a greener welcome

CASE STUDY

National Transportation Alternatives Clearinghouse
A Greener Welcome
by Kyle Lukacs

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On October 7, 2010, the Indiana Department of Transportation (INDOT) shut down a six-mile stretch of I-70 from Indianapolis International Airport to downtown Indianapolis (I-65/I-70 south split). Frustration and disappointment are emotions familiar to many users of the nation’s highway system. Over the past 50 years, the signature accomplishment of building the Interstate network has been shadowed by the bitter experiences of many local communities, who have discovered that the traditional transportation infrastructure planning process is costly, technocratic, and often produces unintended harmful externalities. The I-70 closure, however, was cause for celebration. That day marked the culmination of a holistic, community-driven planning process that leveraged Federal Transportation Enhancement (TE) funds and substantial private dollars to retrofit the major highway entrance to the city of Indianapolis to create A Greener Welcome.

Our nation’s Federal-aid highways are built in conformance with a broad array of national standards and Federal requirements. For example, Section 106 of the Historic Preservation Act requires the consideration of the potential impact of projects on areas listed on, or eligible for, the National Register of Historic Places. The National Environmental Policy Act (NEPA) requires environmental reviews for transportation projects, and the Davis-Bacon Act requires local prevailing wages be paid on all Federal-aid highway projects. Beyond these minimum standards for our infrastructure, local communities have far greater hopes for the performance of the transportation system.

The Transportation Enhancements Program (TAP) was first authorized through the Intermodal Surface Transportation Efficiency Act of 1991 and was reauthorized through two subsequent acts with minor revisions. With the enactment of the Moving Ahead for Progress in the 21st Century Act (MAP-21) in July 2012, the Transportation Enhancement activities were recast as Transportation Alternatives and several categories were eliminated or redefined. The Transportation Alternatives (TA) were combined with the Recreational Trails Program, Safe Routes to School Program, and the ability to construct boulevards from former divided highways to create the Transportation Alternatives Program. The Transportation Alternatives Program supports the creation of infrastructure that is holistically integrated with social, economic, and environmental systems. Such infrastructure not only more effectively meets the travel needs of a community, but is a source of community pride.
The best TA projects are distinguished by both a lasting effect on communities and the engagement of the community itself in the project development process. During the project known as *A Greener Welcome* throughout Indianapolis, members of the community worked together to produce a new identity for their community. Keep Indianapolis Beautiful, Inc. (KIB) originally applied for TE funds through the City of Indianapolis to redefine Indianapolis’ bland landscape and add native species to transportation right-of-way along I-70 and I-65. Unbeknownst to KIB, the entire project was along INDOT right-of-way, which made the City of Indianapolis ineligible to administer the project. Recognizing the potential of this project, INDOT assumed the responsibility of administering *A Greener Welcome*. KIB also reached out to local neighborhoods, major local employers, Eli Lilly and Company, and many other public and private entities to collaborate on such a large scale project.

The whole concept initially came from the neighborhood level as a way to enhance the first impression of these parts of the city. The project’s goals were simple: locals envisioned a retrofit of the existing stretch of highway and five interchanges that connect the Indianapolis International Airport and the city’s downtown area. More than cosmetic, the ambitious vision had the potential to rejuvenate the image of Indianapolis by creating a better first impression, strengthening relationships with communities located along the highway, decreasing maintenance costs for the right-of-way, showcasing Indianapolis as a culturally vibrant city, and making the city more environmentally welcoming. With the help of Federal TE funds administered through the Indiana Department of Transportation, generous donations, and partnerships with members throughout the Indianapolis community, the project took shape.
As a result of the changes made through the 2012 MAP-21 authorization, the scope through which this project was eligible changed. Under the Transportation Enhancements program, “Landscaping and Other Scenic Beautification” was eligible as a category 5 project. The Transportation Alternatives definition eliminated this category but replaced it with “Community Improvement Activities” which among other things mention vegetation management practices in transportation rights-of-way to improve roadway safety, prevent against invasive species, and provide erosion control. Any Federal-aid highway project may include landscaping and scenic enhancement features as part of construction according to 23 U.S.C. 319. For any projects selected through a competitive process, the addition of landscaping and scenic enhancement features can enrich TAP projects. Many lessons can be learned by the way KIB, Inc. managed this project.

