

Excerpts from 5 Year Plan for the Edison Tech Center

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February 2013

Preface:

Five years from now gasoline will be more expensive, there will be fewer schools in the Capital District, and fewer teachers, the President of the United States will be in his second year in office, but what will the Edison Tech Center be?

This document presents a probable future for the Edison Tech Center five years from now (2018), and outlines milestones along the way. The author acknowledges that other outcomes are possible, and hopes that this plan leads to constructive discussion and action.

Synopsis:

Five years from now the Edison Tech Center will be a member-governed organization, with the same mission as now, operating out of the same buildings as now, with a growing membership and with sustainable financial revenue.

Operational Plan:

Location:

For the last eleven years (since mid 2001), a considerable amount of time has been spent discussing locations for the Edison Tech Center. Since 2005, with the acquisition of buildings on North Broadway, a lot of time and money has been spent on locating a larger space, more suitable for the goals of the organization. In spite of all of that effort, it is the author's view that there is much planning and analysis still needed prior to relocating the Edison Tech Center operations. **ASSERTION 1:** Even if the Edison Tech Center were today to be given the building which would satisfy all the location criteria, the Edison Tech Center operations would take a year to relocate. **ASSERTION 2:** The Edison Tech Center has not completed a financial analysis of the requirements necessary to sustain this new location. **ASSERTION 3:** It is highly likely that extensive repairs and construction will be necessary at the new location, prior to its use for Edison Tech Center operations.

Therefore, the author believes that it is improbable that the Edison Tech Center will be moving out of North Broadway within the next five years. During that time the following actions are recommended:

ACTION 1. Change the short-term mentality concerning the use of space in the current buildings. Organize the buildings for productive use of space – with priority given to achieving Edison Tech Center goals. (YEAR 1)

ACTION 2. Weatherize the North Broadway buildings. Knowing that the Edison Tech Center will be occupying the North Broadway buildings for five more years makes it easier to calculate the cost benefit of improvements to the buildings. With a utility bill in excess of \$15,000 each winter, heating has been a substantial percentage of the Edison Tech Center's annual expenses. (YEAR1)

ACTION 3. Develop plan for Logistics of North Broadway buildings. With the planned opening of the Mexican restaurant this year, a plan needs to be developed and agreed upon regarding parking, garbage, and snow placement. (YEAR1)

ACTION 4: Analyze new location for Logistics issues, such as bus parking, snow removal, icing and water runoff. (YEAR2)

ACTION 5. Rent space at new location, as a low risk method of familiarizing staff with new location, and any potential issues prior to ownership. (YEAR2 and YEAR3)

ACTION 6. Develop sustainable financial model for new location. (YEAR2)

ACTION 7. Gather data on construction expenses and schedules for new location. (YEAR4)

Governance:

Sustainable governance of the Edison Tech Center is by definition essential to its survival. ASSERTION 4: The current governance model of the Edison Tech Center is unsustainable.

ACTION 8. Develop a large community committed to the Edison Tech Center's mission and principles. (YEAR1 and YEAR2)

ACTION 9. Transition the governance of the Edison Tech Center from privately-selected Board of Directors to member democratically-elected Board of Directors. (YEAR3)

Mission:

Appendix A has some of the various mission statements which the organization has developed through the years. In the author's opinion, the mission of the Edison Tech Center is to promote engineering. The means that the Edison Tech Center implements this mission are:

- 1) By being a role model – using engineering for Edison Tech Center goals.
- 2) By offering educational materials – the Oral History program, the artifacts, and the videos are all part of preserving knowledge, an important part of education.
- 3) By fostering community – the future of engineering depends on there being practioners: complexity theory suggests that progress will only come through collaboration of diverse fields.
- 4) By providing resources and opportunities for the public to design and engineer for themselves, for the Edison Tech Center, and for the world.

These aspects of the mission will be manifest through the Edison Tech Center programs and events.

Programs and Events:

The Edison Tech Center can help create its identity with a set of well-marketed, mission-focused activities. The author proposes the following:

- 1) Commitment to regular activities. Workshop Fridays and Career Saturdays are examples of this.
ACTION 10. Continue workshop Fridays and Career Saturdays. (YEAR1, YEAR2, YEAR3, YEAR4, YEAR5)
- 2) Involvement in larger national events. The Maker Faire in NYC is a good example of this.
ACTION 11. Enroll in the Power Racing Series at the Maker Faire in NYC. (YEAR1, YEAR2)
ACTION 12. Compete in the Power Racing Series in Chicago and NYC (YEAR3, YEAR4, YEAR5)
- 3) Organization of national and international events. Conference organization and Convention organization are examples of this.
ACTION13. Organize a Conference for a Section of the SPIE or the IEEE. (YEAR3, YEAR4, YEAR5)
- 4) Outreach programs. The Lampkin Collection and other parts of the permanent collection could be an example for this.
ACTION14. Start an outreach program with the Lampkin Collection. (YEAR1, YEAR2, YEAR3, YEAR4, YEAR5)
- 5) Public Involvement in Edison Tech Center projects. Building the internal resources of the Edison Tech Center (like building a laser cutter) would be an example of this.
ACTION15. Do it (YEAR1, YEAR2, YEAR3, YEAR4, YEAR5)
- 6) Train the trainer activities. Teacher workshops, and engineering tool training are examples of this.
ACTION16. Start finding champions in school administration (YEAR1)
ACTION17. Become certified for Continuing Education Credits (YEAR2)
ACTION18. Offer courses (YEAR3, YEAR4, YEAR5)

