

Honda – OSU Partnership

Report of the Planning Team

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Introduction

Honda and The Ohio State University, through their proximity in Central Ohio and the substantial resources available to both of them, have a unique opportunity to form a Partnership in research and education that would be beneficial to both institutions as well as to the State of Ohio and the transportation industry. Honda and OSU have enjoyed close relations through the years in the form of collaborative research, specialized courses, and the employment of OSU student interns and graduates by Honda. An important component of this close interaction has been the Transportation Research Center (TRC), which is owned by Honda and managed by the OSU College of Engineering since 1988 as a very successful research and testing facility for the transportation industry. Through an initial agreement with Honda of America, Inc., the State of Ohio and the TRC Board, the surplus funds from TRC operation have been provided to the University in the form of endowments since 1988 to support transportation research in the College of Engineering. In October 2000, the Presidents of Honda of America Manufacturing and The Ohio State University signed a Memorandum of Understanding in order to establish a procedure for reaffirming the relationship in a way that will benefit both partners, the citizens of Ohio and the transportation industry. At the time this Memorandum was signed, an interdisciplinary planning team consisting of six members, three each from Honda and OSU, was appointed to analyze the existing relationship and prepare a strategic plan for enhancing the relationship between the two institutions.

The following is the strategic Plan prepared by the Honda-OSU Planning Team for education and research in transportation. For the purposes of this Plan, “transportation” refers to ground-based vehicles (automotive systems, including the design and manufacturing of), and systems thereof (such as traffic flow, networks, and inter-vehicle communication).

Honda – OSU Partnership

VISION

Honda and OSU will form a world-class, transportation-focused Partnership to create a synergistic relationship that demonstrably and measurably expands the educational and technical horizons of both parties.

MISSION

The Partnership will act as a steward to strategically define and sustain an environment that:

- Prepares the best engineers for the transportation industry;
- Promotes opportunities for continuous professional development; and,
- Enhances collaborative research,

in a manner that achieves the best use of available resources.

Guiding Values and Principles

We value

- Excellence in everything we do
- Global vision and diversity
- Being a leader in transportation research and technology
- Continual learning and sharing of knowledge
- Communication, respect, and mutual trust
- Teamwork and individual recognition

OBJECTIVE A

Enrich the climate and facilities for world-class, interdisciplinary transportation-related research.

OBJECTIVE B

Continually improve effective education and professional development for the transportation industry.

OBJECTIVE C

Enrich on-campus learning with perspectives from the transportation industry.

OBJECTIVE D

Increase the visibility of the Partnership.

STRATEGIES

1. Develop communication channels to enhance information flow between alliance partners, and to improve participation, knowledge, and understanding of each other's organization. [All Objectives]
2. Initiate a planning process for long-term facility development to improve the success rate of leveraged external equipment proposals (e.g., NSF). [Objective A]
3. Create and sustain centralized, world-class facilities to promote synergistic research by interdisciplinary teams. [Objectives A, C]
4. Develop mechanisms to depict OSU's capabilities to the broader Honda community for facilitating increased collaboration. [Objectives A, D]
5. Establish and maintain state-of-the-art distance learning facilities within the College of Engineering at OSU. [Objective B]
6. Expand OSU's distance learning curriculum and continuing education offerings in transportation-related areas. [Objective B]
7. Identify available expertise at Honda to enrich on-campus learning. [Objective C]
8. Promote student interest and involvement in transportation-related fields. [Objective C]
9. Promote educational and research activities of the Alliance to increase local and worldwide recognition. [Objective D]
10. Develop attractive professional development policies and support mechanisms at Honda which are conducive to higher participation and deepening of knowledge. [Objectives B,C]
11. Establish mechanisms for development and promotion of national and international conference and workshop activities. [All Objectives]
12. Utilize the Plan-Do-Check-Action cycle for all Partnership activities. [All Objectives]
13. Leverage our resources and capabilities to enhance transportation-related research and education. [All Objectives]

The Plan

Vision

Honda and OSU will form a world-class, transportation-focused Partnership to create a synergistic relationship that demonstrably and measurably expands the educational and technical horizons of both parties.

Mission

The Partnership will act as a steward to strategically define and sustain an environment that:

- Prepares the best engineers for the transportation industry;
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Objectives

- A. Enrich the *climate* and *facilities* for world-class, interdisciplinary transportation-related research.
- B. Continually improve effective *education* and *professional development* for the transportation industry.
- C. Enrich *on-campus learning* with perspectives from the transportation industry.
- D. Increase the *visibility* of the Partnership.

Strategies

1. Develop communication channels to enhance information flow between Honda and OSU, and to improve participation, knowledge, and understanding of each other's organization. [All Objectives]
2. Initiate a planning process for long-term facility development to improve the success rate of leveraged external equipment proposals (e.g., NSF). [Objective A]
3. Create and sustain centralized, world-class facilities to promote synergistic research by interdisciplinary teams. [Objectives A, C]
4. Develop mechanisms to depict OSU's capabilities to the broader Honda community for facilitating increased collaboration. [Objectives A, D]
5. Establish and maintain state-of-the-art distance learning facilities within the College of Engineering at OSU. [Objective B]
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7. Identify available expertise at Honda to enrich on-campus learning. [Objective C]
8. Promote student interest and involvement in transportation-related fields. [Objective C]
9. Promote educational and research activities of the Partnership to increase local and worldwide recognition. [Objective D]
10. Develop attractive professional development policies and support mechanisms at Honda which are conducive to higher participation and deepening of knowledge. [Objectives B,C]
11. Establish mechanisms for development and promotion of national and international conference and workshop activities. [All Objectives]
12. Utilize the Plan-Do-Check-Action cycle for all Partnership activities. [All Objectives]
13. Leverage our resources and capabilities to enhance transportation-related research and education. [All Objectives]