*A Greener Welcome* has best practices to offer for all types of TA projects. These lessons provide nongovernmental organizations, community groups, and other project cosponsors with guidance on acquiring and using TA funds to their fullest potential. Prospective applicants, current project cosponsors, and interested parties will learn methods for engaging the local community to create a successful project.

This brief:

- Examines Community Improvement Activities such as vegetation management under MAP-21’s Transportation Alternatives Program;
- Considers the role of nongovernmental organizations (NGOs)—in this case, KIB—in facilitating the implementation of community-based Federal-aid projects with eligible project sponsors;
- Highlights strategies for drafting a successful TA project application;
- Explores the partnerships and teamwork between private businesses, INDOT, and other organizations that enabled the success of this project;
- Demystifies innovative finance including volunteer labor, donations, and other options for assembling a local match; and
- Addresses long-term maintenance issues related to TA projects.
Community Improvements Activities: Vegetation Management

A Greener Welcome was funded through the Landscaping and Scenic Beautification category of the Transportation Enhancements Program. This category was refined by MAP-21 to cover community improvement activities which include vegetation management practices, the management of outdoor advertising, historic preservation and rehabilitation of historic transportation facilities, and archaeological activities related to the implementation of any title 23 transportation project. Vegetation management projects specifically are designed to improve roadway safety, prevent against invasive species, and provide erosion control in transportation rights-of-way. The goals of A Greener Welcome were to create a beautiful entryway to the city to captivate travelers and leave a better impression through a vegetation management project.

A Greener Welcome is the revegetation of five interchanges along a major stretch of highway in downtown Indianapolis. The project was funded through $1,000,000 in Transportation Enhancement funding as well as an additional $1,000,000 in local match funds which Eli Lilly and Company donated. Each interchange received an influx of native vegetation to create a more inviting roadside experience. Volunteers planted more than a dozen different trees including honey locusts, Kentucky coffeetrees, and quaking aspens. The project also installed native shrubs such as sumacs and red-twig dogwoods along with eleven different perennials.

Successful vegetation management projects help to maintain the natural environment and reduce maintenance costs. Native plants and grasses often have deep root systems which help to stabilize slopes, control erosion, suppress invasive species, and also help to mitigate stormwater. Mitigating stormwater runoff with native plants is often less expensive than building separate stormwater management infrastructure and successfully improves infiltration and water quality. Additionally, water is less likely to
freeze or cause hydroplaning if it is absorbed into the ground right away. The use of native plants adapted to a region’s climate requires significantly less maintenance than exotic species. Reduced mowing or chemical spraying as a result means a more efficient use of maintenance staff time and less exposure to hazardous work environments while decreasing fuel consumption, chemical use, and pollution overall. Native grasses such as prairie grasses trap snow which keeps roadways clear and reduces snow glare. There are numerous ways in which native plants can reduce maintenance costs and help mitigate environmental issues.

In addition to the practical uses of native plants, they also happen to add beauty to the natural landscape along a roadway user’s route. According to the Federal Highway Administration’s (FHWA) Environmental Review Toolkit, native plants help achieve a “look that reflects your State’s natural heritage, regional differences, and natural beauty that highway users travel to see and all take pride in.” Although this is not necessarily the goal of vegetation management projects, it is a desirable benefit. The Environmental Tool Kit also says, “in the end, if the result happens to look pretty, the goal of beautification has also been achieved.” Vegetation can also be used to shield undesirable views or objects from roadways. Native plants help to diversify roadides with color which helps to improve driver concentration and safety.

