

CURRICULUM VITAE: **ALEX BARRON**

Career Summary

Alex Barron is an Associate Director of the Railway and Transport Strategy Centre (RTSC) at Imperial College London. He is the Head of Metro Benchmarking, leading the international metro benchmarking groups – the Community of Metros (CoMET) and the Nova Group of Metros. He also oversees the Benchmarking Group of North American Light Rail Systems (GOAL) and is a senior adviser to the American Bus Benchmarking Group (ABBG). He has also worked in the past with other benchmarking groups managed by the RTSC – ISBeRG, the International Suburban Rail Benchmarking Group, and IBBG, the International Bus Benchmarking Group.

In his time at Imperial College, he has co-founded the International Suburban Rail Benchmarking Group (ISBeRG) in 2010, the American Bus Benchmarking Group (ABBG) in 2011, and the Benchmarking Group of North American Light Rail Systems (GOAL) in 2016. His key areas of research are public transport planning, operations, and management.

He brings transportation planning skills to the RTSC team of engineering and management experts, with training at the Bloustein School of Planning and Public Policy at Rutgers, the State University of New Jersey, where he received the Outstanding Student Academic Achievement Award. He subsequently lectured in “Planning and Budget Development for Transit Managers” at John Jay College of the City University of New York.

He also brings real-world public transport experience and a strong knowledge of the industry after spending more than three years working at New York City Transit, the metro and bus operator in New York, with a focus on strategic planning and service planning.

Education

2005-2007 Master of City and Regional Planning (MCRP) – Bloustein School of Planning and Public Policy at Rutgers, the State University of New Jersey, USA. Concentration in Transportation Planning and Graduate Certificate in Transportation Studies.

1998-2002 Bachelor of Arts in Urban Studies (BA) and Bachelor of Science in Information Science (BSIS) – University of Pittsburgh, USA.

Key Skills

- International benchmarking
 - Public transport planning, operations, and management
 - Project management
 - Excel-based modelling
 - Performance data analysis
 - Geographic information systems (GIS)
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Selected Projects

Ongoing – Head of Metro Benchmarking – Project Director for the Community of Metros (CoMET) and the Nova Group of Metros

Project Director for the two international metro benchmarking groups (CoMET and Nova). CoMET consists of 18 of the largest urban rail systems in the world, including the metro systems of London, Paris, New York, Moscow, Hong Kong, Sao Paulo, Delhi and Beijing, while Nova consists of 17 small- and mid-sized metros around the world, including Montreal, Buenos Aires, Kuala Lumpur, Brussels, Barcelona, and Istanbul. The two groups operate as a single large metro benchmarking community; CoMET started in 1994 and Nova in 1998. The key goals are the ongoing development and use of a Key Performance Indicator system for performance measurement, in-depth case studies to identify best practices, and ongoing confidential information exchange through meetings and the web.

Ongoing – Project Director for the Benchmarking Group of North American Light Rail Systems

Project Director for the Benchmarking Group of North American Light Rail Systems (GOAL), which consists of 11 light rail operators in North America, including Sound Transit (Seattle), MTS (San Diego), DART (Dallas), and Calgary Transit (Calgary). The group's key goals are to develop and use a Key Performance Indicator system for performance measurement and to establish a confidential environment for the ongoing sharing of knowledge and best practices among peers.

Ongoing – Senior Adviser to the American Bus Benchmarking Group

Senior Adviser to the American Bus Benchmarking Group, which consists of 20 mid-sized bus agencies in the United States, including Capital Metro (Austin, TX); GCRTA (Cleveland, OH); Lane Transit (Eugene, OR); RGRTA (Rochester, NY); RIPTA (Rhode Island); PSTA (St. Petersburg, FL); and UTA (Salt Lake City, UT). The group's key goals are to develop and use a Key Performance Indicator system for performance measurement and to establish a confidential environment for the ongoing sharing of knowledge and best practices among peers.

2015 – Best Practices in Operating Very High Frequency Services Case Study

Case study for the CoMET metro benchmarking group focused on identifying and understanding the variety of constraints that prevent and good practices that enable the operation of very high frequency train service, defined as 30 trains per hour or more.

2013 – Dwell Time Management Case Study

Case study for the CoMET metro benchmarking group focused on identifying and understanding how metros manage station dwell times in order to improve train service performance.

2012 – Causal Factors of Cost Case Study

Case study for the NOVA metro benchmarking group focused on identifying the key factors that influence metro costs and best practices in reducing costs.