Initiatives

The following initiatives will be prioritized by the planning team and outlined in a realistic implementation schedule:

- a) Identify and initiate development of one or two top priority centralized laboratory facilities geared toward interdisciplinary transportation-related research activities.
- b) Develop a first class distance learning facility in the College of Engineering at OSU, with two-way communications links to Honda, while providing funds for immediate use (rent) and enhancement of existing facilities.
- c) Develop and implement plans leading to interdisciplinary proposal efforts for development of a federally funded research center in transportation-related areas (e.g., ERC, STC).
- d) Develop curriculum towards an Automotive Systems Engineering specialization program tailored to the needs of the transportation industry.
- e) Develop a program of short course offerings on state-of-the-art technologies of interest to the transportation industry for continuing education.
- f) Provide multimedia resources (outside of ordinary library purchases) at OSU to enhance transportation-related research and education.
- g) Establish a “Visiting Honda Chair” to attract top researchers for extended sabbatical visits and collaboration.
- h) Develop brochure and web page materials, including a mutual web-based sharing process, to promote Partnership activities.
- i) Develop a “theme conference” to be held at OSU in a cutting-edge transportation-related field.
- j) Initiate a regular series of “Honda Days” at OSU which showcases Honda to on-campus students.
- k) Initiate a variety of undergraduate student activities such as: award programs; “Honda Scholar Series” lectures to identified scholar undergraduates (on-campus ambassadors for Honda); an enhanced co-op program via increased Honda involvement; internships and scholarships; and, Honda participation in the College of Engineering Honors Program.
- l) Promote involvement of graduate students in transportation-related research through fellowships.

- m) Initiate activities to involve Honda engineers and researchers in OSU programs such as: co-advising graduate and undergraduate students; guest lectures; team-teaching courses; mentoring; serving on advisory boards and on university, college, departmental committee activities; out-reach programs; being a spokesperson for higher education/OSU; and, recruiting efforts.
- n) Develop a student newsletter aimed at increased student involvement in transportation related activities.
- o) Provide support for travel to establish new collaborative efforts with the broader Honda community.
- p) Prepare an inclusive list and arrange subsequent tours of existing Honda and OSU facilities [in conjunction with Initiative j]
- q) Provide “planning grants” for appropriate initiatives.
- r) Develop a process to begin May 1, 2001, by which the Planning Team reviews progress of the Plan, and provides recommendations for: interim adjustments of initiatives, future initiatives, and surplus fund allocations.

Performance Measures

- Level of external collaboration [Objectives A,B,C]
- Number of sponsored projects between Honda and OSU [Objectives A,C]
- Level of funding from outside [All Objectives]
- Number of graduates employed in the transportation industry [Objectives A,D]
- Number of distinct facilities developed, and participation level therein [Objective A]
- Quality of students attracted [Objectives A,B]
- Number of publications, invited lectures, leadership roles, and awards [Objectives A,B,D]
- Accomplish development of a world class distance learning facility [Objectives B,C,D]
- Participation level in student programs [Objectives B,C]
- Participation level in distance learning programs [Objectives B,D]
- Participation level at a Theme Conference and Workshops [All Objectives]
- Number of individual interactions of Honda employees at OSU [Objectives B,C]
- Number of OSU student internships and co-ops at Honda [Objective C]
- Number of student design projects focused on problems of interest to Honda
[Objectives B,C]
- Level of participation in “Honda Days” at OSU [Objectives B,C,D]
- Commercial applications of collaborative output [Objectives A,D]
- Development of promotional materials [Objective D]
- Positive exposure in local media and local events in sharing the Partnership story
[Objective D]

First Year Implementation of The Plan

It is clear that successful implementation of The Plan requires a commitment of human resources from both Partners. Thus, it is anticipated that Honda and OSU will work toward establishing teams to carry out the Plan initiatives. To facilitate this, and for proper review as the Plan unfolds, each member of the Planning Team shall act as a window to the other members (and therefore to Honda and OSU) in oversight of a set of initiatives.

The following recommendations are made for allocation of the current uncommitted TRC surplus funds, as Honda/TRC Funds, in the first year of the Plan:

- Earmark the uncommitted portion of the existing “Honda Endowment for Academic Enrichment” to support supplemental graduate stipends (bearing the Honda name) in attracting top new graduate students, and to support transportation-related undergraduate student activities focused on increasing Honda visibility.
- With the remaining uncommitted surplus funds, establish the “Honda/TRC Funds Endowment for Interdisciplinary Research Infrastructure Support (IRIS)”, to which funds may be added in the future, to support centralized interdisciplinary research laboratory facilities.
- Installments of the loan taken from the current year’s TRC surplus funds (“Engineering College Special Fund for Honda R&D West Campus Lab”) are to be added to grow the IRIS endowment.
- Improve existing distance learning facilities, and initiate planning for new facilities in the College of Engineering (a modest new room in the short term, and a first-class larger facility in the long term) in order to immediately scale up distance learning activities with Honda.