

# An Apps Store for SME

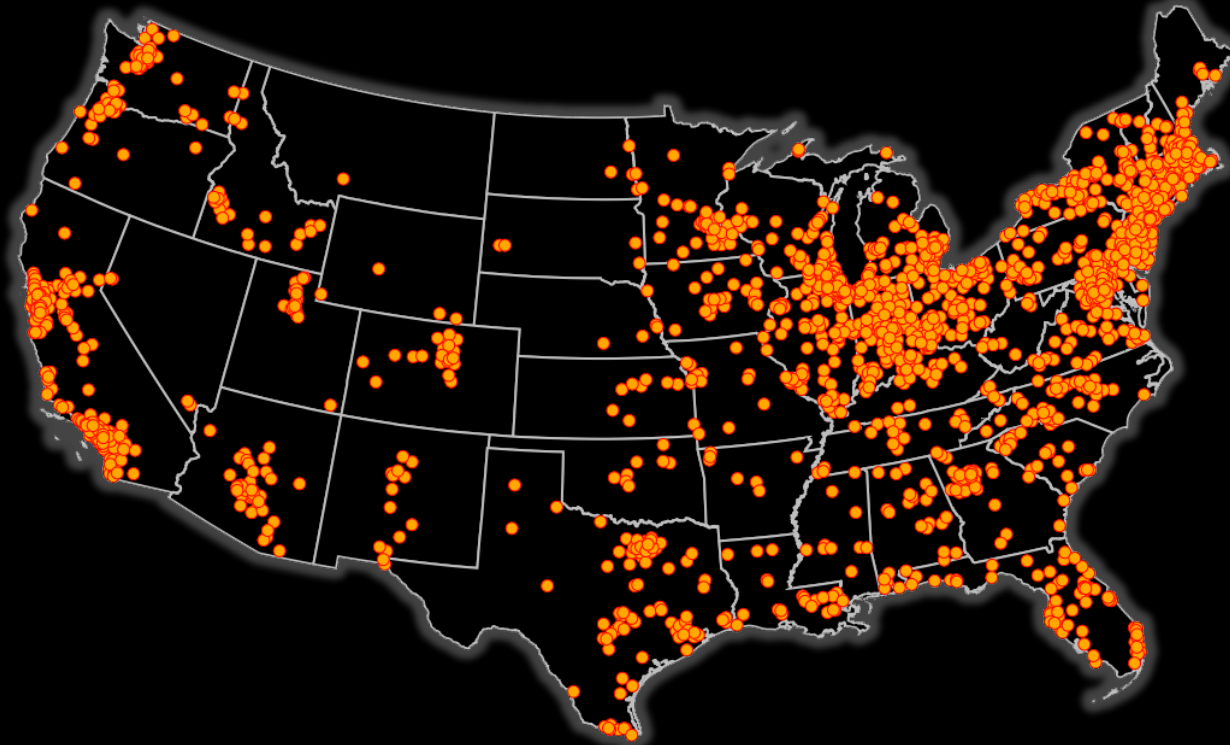
(Small and Medium-Sized Enterprises)

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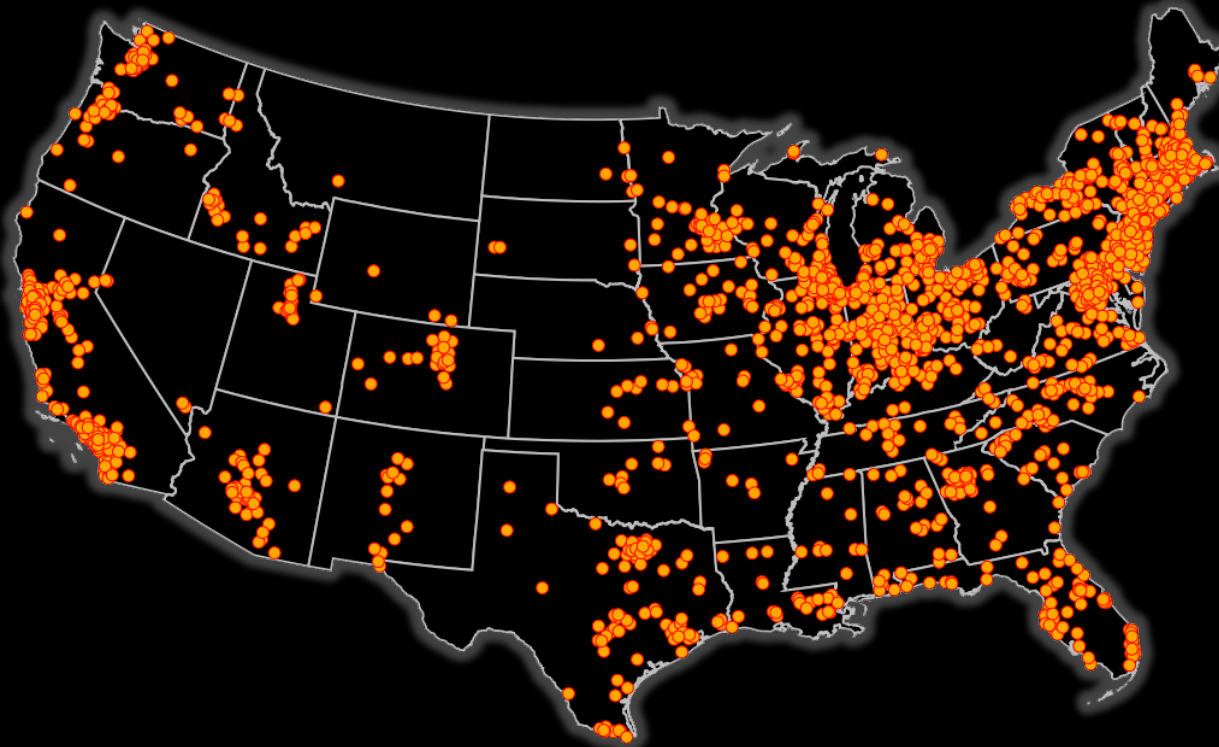
# An Apps Store for SME