All aspects of A Greener Welcome are still eligible as a community improvement activity vegetation management Transportation Alternatives project. The use of only low maintenance native plants helped remove approximately 18 acres from the INDOT maintenance schedule. Eleven acres within INDOT right of way were naturalized with grasses and plants which require less frequent mowing, saving INDOT money. The remaining acreage is classified as “no mow” as the plants selected for it are recognized for their appeal as they mature. In total, approximately 16 semi-truck loads of trees, 24 semi-truck loads of other plant material, 206 dump truck loads of soil, and 206 dump truck loads of mulch helped to removed 17,000 net pounds of CO2 from the atmosphere in the first year alone. This successful vegetation management project also happened to transform the I-70/I-65 corridor into a welcoming and memorable entrance to the city of Indianapolis.

Three different public art installations were commissioned to help further create a sense of place at each interchanges along I-70. At the Harding Street exit, 9 13-foot-tall totem poles designed by Jason Bord were installed. Shi-Fen Liu, a Master of Fine Arts Sculptor at the Herron School of Art designed ten lotus leaves of different sizes which were installed near West Street. Biagio Azzarelli designed a sculpture called “Life Evolving” which depicts a molecule of ribonucleic acid or RNA, this was installed at the Meridian Street interchange. Other public art was installed prior to A Greener Welcome as well. For A Greener Welcome, the $1,000,000 local match Eli Lilly provided funded the public art. Newer Transportation Alternatives Projects may include public art under community improvements activities so long as the project is proposed by an eligible project sponsor and selected through a competitive process.

Project Breakdown

- 1,614 Trees
- 995 Shrubs
- 71,309 Perennials
- 6,172 Yards of soil amending
- 2,658 Yards of mulch

Find out about native species in your state!
www.environment.fhwa.dot.gov/ecosystems/veg-mgmt_rdsduse.asp
Community Engagement: The Potential of NGOs as Project Cosponsors

What is an NGO?
A nongovernmental organization is a private non-profit entity with an association that is based on the principal interests of its members, individuals, or institutions. NGOs primarily serve a public purpose instead of private profit and often work closely together with governments to promote the public interest.

Non-governmental organizations (NGOs) can serve vital organizational, planning, and coordination functions as cosponsors of Transportation Alternatives projects. As the cosponsor of the 2009 TE application with the City of Indianapolis, the NGO Keep Indianapolis Beautiful (KIB), Inc. was entrusted with certain duties according to State regulations at the time. KIB was financially responsible for providing the local match, funding any cost overruns, providing all associated monthly utility costs where applicable, and providing long-term maintenance for the project. KIB also provided design concept input, reviewed and accepted design plans, and chose plant materials applicable to the site. Assuming these burdens from INDOT was a critical step in allowing the project to proceed. The capacity of well-established NGOs to handle risk and responsibilities can complement busy local governments.

Under the Transportation Alternatives Program, nonprofits generally are not eligible as direct recipients of funding but may still apply in conjunction with other eligible entities if State or local requirements allow. MAP-21 synchronized Federal policy with Indiana’s State policy. According to 23 U.S.C. 213(c)(4)(B), the following entities are eligible project sponsors:

- local governments;
- regional transportation authorities;
- transit agencies;
- natural resource or public land agencies;
- school districts, local education agencies, or schools;
- tribal governments; and
- any other local or regional governmental entity with responsibility for or oversight of transportation or recreational trails (other than a metropolitan planning organization or a State agency) that the State determines to be eligible, consistent with the goals of this subsection.

Requiring NGOs to apply for funding through these entities ensures that these groups are working through partners who are familiar with government regulations and procedures and are legally able to enter into contracts with a State department of transportation. This relationship helps alleviate the potential challenges of working with NGOs and ensures that the public investment is completed by the Local Planning Agencies (LPA) and Metropolitan Planning Organizations (MPO) partners.

KIB played a central role on A Greener Welcome, organizing and coordinating with many of the parties involved. The main partners of the project were Eli Lilly and Company (Lilly) and the Indiana Department of Transportation (INDOT). Other participants in the project included the Indianapolis Department of Public Works (IDPW), Indianapolis Metropolitan Police Department (IMPD),
Indiana State Police (ISP), the Basile Center for Art, Design, and Public Life at the Herron School of Art and Design, and many local businesses. NGO project cosponsors can effectively reach out to the public, private, and educational sectors to build successful partnerships. A substantial part of KIB’s role was their ability to provide a flexible approach and a neutral table at which to gather all project stakeholders.

