MetroLab Network New Member Application

Thank you for your interest in joining MetroLab Network, a recently-launched network of city[1]-university partnerships focused on smart cities. Partnerships are focused on "research, development, and deployment" (RD&D) projects that offer technologically- and analytically-based solutions for challenges facing city infrastructure, services, and other public sector priorities.

Please email applications or questions to membership@metrolabnetwork.org. Applications must be submitted by a city government official on behalf of the city-university pair. (Partnerships can include more than one city and/or university; all partners should be located in the same region).

To be considered for membership, applicants must identify and describe three RD&D projects that are planned or currently in the pipeline between the city and university. In addition, applicants must sign-on and commit to the conditions for membership enumerated in the letter (included as an appendix to this application) to the President initially launching the Network. These are:

1. Form a City/University collaboration within a respective community memorialized in a Memorandum of Understanding;
2. Appoint a representative (referred in application as city / university POC) from each partner responsible for maintaining the collaboration;
3. Through the collaboration, identify and undertake at least three RD&D projects within the coming year;
4. Participate as a member of the MetroLab Network through workshops and other knowledge sharing activities.

City Partner(s):	City of Austin; City Manager Marc Ott
City POC:	Jim Dale, PE Assistant Director, Austin Transportation Department City of Austin
University Partner(s):	The University of Texas at Austin; David Hawkins, Associate Director of Sponsored Projects
University POC:	Dr. Jennifer Duthie, PhD, PE Network Modeling Center, Director Center for Transportation Research
Websites, Programs	http://ctr.utexas.edu/ http://austintexas.gov/department/transportation/programs
Existing City-University Partnership	The City of Austin (COA) and the University of Texas at Austin – Center for Transportation Research (CTR) have partnered on numerous specific projects in the past. Recently the COA and CTR have entered into a 5 year interlocal agreement to partner on transportation related analytics to identify trends and performance for decision-making, multimodal traffic data sharing strategies (to both the public and 3rd party consumers), dynamic traffic and transit modeling, etc.

[1] The Network also includes county-university partnerships. County-university applications are also accepted.

Pursuant to the requirement for three RD&D projects, please identify at least three project descriptions your partnership would undertake in your region. If your partnership joins, these would be included in MetroLab Network's forthcoming online library of existing RD&D projects.

Project #1

Name:	**Open Transportation Data Portal**
City or University POC & Email:	UT: Jennifer Duthie, jduthie@mail.utexas.edu COA: Jim Dale, jim.dale@austintexas.gov
Description:	The COA has invested in various forms of technology to collect traffic data throughout the city. This investment includes the installation of volume count stations, travel time sensors, communications to pedestrian hybrid beacons that allow monitoring of the number of times the device is used, etc. The COA is continuously expanding its data collection capability. The COA desires to partner with CTR to establish a shared repository for this data as well as devise plans to be able to share this data with numerous parties while maintaining security. CTR has access to the UT - Texas Advanced Computing Center, which hosts some of the world's most powerful computing resources. CTR will be able to access this data for analytical analysis as well has support COA in the development of technologies and processes to share data across various platforms and with various users.

Project #2

Name:	**Data-Driven Transportation Demand Management Program**
City or University POC & Email:	UT: Jennifer Duthie, jduthie@mail.utexas.edu COA: Jim Dale; jim.dale@austintexas.gov
Description:	The COA would like to use traffic data to inform and optimize transportation demand management programs. This analysis could be used to devise data-driven programs to address long-haul/commuter trips, identify key demand locations, first mile/last mile services, etc. Increasing the utilization of transportation demand management programs is an integral step in addressing Austin's current gridlock issues. Data-driven solutions allow the COA to focus resources on high-yield solutions and to partner with numerous public and private entities, as well as individual citizens.

Project #3

Name:	**Transportation Management Center Effectiveness**
City or University POC & Email:	UT: Jennifer Duthie, jduthie@mail.utexas.edu COA: Jim Dale, jimdale@austintexas.gov
Description:	The COA is looking at options to increase the effectiveness of its Transportation Management Center (TMC). An optimally performing TMC would assist in addressing real-time traffic issues, special event plans, construction plans with traffic impacts, etc. Options to improve TMC functionality include transitioning to expanded operations, partnering with regional transportation partners, implementation of a traveler information service, etc. CTR will help establish and measure the effectiveness of these changes. These measurements will include operational and infrastructure metrics, as well as the effectiveness of traveler information programs and the use and performance of intelligent traffic systems. From these metrics the COA and CTR will work together to identify areas and steps for improvement.

Letter from Mayors and University Leadership to President Obama on the Creation of a MetroLab Network

March 31, 2016

We, the undersigned university presidents and mayors, commit to collaborating within and across our communities to research, develop and deploy technology-enabled solutions that can help address our communities' most pressing challenges.

Our cities and metropolitan areas face complex challenges involving interconnected and interacting infrastructure systems such as transportation, water and sewer, communication, buildings, and public services. Under conventional approaches, addressing these looming challenges will require significant investment.

Our research universities have the physical and human resources to help their cities meet these challenges through undertaking research, development – and deployment – of innovative projects at lower cost. The identification and undertaking of these innovative and deployable projects can best be identified and prioritized through a working partnership between the city and the university that outlines the purpose and process. Many of us are already engaged in these beneficial partnerships.

Any such city/university partnership will exponentially benefit by collaborating with other city/university partnerships similarly organized. Given the complexity of many of the infrastructure city challenges, a comprehensive research, development and deployment approach embracing multiple cities and multiple universities working together collaboratively can offer important advantages.

The formation of an unincorporated network of city/university partnerships, hereinafter referenced as the MetroLab Network, would enable such explicit sharing and collaboration in research development and deployment of solutions to those cities.

Therefore, the undersigned agree to:

Form a City/University collaboration within their respective community memorialized in a Memorandum of Understanding (please contact membership@metrolabnetwork.org for sample MOU language, if needed);

Appoint a representative (referred in application as city / university POC) from each partner responsible for maintaining the collaboration;

Through the collaboration, identify and undertake at least three research, development and deployment projects within the coming year;

Participate as a member of the MetroLab Network through workshops and other knowledge sharing activities.

Marc Ott,
City Manager,
City of Austin

3.29.2016

David Hawkins
Associate Director of Sponsored Projects
The University of Texas at Austin

3/28/16

John Ekerdt
Associate Dean, Cockrell School of Engineering
The University of Texas at Austin