Driving Early Success

SME's need Modeling and Simulation

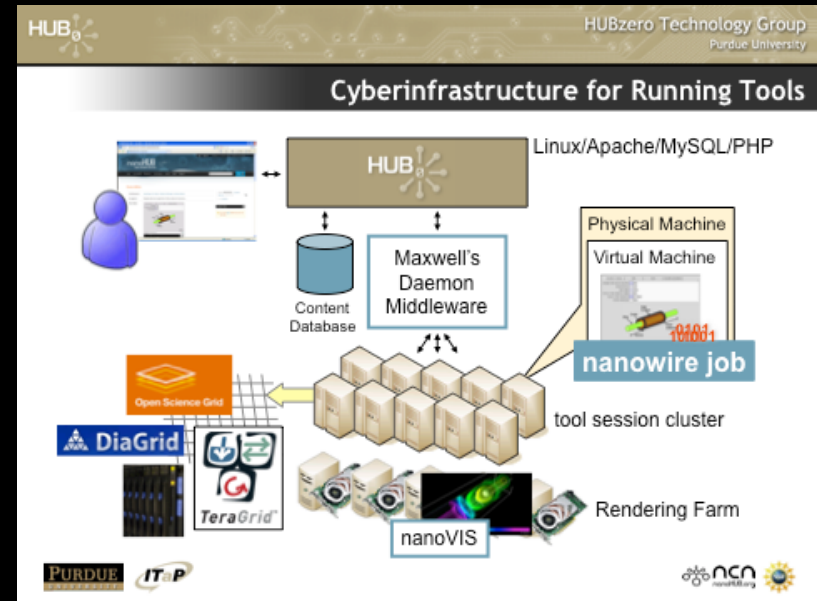
nanoHUB.org proves we can deliver (see user map)

TAP and HUBzero can pilot this in Indiana



# HUBzero Summary

- Spun out of nanoHUB.org
- Supports 20+ HUBs
- Deploy any linux-based software - any language
- Support and deployment infrastructure
- 24/7 operations  
<30 hours downtime / year
- Access to HPC resources as needed - transparently to the end user
- HUBzero consortium



