**University of Southern California**

**Information Sciences Institute**

**Budget Justification**

**PERSONNEL**

John Heidemann, Principal Investigator (PI/PD), (.83calendar months per year) Dr. Heidemann will lead the research on address space scanning for population estimation, and comparing those observations to others, and supervise one graduate student researcher at USC.

We have budged for on Graduate Research Student (7.50 calendar months per year) at USC. That student will work on address space scanning for population estimation.

**Fringe Benefits** (ITEM C) – In accordance with the University’s DHHS rate agreement dated July 6, 2020, the fringe rate is budgeted at 28.6%.

**Travel** (ITEM E.1, E.2) – Our total travel budget ($16,275) includes 1 trip for 1 person to attend annual PI meeting in Washington, DC to meet with the other Program Manager and performers every other year. We have also included one domestic trip for one person to present results of this work at apporipate networking conferences such as the Internet Measurements Conference, SIGCOMM, or the Passive and Active Measurements Conference.

The amount is based on estimates of airfare, conference registration, lodging and meal expenses, and local transportation

**Other Direct Costs**

**Material & Supplies** (ITEM G.1) –

The costs include the following: $219 per month for miscellaneous materials & supplies and

for $2839 for a laptop purchase and $3069 for a RAID.

These funds are requested for Miscellaneous M&S funds to cover miscellaneous supplies and/or services that will be needed by the staff over the term of the project.  Examples of possible items/services to be purchase with Miscellaneous M&S funds include software, hard drives, books, laptop repair costs, laptop periphery(cable/adaptors).  Other costs such as manuals, textbooks, and poster printing, etc., also typically arise.

We also budgeted a Lenovo laptop for programming tasks, mobile programming, conduct research and prepare presentations for the project.

We have budgeted for one rack-mount computer to be used for network probing. We expect that computer to be placed in a remote location with network support contributed by a colleague. A candidate location is the University of Memphis, but if possible we will look for a location in Australia or south Asia to get geographic diversity.

The submitted budget is based on an estimate from what we have needed for past projects. In general, the team does not know in advance precisely which, or how many of these various items will be needed.

**Computer Services** (ITEM G.4) – This covers the cost of ISI’s Information Processing Center. This is charged at a flat rate per month times the level of effort per month for staff, faculty and GRAs and students

**ISI Common Costs** (Item G.6) - Other direct costs include ISI Common costs. (The ISI Common recharge center reflects the cost of ISI's executive office, calculated as a percentage of total salaries and wages and GRA Stipends.)

**Indirect Costs** (ITEM I) **-** As a department of USC's Viterbi School of Engineering, the Information Sciences Institute is located at an off-site facility in Marina del Rey, CA. ISI's Facilities and Administration (F&A) rate is 26% of modified total direct cost (MTDC). The ISI Facilities rate is 15% of MTDC. (ISI Facilities covers the cost of ISIs rent, power, and office equipment.)