



Assessing the Impact of University Research, Transferred Technology and Assistance on Private Firms

An Overview of Available Measures

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Economic Drivers: Measuring and Building Success
September 26, 2011



Channels for Technology Transfer to Firms

- Publications and conference presentations
- Employment of recent graduates
- Spillovers into regional economy through informal interactions
- Licensing of university IP
- Creation of new companies by faculty and students
- Faculty consulting
- Contract research
- Collaborative research
- Incubators
- Research joint ventures
- University/Industry research centers



Current Metrics

- Collected through the Association of University Technology Managers (AUTM) Annual *Licensing Activity Survey*
- Performance of research and IP Creation
 - Research expenditures by funder
 - IP Disclosures
 - Patent applications files
 - Patents issues
- Licensing Activity
 - Number of licenses and options executed
 - Licensing Income
- Startup activity
 - Number of startup companies formed
 - Number of currently operating startups
 - External funding received by startup companies.



Assessment of Current Metrics

- Pros
 - Captures the licensing activities of university TTOs.
 - Tracks industrial sponsorship of university research.
 - Counts companies created by faculty and students.
 - Quantifies a lower bound on firm valuation of university R&D.
- Cons
 - Does not measure technology transfer that occurs outside of licensing and startups.
 - Does not measure many of the new policies and tools developed to facilitate university to industry technology transfer (RJVs, research centers).

Existing metrics will be supplemented with new measures developed to take into account pathways for technology transfer.



A Sample of Proposed Metrics

Channel for Technology Transfer	Possible Measure
Employment of graduates	Annual tracking of alumni by location and employer.
Faculty consulting	Self-reporting of consulting activities and clients.
Collaborative research	<ul style="list-style-type: none">• Tracking of university/industry co-authored publications and patents.• Faculty reporting of university-industry collaborative projects.
Incubators	<ul style="list-style-type: none">• Track interaction between faculty and incubator companies.• Survey companies to quantify the impact of faculty interactions.
Research joint ventures	<ul style="list-style-type: none">• Count of and funding sources for university-industry RJVs.• Track resulting publications and technologies.
Research centers	<ul style="list-style-type: none">• Reporting of industry investment in research centers.• Count of university and private employment within the center.• Collaborations between faculty and partners.