## ***HUBzero Consortium***

**PURDUE**  
UNIVERSITY™

**Ψ INDIANA UNIVERSITY**

**CLEMSON**  
UNIVERSITY

**THE UNIVERSITY  
of WISCONSIN  
MADISON**

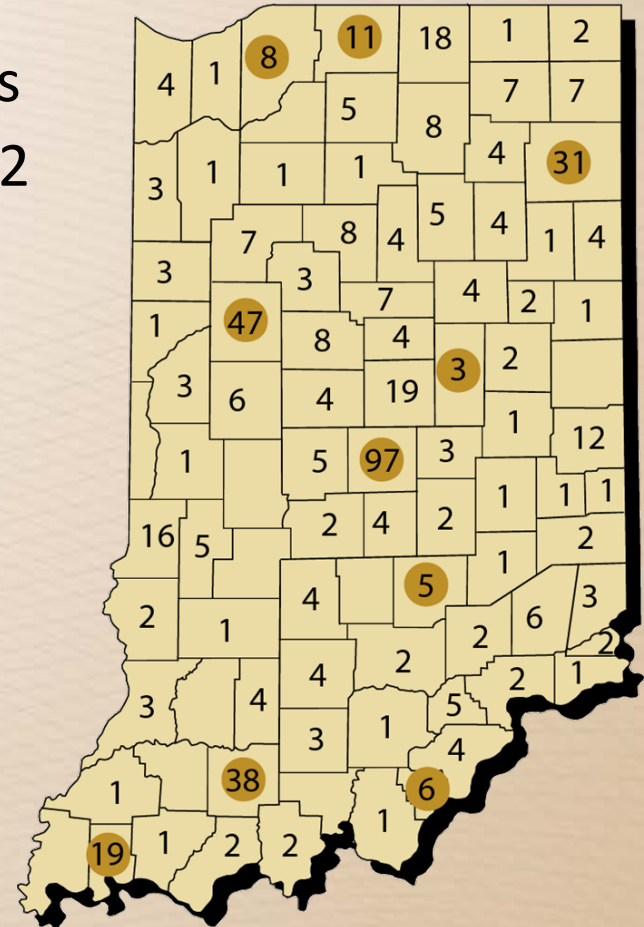
# TAP Quick Facts FY 09-10

## Funding and state-wide activity

- \$7,200,000 in funding from 101 sources
- Served 541 employers (half SME's) in 82 counties
- 3,731 employees trained
- 100 faculty, staff, student participants

## Impacts from TAP MEP work

- Jobs added/saved 1,098
- Increased/retained sales \$54,100,000
- Cost savings \$6,800,000
- Capital investments \$26,100,000



Numbers indicate employers served by county

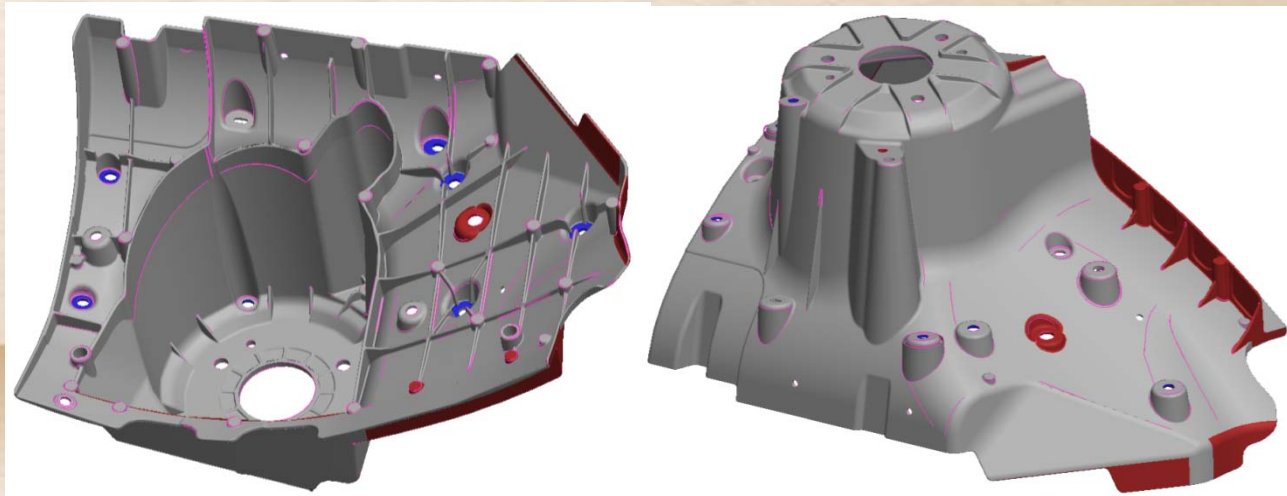
# Need for Manufacturing nanoHUB

## Purdue TAP project for an Indiana SME die caster

Problem: Modeling heat treat distortion in a thin-walled high pressure die casting

Project status: Mid level modeling tools not adequate for this analysis, response to company delayed

The need: Capable, powerful, reasonable cost, easy to use analysis tools

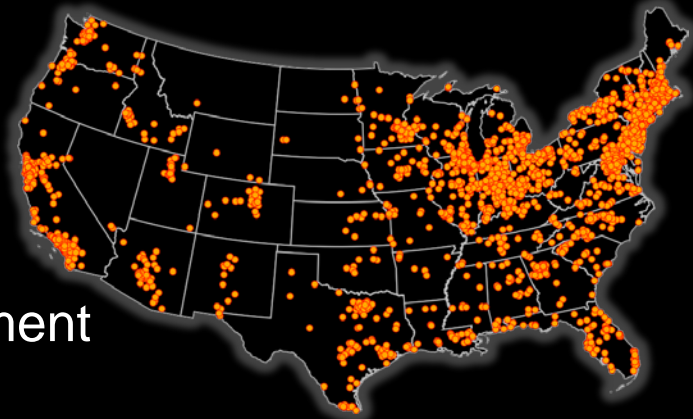


# An Apps Store for SME

Driving Early Success

Purdue has begun:

- We are ready to hire a Technical Project Manager
- We have identified small companies and can get more
  - They have real needs of design improvement
- Begun to identify software vendors and open source codes



**Sustained Success Comes From  
Training, Persistent Use, and Improved Tools  
HPC for automatic Design Synthesis**

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