### 27 out of 51 states in the NTAC database contain NGO cosponsors

**Highest NGO use:**
- Pennsylvania — 32%
- New York — 10%
- Vermont — 8%
- Virginia — 8%

**Most common NGO Sponsors:**
- Historic Preservation groups — 35%
- Economic Development Groups — 16%
- Trail Associations — 15%
- Conservation Groups — 15%

**Most popular TE categories:**
- Category 7 — 20%
- Category 1 — 18%
- Category 8 — 17%

Average Match rate: 30% among NGO sponsors
Creating a Successful Application

Try a wide variety of sources to secure the local match by speaking with businesses, nonprofits, and local governments. Fundraising and innovative financing can also help provide the local match.

Early discussions bring major conflicts to the forefront in time to make changes to the project. Additionally, any inconveniences caused by the project construction are known to the public ahead of time, minimizing potential hostility toward the project.

Demonstrate Public Support through:
• Letters of Support
• Petitions
• Meetings
• Secure Local Match

Developing a high quality, persuasive project application that is likely to be selected requires care, attention, and time. Planners want projects that make a large impact, are in demand, and have low perceived risks. Applications are looked upon favorably when they have a secured local match, demonstrate local support, and show a relationship between the project and surface transportation.

Having the local match secured shows that a project is serious and that the project sponsor has been able to focus efforts on other parts of the planning process. As a result, applications without a local match look far less favorable. For A Greener Welcome, KIB partnered with major local employer and pharmaceutical firm Eli Lilly and Company, whose $1,000,000 donation provided the entire local match and 50% of total project costs.

Garnering public support for a project begins early in the development phase and helps highlight the demand for the project. Although the idea for vegetation management along I-70 floated around Indianapolis for more than 30 years, KIB only moved forward with the project after meeting with the West Indianapolis Development Corporation and the Concord Community Development Corporation, the two community groups representing the neighborhoods surrounding the project. These meetings confirmed the interest of the communities to proceed with the project and allowed for open communication and collaborative design. Both of these organizations submitted letters of support along with the TE application. KIB sought the support of the development corporations and neighboring communities early on so that the project would truly reflect community wants and needs.
Partnerships and Community Involvement

The level of collaboration between public and private organizations on *A Greener Welcome* was a key component of the success of the project. Mark Adler of KIB, commenting on the strength of the partnership, said, “to hear 30 year veterans of INDOT and other public entities say that this was the best day of their career was truly transforming and amazing.”

Partnerships between INDOT and Eli Lilly and Company contributed to the success of the project. In the developing stages, engineers planned to partially close down the highway so that volunteers could work. Subsequently, INDOT engineers suggested shutting down the highway completely, recognizing that separating volunteers from traffic increased costs and the exposure of volunteers to danger. This created another opportunity: while the volunteers worked, INDOT performed tests and maintenance on the highway. INDOT workers inspected, tested, and repaired bridges, filled in potholes, and fixed other pavement issues. A local towing company donated its time and removed abandoned cars.

Private sector partnerships made the difference between success and failure. *A Greener Welcome* served as Eli Lilly and Company’s 2010 Global Day of Service. 8,250 volunteers on behalf of Lilly were joined by an additional 250 volunteers from interchange adopter companies. KIB also involved local businesses in project planning and purchasing decisions. The project included over 1,600 trees and 72,000 plants and shrubs from nurseries located in Indiana. When securing estimates for other goods, KIB explained the project and its community impacts, convincing many businesses to discount their prices.

