# Introduction

Welcome by ***Dr. Denis Dean*** (Dean of the School of Economic, Political and Policy Sciences)

## Workshop Participants and Organizers

- Broad spectrum of enrollees:

| | Faculty | Master's | Ph.D. | UG |
|---|---|---|---|---|
| **Erik Jonsson School of Engineering and Computer Science** | 0 | 2 | 0 | |
| **Naveen Jindal School of Management** | 0 | 37 | 0 | 1 |
| **School of Economic, Political and Policy Sciences** | 2 | 8 | 8 | 1 |

  Note, UG's should not be intimidated: no prior knowledge is required.

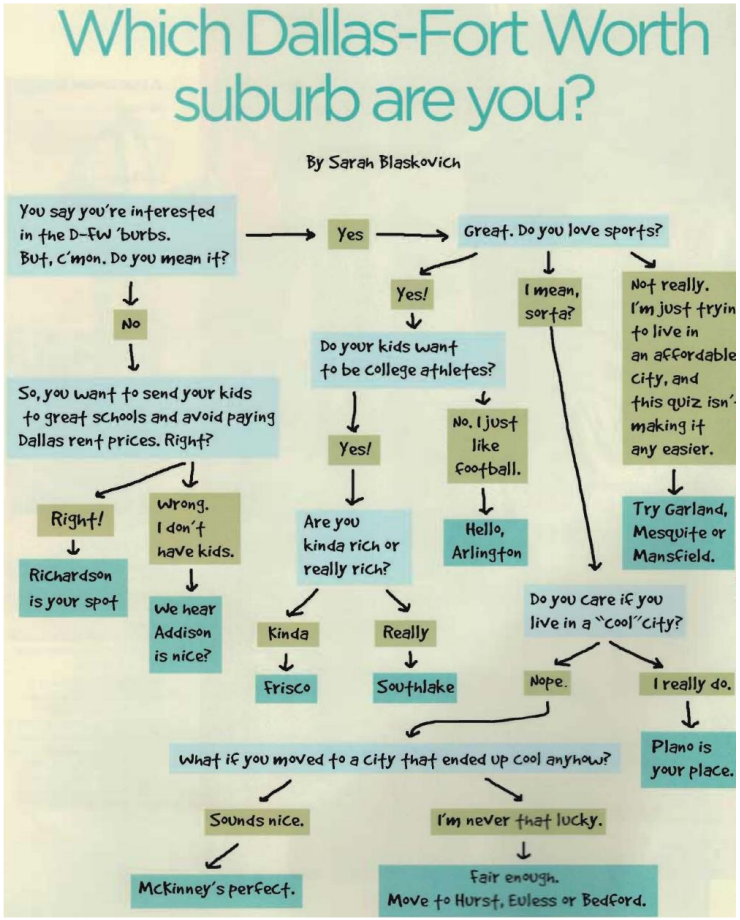
- Team members (see credits on workshop's webpage).

## Motivation for Holding the Workshop

- Caliper Inc. has made Maptitude available to EPPS. We want to introduce the UTD community to the academic and professional potential of using spatial information in order to support decision-making processes.
- Non-GIS participants should obtain an introduction to Geo-Spatial Information Systems (GIS).
  My claim: doing basic GIS is not more complicated than using your favorite word-processor
- For GIS students we would like to introduce them to another GIS software

## Workshop Objectives

- Allow participants to perform basic GIS tasks with Maptitude, like retrieving census data, mapping their own data and perform basic spatial analyses.
- Give participants an idea what GIS can do for their specific academic and professional fields.
- ***Learn something about the places we are living in or potentially will move to!***



## Maptitude within the Environments of GISystems

- Upon application an academic one-year licenses of Maptitude 2018 is available at https://www.caliper.com/maptpric.htm
- Maptitude key property:
  - relative ***ease of learning*** GIS with Maptitude,
  - good subset of key ***spatial analysis*** and ***spatial data handling*** routines,
  - comprehensive set of ***available data*** for several countries,
  - reasonable ***costs*** of ownership
  - good ***integration*** with other software systems,
  - ***efficient*** use of computer and network resource,
  - possibility of ***extending*** its capabilities and ***modifying*** the interface.

  Note: Maptitude is not a raster software to process remotely sensed data.

- Other mapping and spatial analysis software systems:
  - Rudimentary mapping capabilities: SAS, Tableau, Google maps and Google Earth etc.
  - Open source GIS programs: QGIS, GRASS, R and OpenStreetMap etc.
  - Midlevel: MapInfo and Maptitude with US country package including census data and HERE street network (formerly Navteq and Nokia, now consortium of German car manufactures)
  - High-end: ESRI's ArcGIS suit etc. (THE 500 pounds gorilla)
  - Specialized: TransCAD by Caliper etc.

## Workshop Schedule

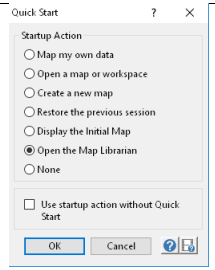
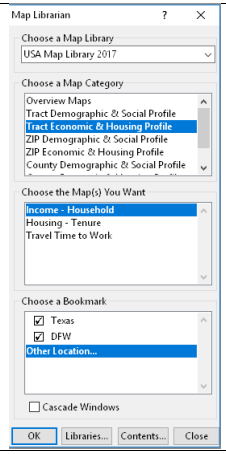
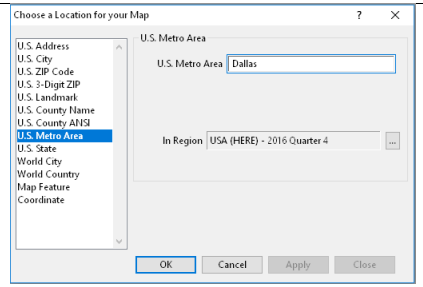
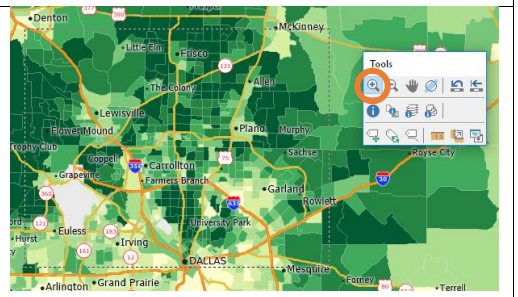
- Outline of activities during the workshop see the website's schedule page.
- What is ***not*** covered?

## Post-Workshop Tasks

- Information on how to obtain a participation certificate
- Workshop evaluation

## First Maptitude Encounter

- Before we will cover some theory, concepts and terminology in the next lecture, ***let's do some exploring***.
- Open Maptitude by selecting the ***blue map-head desktop icon***  and wait for the **Quick Start** menu to pop-up. To show a map of the income distribution in the Metroplex proceed with:

| [1] Select the **Open the Map Librarian** and click **OK**. | [2] Select **Income** from the **Tract Economic & Housing Profile** and click **OK**. | [3] Select **Dallas** from the **U.S. Metro Area** and click **OK**. | [4] Interactively zoom into North-Central Dallas |
|---|---|---|---|
|  |  |  |  |

- To explore other themes goto **Map ▶ Demographic Map Librarian**. You can scroll through your open windows in the **Windows** menu.