2011/2012 – Improving Incident Response and Recovery Case Study (Phases 1 and 2)

Two-phased case study for the CoMET metro benchmarking group focused on identifying best practices in metros' response to and recovery from incidents in order to help metros minimize both the time that train services are disrupted and the time it takes to restore normal service following an incident.

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2011 – Service Control and Route Management Case Study

Case study for the International Bus Benchmarking Group focused on profiling service control and route management functions at bus operators and identifying best practices leading to successful service control and route management, including dealing with service disruptions and roadworks.

2011 – Customer Service Case Study

Case study for the NOVA metro benchmarking group focused on identifying best practices in a variety of customer-related areas. The study examined metros' commitment to customer service, their use of customer-facing staff, customer interfaces (such as information systems and ticket machines), and the ways in which customers can provide input to operations.

2010-2011 – Station and Platform-Train Interface Safety Case Study

Case study for the CoMET metro benchmarking group focused on identifying best practices in improving safety in stations and at the platform-train interface, which have been identified as the most critical areas for metro safety. Specifically, the study looked in-depth at vertical circulation, passenger flow, and the use of platform doors.

2010-2011 – Information During Disruptions Case Study

Case study for the CoMET metro benchmarking group focused on identifying best practices in the management and provision of information during disruptions to metro services, with emphasis on the growing demand for real-time information through advanced technologies.

2010 – Human Resources at Bus Organizations Case Study

Case study for the International Bus Benchmarking Group focused on profiling human resources functions at bus organizations and identifying best practices in carrying out these functions.

2010 – Train Service Reliability Case Study

Case study for the NOVA metro benchmarking group focused on identifying the most important factors affecting the reliability of metro train services, including both network- and line-level analyses of the factors affecting service reliability.

2009-2010 – NYC Transit Service Reductions Program

Leading team member in identifying, developing, and communicating the 2010 service reduction program that was ultimately approved and implemented in June 2010 at MTA New York City Transit in New York.

2009 – Planning and Budget Development for Transit Managers Course

Taught "Planning and Budget Development for Transit Managers" course at John Jay College (part of the City University of New York), with focuses on strategic planning, transportation funding and finance, capital and operating budget processes, and capital planning.

2008-2009 – NYC Transit Service Rationalization Program to Balance the Budget

Leading team member in identifying, developing, and communicating the 2009 service rationalization program that was ultimately not implemented due to new state funding to fill the budget gap.

2008-2009 – New York City Congesting Pricing Pilot Program

Assisted with New York City Transit participation in and response to the New York City's Congesting Pricing Pilot Program proposals, including budgetary analysis, expanded public transport services, and capacity utilisation analysis.

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2007 – Airport Rail Access in the United States

Urban planning professional paper focused on profiling and evaluating airport rail access in the United States with a discussion of principles for good rail connections.

2007 – Regenerating Long Hill Township Planning Studio

Urban planning studio project focused on environmental planning that used regenerative design principles to identify, evaluate, and ultimately recommend a series of alternatives to enhance a suburban community's character and environment.

2007 – Redevelopment Options for Station Square at Secaucus Junction Planning Studio

Urban planning studio project focused on the creation of multiple development scenarios for a major brownfield transit-oriented development site adjacent to a massive new rail interchange station less than 10 miles from Midtown Manhattan in the New Jersey Meadowlands.

Papers and Publications

Morse L, Trompet M, Barron A, Graham DJ, 2017, [Development of a Key Performance Indicator System to Benchmark Relative Paratransit Performance](#), Transportation Research Record-Series, Vol:2650, ISSN:0361-1981, Pages:1-8.

Canavan S, Graham DJ, Melo PC, Anderson RJ, Barron AS, and Cohen JM, 2015, [Impacts of Moving-Block Signalling on Technical Efficiency Application of Propensity Score Matching on Urban Metro Rail Systems](#), Transportation Research Record-Series, Vol:2534, ISSN:0361-1981, Pages:68-74.

Cohen JM, Barron AS, and Anderson RJ, 2015, [Impacts of Unattended Train Operations on Productivity and Efficiency in Metropolitan Railways](#), Transportation Research Record-Series, Vol:2534, ISSN:0361-1981, Pages:75-83.

Barron A, Melo PC, Cohen JM, and Anderson RJ, 2013, [A Passenger-Focused Management Approach to the Measurement of Train Delay Impacts](#), Transportation Research Record-Series, Vol:2351, ISSN:0361-1981, Pages:46-53.

Melo PC, Harris NG, Graham DJ, Anderson RJ, and Barron, A, 2011, [Determinants of Delay Incident Occurrence of Urban Metros](#), Transportation Research Record-Series, Vol:2216, ISSN:0361-1981, Pages 10-18.
