Strategic Plan
PaSCoR  1998 - 2003
Strategic Map
PaSCoR

Mission: To facilitate, enhance and strengthen the undergraduate research and education program in SMET in the areas of GIS and Remote Sensing, facilitating opportunities for underrepresented minorities

Vision: PaSCoR will integrate Science and Engineering education with practical experiences to produce a more competitive professional to face the global challenge of the next millennium.

Objective A: To develop of new undergraduate interdisciplinary courses in areas such as remote sensing, geographic information systems and GPS.

Objective B: To develop an effective undergraduate research program integrated into the curriculum

Objective C: To develop partnerships to advise, support and provide guidance to undergraduate research and education program in SMET.

Objective D: To disseminate PaSCoR program results to the academic, industrial and government communities as a potential national model to enhance SMET.

Objective E: To develop and implement a project outcomes assessment strategy.

Strategy 1: Curriculum Development

Strategy 2: Undergraduate Research

Strategy 3: Partnerships

Strategy 4: Outreach

Strategy 5: Assessment
Substrategy 1: Develop new curriculums in Geology, Mathematics, ECE and Agricultural Sciences. This new approach will be exported to other disciplines.

Substrategy 2: Develop curriculums which comply with accreditation agencies.

Substrategy 3: Develop an outcomes assessment strategy for continuous curriculum quality improvement.

Substrategy 4: To design a curriculum integrating opportunities for application and hands on activities, balancing content with soft skills.

Action 1: Develop at least ten new courses

Action 2: Revise seven courses

Action 3: Establish the GIS/RS certificate

Action 4: Train participating faculty in curriculum innovation and assessment

Action 5: Motivate SMET faculty to incorporate GIS/RS topics in their courses through small grants
Strategic Map
PaSCoR

Strategy 2:
Undergraduate Research
Provide undergraduate research experiences to students throughout the curriculum to complement the academic experience

Substrategy 5: Research training for undergraduate students

Substrategy 6: Mentoring
Assign students to individual research mentors

Substrategy 7: Develop skills such as oral, scientific literacy, independent work and team work
Facilitate participation of undergraduate students in technical meetings

Action 6: Recruit a minimum of 35 freshman undergraduate students every year

Action 7: Assign students to individual research mentors

Action 8: Facilitate participation of undergraduate students in technical meetings

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Strategic Map
PaSCoR

Substrategy 1: To establish MOU’s with academic institutions, industry and government

Substrategy 2: Establish collaborations with existing programs

Action 1: Provide students projects
Action 2: Provide experts for lectures, seminars and workshops
Action 3: Provide summer internships for faculty and students
Action 4: Provide jobs and graduate studies opportunities
Action 5: To facilitate the continuation of research activities beyond the summer experience

Strategy 3: Partnerships
Create an Advisory Board and MOU’s for specific collaborations
Strategic Map
PaSCoR

**Substrategy 1:** Publications in peer review journals and presentation in local, national and international meetings

**Substrategy 2:** Dissemination of curricular materials

**Substrategy 3:** Develop and implement an assessment strategy to determine the critical success factors of the PaSCoR model

**Substrategy 4:** Outreach
Disseminate PaSCoR program results and the RS/GIS curriculum track and certificate

**Action 1:** Organize an Annual Meeting to present the abstracts of the papers to submitted or in the process to be submitted

**Action 1:** CD-ROM and WEB Page

**Action 2:** Preparation of poster, brochure and videos

**Action 3:** Offer workshops and presentations to stakeholders

**Action 1:** Generate new proposals using the PaSCoR model
Strategic Map
PaSCoR

Substrategy 1: Create an assessment team with stakeholders representation

Substrategy 2: Study project goals and objectives, develop criteria, assessment tools and performance indicators and schedule

Strategy 5: Assessment
Develop and implement an outcomes assessment strategy evaluate the project results in terms of its objectives
PaSCoR
Organization

Executive Committee

Researchers

Advisory Board

Research Projects

Consultation ➔ Direct action
PaSCoR
Advisory Board

- **University**
  - Andy Bernard, UTEP
  - Gerald Engel, Univ. Connecticut.
  - John Lamancusa, PSU

- **Industry**
  - Antonio Santiago Vázquez, CSA
  - Wayne Johnson, Raytheon

- **Government**
  - Rafael Rodríguez, USGS
  - Nestor Ortiz, Sandia National Laboratories
  - José Caballero, P.R. Planning Board

- **Mission:** To advise, support, provide guidance and project outcomes assessment in this new educational paradigm.
PaSCoR
Executive Committee

• Ramón Vásquez
• Lueny Morell
• Pieter Van der Mier
• Rosa Buxeda
• Josefita González
• Jorge Vélez-Arocho

Mission:
– To define the general guidelines of the project
– To plan, organize and execute
– To analyze the project results
PaSCoR
Researchers

• Hamid Parsiani
• Luis Jiménez
• Pamela Jansma
• Robert Acar
• Luis Olivieri
• Ramon Vázques

Mission:
– To identify the research needs
– To conduct the research
– To recruit at least five students from their depts.
– To mentor students
– To identify internships opportunities
– To place and monitor student internships
– Publish research results
– Identify further research opportunities
## PaSCoR
### 5 Year Implementation Plan

**Curriculum Development**

<table>
<thead>
<tr>
<th>Tasks/Milestones</th>
<th>Year</th>
<th>Person Responsible</th>
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</thead>
<tbody>
<tr>
<td>Develop Courses</td>
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<td>Pilot Test Courses</td>
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<tr>
<td>Institutionalize</td>
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<td>Lueny Morell &amp; Faculty</td>
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PaSCoR
5 Year Implementation Plan

Undergraduate research

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<th>3</th>
<th>4</th>
<th>5</th>
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<td>X----------------------------------------------------------------</td>
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<td>•Training</td>
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<td>P.R. AMP</td>
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## PaSCoR

### Partnerships

#### 5 Year Implementation Plan

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<th>3</th>
<th>4</th>
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<td>Create Adv. Board</td>
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<td>Annual Meetings</td>
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<td>Establish MOU’s</td>
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# PaSCoR
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### Outreach

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<th>Tasks/Milestones</th>
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<tr>
<td></td>
<td>Person</td>
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- **Publication of results**: X-----------------------------X PaSCoR Team
- **Home Page**: X-------------------------------X Jorge Vélez
- **Video**: X X Jorge Vélez
- **Brochure**: X X Jorge Vélez
- **Newsletter**: X-------------------------------X Jorge Vélez
- **Faculty meetings**: X-------------------------------X PaSCoR Team
- **Career Op. Fair**: X-------------------------------X Jorge Vélez, Josefa González
PaSCoR
5 Year Implementation Plan

Outcomes assessment

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<tr>
<th>Tasks/Milestones</th>
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<th>Person Responsible</th>
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<td>• Create Team</td>
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<td>Lueny Morell</td>
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<tr>
<td>• Study project goals and objectives</td>
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<td>Lueny Morell</td>
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<tr>
<td>• Develop criteria, indicators, and tools</td>
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<tr>
<td>• Establish schedule</td>
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<tr>
<td>• Assessment</td>
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<td>Lueny Morell</td>
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<tr>
<td>• Report</td>
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<td>Lueny Morell</td>
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# PaSCoR

## 5 Year Implementation Plan

### Organizational Management

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<td>• Partnerships</td>
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<td>• Outcomes Assessment</td>
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<td>• Co-Project Mgt.</td>
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<td>• Outreach</td>
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<td>Jorge Vélez-Arocho</td>
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