20 million parking tickets annually, contributing to our role as the largest provider of services in the government sector
- Serving more than 100M travelers daily
- Operating 1100 car parks in the world

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