Please upload an essay of approximately 1,000 words describing your academic and professional background, your career goals, and how the program will help you achieve your goals. (word count: 1,000)

I decided to devote my professional life to incorporate advanced data analysis in the policy-making process after I read last year about a program in NYC to detect illegal oil-dumping at local restaurants. This public initiative used data to determine the restaurants most likely to be incurring that offense. I instantly became impassioned about the potential of data and technology in solving policy issues. I am determined to lead the efforts in Mexico to use these tools in the policy-making process and improve urban issues such as planning and service provision while promoting citizen engagement. My medium term objective is to implement a system so that every medium sized city in Mexico has an inter-municipal office that gather and analyzes data. However, my professional experience has shown me that there are two obstacles preventing these goals: lack of relevant skills in the job market and lack of individuals with experience implementing similar projects. My intention in pursuing a MPPM degree with the Data Analysis track in Carnegie Mellon is to cover these gaps and promote impactful changes in the way urban policy is conducted in my country.

My academic background has given me valuable tools to achieve this objective. I hold a Bachelor in Economics degree from the Center for Research and Teaching in Economics (CIDE). This program is highly competitive and provided me with strong statistical skills as well as commitment to excellence. I am experienced at using datasets to calibrate economical models, as well as using economic analysis to understand real-life problems. These skills procured me a job at one of the most influential think tanks at Mexico, the Mexican Institute for Competitiveness. As a researcher and later project leader in this institution, I have been responsible for conducting rigorous analytical research and designing relevant policy recommendations. For instance, one of the projects I am currently leading is improving the inspection process in Mexico City. We are currently working with local authorities to detect areas of corruption and inefficiency in the process and suggest improvements in the technological and institutional policies. To achieve this we are using data on 10,000 business inspections, reviewing the legal framework to diagnose institutional challenges and interviewing relevant agents. This is an example of how I approach an issue analytically, I generate a diagnosis and policies based both on quantitative and qualitative evidence.

My experience and high performance at CIDE and IMCO makes me confident that I can live up to the standard of a world-class graduate program. While I can provide my practical experience in econometric analysis and policy design, I want to further develop my computer science skills that will allow me to fully exploit the data potential that cities have. These skills are still rare in Mexico despite its advantages in delivering better solutions to citizens. I am particularly interested in using big data to predict urban patterns and design more effective zoning and service provision policies. One of the reasons the MCPP program is fundamental to my goals is the coursework it provides. I am particularly interested in courses similar to Machine learning and R-programming.

My professional background has also given me some relevant experience and strengthened my ability to come with practical solutions and implement them. I believe this is fundamental to achieve my goals because strong technical skills are often not sufficient to implement successful public policies. As mentioned earlier, I am currently leading several projects that promote the use of data to improve economic development in Mexican municipalities. One of this projects intended to create a model build on government data that suggested business where to locate their operations. However, after we diagnosed the scarcity of appropriate municipal information, I decided to focus

the project on training public officials on data openness, management and analysis. This type of regional experiences are valuable lessons I can bring into the MSPM classrooms to enrich the discussions and learning process.

While I have had some relevant professional experience, the MSPM program will provide me with invaluable exposure to management skills and cutting-edge projects in my area of interest. In particular, the Data-Analytics track is the ideal program for me because its unique dual approach in data analysis and management. Thanks to previous unsuccessful projects, I have learnt that to achieve my professional goals I must acquire skills such strategic planning, risk analysis and budgeting. I am convinced that the practical approach of the MSPM courses will allow me to become an effective leader in the introduction of data science in the urban policy-making process at Mexico.

As a graduate student from MSPM I will also take full advantage of the out of classroom experiences. I am particularly interested in doing work with the I-lab related to mobility. Coming from an emerging country, I know the challenges that inefficient public transportation systems brings to an urban setting. Thus, I want to gain experience on cutting-edge projects such as the Traffic 21 that will provide me with better insights on how to gather and analyze data to deliver better public services.

My intention is to return to Mexico and work as a senior level officer in agencies similar to the Unit of Digital Strategy, a government office in charge of digitalizing government processes and promoting open data. From that position, I want to introduce initiatives that create smart municipalities capable of using technology and data to engage citizens and deliver better public services. In the long term I strive to run for public office for a municipality in Mexico City. My flagship will be the creation of mechanisms for citizen engagement as well as the use of technology to tackle citizen´s problems. As a young professional in the field of public policy, I am excited for the possibilities in the era of digital innovation. However, I am also aware that we need qualified leaders able to implement feasible solutions and produce innovation shifts. I am sure that with the aid of the Heinz College I can become that type of individual.