Samuel Paul Girvan, Managing Director

Mr. Girvan is a Managing Director of The Innovation Group and a partner in the firm. As a British-trained demographer, geographer and economist, Paul Girvan's depth of study in these interconnected disciplines enables him to recognize key trends and patterns that are often overlooked by traditional research alone. Since joining The Innovation Group in 1992, Mr. Girvan has conducted an extraordinary array of gaming, leisure and hospitality industry research projects, often pioneering new techniques and combining existing research tools to provide more insightful, reliable analysis. His wide range of experience and visionary approach ensures Innovation Group clients of a well-conceived and comprehensively-managed project from the outset. The insight and accuracy of Mr. Girvan's reports have assisted clients in obtaining government approvals, management contracts, financing for facilities and the acquisition of strategic properties.

Mr. Girvan's studies have covered every major U.S. gaming and hospitality market and several international markets as well. Specific to Pennsylvania, in support of the bill that became the basis for subsequent gaming legislation and a state goal to generate $1 billion in revenue, Mr. Girvan helped conduct a gaming market analysis (using a gravity model at the statewide level) to determine the number, size and location of gaming licenses for 12 proposed facilities. Multiple scenarios were addressed in order to determine the distribution which would maximize state tax revenues and ensure viable developments.

In a related assignment (and one of his most in-depth and high-profile roles), Mr. Girvan also served as a consultant to the Philadelphia Gaming Advisory Task Force, during which time he completed a comprehensive study of the proposed slot operations in the city which included analyses for 11 sites, developing market assessments and revenue projections for 14 scenarios, developing 28 pro formas, estimating local and overnight modal splits, estimating the fiscal impacts of problem gambling and impacts of crime and providing secondary research on trends in gaming. As primary consultant, he also oversaw the work of other consultants involved in the design and analysis.

In 2010, Mr. Girvan helped direct The Innovation Group's involvement as a key advisor in the table games review in the Commonwealth of Pennsylvania. He oversaw a statewide economic impact study evaluating the benefits to the Commonwealth from the introduction of table games, as well as to support testimony to the legislature regarding the findings.

Mr. Girvan has applied his expertise throughout the globe as well. For the Government of Panama, for example, he directed the analysis of state-run hotel-based casinos that ultimately led to their privatization and upgrading. In El Salvador, he conducted an in-depth analysis of national lottery operations, which lead directly to our client's obtaining a nationwide operating contract. Mr. Girvan also conducted an in depth analysis of gaming for the Government of Bermuda which covered all economic aspects and social impacts of gaming should it be legalized in that country.

Functioning as the lead Canadian gaming specialist for The Innovation Group throughout the past decade, Mr. Girvan has contributed to numerous projects for OLG including a province-

wide strategic planning process designed to determine the optimal future development of provincial wide gaming properties. Mr. Girvan also was in charge of the development of research tools that analyzed the smoking preferences gamers in Ontario and the expected impacts of smoking bans in the province. The study estimated the long term effects of the province-wide smoking ban on revenues at gaming facilities, in the absence of historical data from within the province, necessitated the construction of a model using impacts of other bans on gaming and other hospitality facility revenues in comparable jurisdictions.

Mr. Girvan is in the unique and highly trusted position, of being entrusted with player database summaries from a number of casino properties across Canada and the U.S. Using GIS software, these have been mapped and competitive advantages identified. In this he has gained a unique perspective into the geographic distribution of casino gamers that few, if any, in the industry can match.

Mr. Girvan's depth of experience in research techniques extends to his development of tailored customer surveys and intricate statistical analyses. His interpretations often lead directly to operational changes to improve customer service, to new promotional programs, to modification in physical facilities and ultimately to increased market share and revenues. He has also innovated a number of analytical techniques using GIS software, developing a proprietary technique utilizing player-tracking data to map market penetration by zip code. By segmenting the player database and assigning lifestyle cluster codes to the segments, Mr. Girvan has been able to target not only geographic areas, but also to target customers likely to be similar to those in a specific segment of the existing database. Building on this approach, he has been able to aid clients in the development of customized marketing and media programs.

With his breadth of training and experience, Mr. Girvan is a published author and sought-after speaker at gaming industry conferences and events. He has recently contributed articles and white papers on such relevant subjects as the Canadian gaming market, the impact of smoking bans on gaming jurisdictions, iGaming, and the value and trends of amenities at destination resorts.

Mr. Girvan has a Master's in Urban and Regional Planning with a specialization in Economics. He also holds an associate's degree in Economics and a Bachelor of Science with Honors in Geography and Geology.

Tom Zitt, Ph.D, Senior Vice President Strategic Planning

Since joining The Innovation Group in 1997, Thomas Zitt, Ph.D., has developed a level of expertise in high-level strategic planning and market feasibility analysis that has earned his reports a reputation for accuracy and perceptiveness throughout the gaming, leisure and hospitality industries. Dr. Zitt provides a depth of analysis that provides developers and government bodies with the peace of mind of knowing their decisions are being made on sound economic foundations, and the accuracy, methodological soundness, and comprehensiveness of his expert witness reports have been critical in his clients' success in a number of legal proceedings.

Dr. Zitt also contributed to the statewide gravity model analysis used by Pennsylvania legislators to assist in structuring history-making racino legislation. Consulting for the Senate Democratic Appropriations Committee, he provided an assessment of gaming revenue potential under a number of defined and open-market scenarios, with the goal of maximizing state tax revenues within politically defined parameters. Additional statewide gravity models include California, Florida, Kentucky, Michigan, New York, Ohio, Virginia, and West Virginia. Together with individual leisure assessments in Illinois, Indiana, Iowa, Louisiana, Mississippi, Missouri, Montana, New Mexico, Oklahoma, Oregon, South Carolina, South Dakota, Texas, Washington, and Wisconsin, Dr. Zitt has extensive experience throughout the United States.

His work for investment firms includes a state-by-state racino assessment published by CIBC World Markets and the Native American section in the (former) Bear Stearns North American Gaming Almanac. For Deutsche Bank, he completed a market assessment by region for California that included a statewide telephone survey and an assessment of the impact on Nevada gaming revenues. In addition, he has tracked the Atlantic City market since 2000 when he performed impact assessments for Deutsche Bank and Bear Stearns regarding potential gaming development in New York, Pennsylvania and Maryland.

His international experience includes feasibility studies for leisure developments in the United Kingdom, Isle of Man, Cambodia, Kazakhstan, Macau, Mongolia, the Philippines, and South Korea.

In addition, Dr. Zitt has assessed the social and fiscal impacts of gaming development for numerous potential jurisdictions, including Sullivan County, New York, Monroe, Ohio, Boston, Massachusetts and London, England. He has also advised the National Council of Legislators of Gaming States as to the fiscal impacts felt at the state and local level from gaming development.

Dr. Zitt received his doctorate in American Culture Studies from Bowling Green State University.