KIB used art to build goodwill for the project and to engage the community. In lieu of commissioning art from a professional, for which KIB had little experience, KIB solicited guidance and community input.
from the Basile Center for Art, Design and Public Life at the Herron School of Art and Design in Indianapolis. The center had two artists who had previously done work within the city and had the capacity to build the art. KIB showed masters students the potential art locations and invited them to submit proposals for the project. Together INDOT, KIB, landscape architects, engineers, community members, and members of the art community reviewed the proposals to find two that were safe within the highway setting (by looking at the impacts on drivers) and represented the community well. KIB commissioned a third piece of art from a local sculptor. This approach drew on the knowledge and expertise of the school, helped to acquire art at a reasonable price, and helped local artists and students realize the opportunities available to them in Indianapolis.

In addition to beneficial partnerships with INDOT and private businesses, State and local municipal groups fulfilled necessary roles. Project funds paid off-duty officers from both the IMPD and the ISP to assist with project implementation. Fifty-five officers closed the highway and interchanges, directed traffic, and reduced the burdensome effects of the improvement efforts for travelers and commuters. The IDPW also contributed their services to this project, providing cones and barricades to close interchanges and message boards and arrow signs to redirect drivers. The Metropolitan Police Commander monitored traffic issues on streets throughout the city to ensure traffic moved smoothly.

**Legal Barriers**

Working with a government agency presents certain legal challenges for NGOs. For example, INDOT requires anyone who submits a bid under a public works contract or does any work under a public works contract to have a formal drug testing policy in place. The drug testing policy must meet the standards outlined by INDOT to test for certain drugs, with a certain frequency, and with certain penalties. While it was not difficult for KIB to add a formal drug testing policy to its employee handbook, it is an example of the regulatory difference between the public and private sector.

KIB also needed to adjust to public sector standards in making business decisions. While private sector decisions are often agreements, public sector decisions typically come in the form of contracts. NGOs need the resources to review, draft, and finalize such necessary contracts. A KIB project partner provided 40-50 hours of legal services preparing contracts for *A Greener Welcome*. 
A Greener Welcome used volunteer labor to help complete the landscaping and installation of plants alongside I-70. The 8,500 volunteers from Lilly and other companies planted native trees, plants, shrubs, and spread mulch and soil over two 4 hour shifts. Without the work of these volunteers, the project would have faced much higher project costs.

In the case of A Greener Welcome the project sponsor did not seek to count volunteer work towards the local match thanks to a generous donation by Lilly. If the sponsor did seek to include the cash value of the donation towards the local share of costs, it would be through a process similar to the following:

1. State identifies candidate project for match.
2. State identifies non-Federal funds or materials for match.
3. FHWA reviews proposed match and valuation and approves match.
4. Non-Federal funds or materials are used on project, documented, and then applied as match when state submits billing invoice for progress payments.
5. FHWA reimburses Federal share of costs.
Transportation Alternatives funds generally cannot be used for long-term maintenance of TA projects. Projects such as A Greener Welcome, with tens of thousands of plants and shrubs, typically require time-consuming and expensive continual maintenance. KIB partially addressed this problem by using low-maintenance native plants. For the additional maintenance, KIB mimicked a program started in Chicago called the Chicago Gateway Green. The program, similar to an Adopt-A-Highway program, requires companies to pay money to KIB who then contracts a professional landscape company to maintain the spaces. In exchange, the agreement gives the adopter recognition and KIB the ability to keep the areas landscaped. Of ten interchanges landscaped during the project, nine have five year commitments from companies to pay for maintenance and landscaping costs.
Conclusion

An enhancement project designed to instill civic pride and welcome visitors and residents achieved much more than that. The lasting effects are significant: INDOT has received calls from across the State about how to complete other similar vegetation management and interchange enhancement projects; the bond between the State and Metropolitan Police Departments was strengthened; and the community was challenged to be more open and think outside the box about what it was capable of achieving.

*Greener Welcome* is a project that citizens throughout Indianapolis and Indiana can be proud of. The successful partnership between Eli Lilly and Company, the Indiana Department of Transportation, Keep Indianapolis Beautiful, Inc., and many other community organizations demonstrates the ability of public and private entities to work together and provides guidance for future projects.