Identity:

The perception of the Edison Tech Center identity is mixed, and that has created an impediment for the Edison Tech Center to accomplish its mission. Some people believe that the Edison Tech Center is a history museum. Some people think that the Edison Tech Center is a school. Some people think that the Edison Tech Center is a Science Museum. Some people think that the Edison Tech Center is an appraisal service for old artifacts. Metroplex thinks that the Edison Tech Center is a blight on the landscape of downtown Schenectady without the focus, finances, or involvement to get anything done. Wayne Nelson, who instructed a weeklong training course at the Edison Tech Center said that he would tell his friends about the “museum of interesting junk”. While the Edison Tech Center may not be able to change these opinions overnight, the following is suggested:

ACTION19. Beautify the buildings. (YEAR1, YEAR2)

ACTION20. Always assert the identity of the Edison Tech Center as being related to Engineering. (YEAR1, YEAR2, YEAR3, YEAR4, YEAR5).

ACTION21. Be able to explain the difference between the Edison Tech Center's mission and the mission of MiSci. (YEAR1, YEAR2, YEAR3, YEAR4, YEAR5)

ACTION22. Be able to explain the difference between the Edison Tech Center's mission and the mission of the Schenectady County Historical Society. (YEAR1, YEAR2, YEAR3, YEAR4, YEAR5)

ACTION23. Be able to explain the relationship between the Edison Tech Center and the Tech Valley Center of Gravity or the Capital District Makerspace. (YEAR1, YEAR2, YEAR3, YEAR4, YEAR5)

Collaborations:

ACTION24. Pursue collaborations with similar organizations around the world, ie. The Tech Museum in Silicon Valley. (YEAR1, YEAR2, YEAR3, YEAR4, YEAR5)

ACTION25. Pursue collaborations with complementary organizations in the region, ie. MiSci, Glenville Aerospace Museum, etc. (YEAR1, YEAR2, YEAR3, YEAR4, YEAR5)

Finances: Contact Edison Tech Center for more info.

Staff:

All the consultants hired or consulted by the Edison Tech Center have recommended adding staff to ensure that the Edison Tech Center mission and goals are carried out. The reasoning is that paid staff will be more reliable and committed than unpaid volunteers. Present experience has shown that staff satisfaction is directly connected to expectations of the job.

ACTION28. Develop a financial model for the next five years establishing the availability of funds for staff expenses, taking into consideration such items as mandatory health care coverage, etc. (YEAR1)

ACTION29. Develop clear job requirements for all positions, both paid and unpaid. (YEAR1)

Appendix A. Mission Statements

Mission Statement (from Guidestar (articles of incorporation)):

To construct, own & operate one or more centers for the dissemination of scientific knowledge to the public, the public appreciation of scientific discovery, and or the provision of interactive displays to the public.

Mike Whelan's Mission Statement (from newsletter/website):

The Edison Tech Center celebrates the past, present, and future of engineering:

Engineers have built our world, and the Edison Tech Center stands as a tribute to the men and women who have a passion for tinkering, experimenting, and inventing. The center is a resource for learning both online and on-site. The center is located in the historic Mohawk and Hudson Valley region - one of the centers of North America's engineering legacy.

The hands-on tactile experience is a very important part of the Center's mission. The greatest engineers of humanity began with an interest of tinkering and hands-on experimentation. The center provides access to incredible artifacts of technological history in the dynamic "engineer's workshop". This year there will be some exciting new events and programs both on site and accessible via the internet.

Mission Statement (from The Edison Tech Center: A Signature Institution for Engineers and STEM learning):

The Edison Tech Center strives to inspire a new generation of engineers by providing an authentic learning experience that:

Imparts an understanding of electricity

Encourages critical and creative thinking about how things work

Fosters an appreciation of the role of engineering in the evolution of technology and everyday life.

Mission Statement (from Bentz Group):

The ETC strives to inspire a new generation of engineers by providing an authentic learning experience that imparts an understanding of electricity, encourages critical and creative thinking about how things work, and fosters an appreciation of the role of engineering in the evolution of technology and everyday life.

MISSION Statement (from Samatulski Strategic Plan):

The Edison Tech Center provides a unique interactive learning experience that imparts an understanding of engineering, encourages critical and creative thinking, and fosters an appreciation of engineering as essential in the evolution of technology and everyday life.

With a growing world-wide audience that includes students, engineers, and the general public, the Edison Tech Center strives to inspire a new generation of engineers.