

Task Seven: Governance & Implementation

In this task, the team developed an understanding for the mechanisms, processes, and governance which make implementation of the vision for the White River Vision Plan possible. The team evaluated organizational structures, phasing, costs, and other steps that guide the two-county vision toward realization in the next twenty years.

The following pages detail our understanding of the governance and implementation strategies for the river.

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TASK SEVEN: GOVERNANCE AND IMPLEMENTATION

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Project Implementation

Regional planning efforts, like this two-county vision for the White River, are implemented through the steady and incremental accrual of projects, programs, policies, and the steadfast commitment and collaboration of dedicated communities and staff. Implementation of the White River Vision Plan requires leadership, capacity, and funding. Its success will grow from the combined ability to sustain momentum from the vision plan, deliver on some key early catalytic projects, and maintain patience for the development of long-term infrastructural change.

The governance strategy for the plan lays out the premise that implementation will result from a combination of overarching leadership that knits together initiatives for the full river corridor as well as "ground up" projects led and implemented by local municipalities that each build toward a greater whole. An achievement for one community is ultimately a "win" for the full White River study area. A great measure of success for the White River Vision Plan would be for this two-county plan to expand and encompass other areas of the White River as well, building stewardship, enthusiasm, and political will beyond Marion and Hamilton Counties over time.

The White River Vision Plan is a community-supported plan that was developed through extensive public engagement and consensus building. As the plan is implemented and capital projects are realized, it is important to continue this genuine engagement with the surrounding neighborhoods. This community engagement can be done as a collaborative effort between the individual municipalities and the future overarching governance entity.

The plan provides direction on implementation in several forms, with a focus on governance and a costing toolkit. Given the large scale and scope, it is important to maintain flexibility in terms of the sequence of capital improvements to allow each municipality to develop its own priorities and to support the alignment of actions with future funding availability. The following sections describe important implementation considerations in detail: 1) Barriers to be aware of, including permitting, regulations, and environmental issues; 2) Governance recommendations; and 3) Costing assumptions for fundraising and budgeting purposes.

Barriers to Implementation

Various constraints have the potential to impact project implementation as it relates to capital improvements. These generally relate to federal, state and local permitting; utility relocations, and environmental considerations. As indicated in the Task One "Report Permitting Review" section, due diligence related to permitting requirements needs to take place early in program development for each project.

Permitting

At the most basic level, any land disturbance or earthwork activity in the floodway requires permitting. Early coordination with permitting agencies during preliminary project design and planning will help the permit process go more smoothly, and assist the community in making design adjustments that will aid in permit acquisition.

The primary benefits of early coordination and responsiveness to agency concerns will be to expedite permitting later in the design and implementation process. For instance, Indiana Department of Natural Resources, Construction in a Floodway (CIF) permits

generally take six months for approval with early agency coordination. Projects that require a CIF permit and either do not engage early coordination or have project elements at variance with agency requirements can take in excess of one year to receive and require extensive mitigation.

Federal Section 404 and Indiana Section 401 Water Quality permits are complementary; this means that projects requiring a Section 401 permit will also require a Federal Section 404 permit. Both the Indiana Department of Environmental Management (IDEM) and the U.S Army Corps of Engineers (USACE) encourage applicants to meet at the project site with both agencies early in the design process to discuss the project, potential impacts, and agency concerns. Prior to this meeting, environmental due diligence should be completed, identifying waters of the U.S., wetland areas, and endangered or threatened species. This coordination meeting is invaluable in helping applicants to minimize or avoid impacts associated with a project.

Projects with minimal impacts on water quality will require Regional General Permits (RGP). Section 401 and 404 RGP's are governed by a Memorandum of Understanding between

Indiana and the USACE. Section 401 and 404 permit mitigation requirements are discussed in the Permitting Review discussion in the Task One Report. It is very beneficial to keep potential impacts on water quality below RGP thresholds. Projects requiring Section 401 and 404 RGP's should be allocated a six-month timeframe to secure permits. It is important to identify and provide for mitigation when the permit is submitted. For larger projects that are unable to keep water quality impacts within RGP thresholds, Individual Section 401 and 404 permits will need to be acquired.

Since there is not a Memorandum of Understanding between the state and USACE for Individual Permits, much greater scrutiny and project review is required by the permitting agencies, which extends permit review times. It is not uncommon for Individual Permits to take in excess of one year for approval. Once permits are received, applicants generally have up to two years to complete construction of the project. If projects cannot be completed within the permit window, time extensions be granted with prior notification.

Other permits that are required for capital improvement projects include IDEM Rule 5 Erosion Control permits and local permits. In Indiana, projects that disturb one acre or more of land are required to demonstrate that adequate erosion control measures are in place before construction starts; however, Marion County has a more stringent half-acre permit threshold. Rule 5 permits require the submission of Stormwater Pollution

Prevention Plans (SWPPP) for approval by IDEM. These permits have a thirty-day review period, including review and approval by the county Soil and Water Conservation Department or MS4 coordinator prior to submission to IDEM for final approval.

Local drainage permits in Marion and Hamilton Counties regulate water quality and water storage for new projects. Generally, these permits require new projects to limit post-construction water runoff to current undeveloped rates and require potential waterborne pollutants to be filtered out on-site prior to off-site release. In Marion County, the most recent zoning ordinance revision requires existing vegetation within sixty feet of the top of stream banks to be maintained, to encourage shading of stream corridors, enhancing stream habitat. For tree clearing that may be required, there are tree replacement mitigation requirements.

Environmental

Anticipated Issues

Many urban sites along the White River in Indianapolis and Hamilton County have an industrial past and are already environmentally degraded to varying degrees. This includes degradation of on-site soils, groundwater, and, potentially, air quality. The presence of degraded sites near the White River and its sensitive environmental character present significant potential to continue to impact the White River environment. There are a wide

variety of potential environmental remediation solutions depending on the type of chemicals present, potential groundwater movement, and the type of proposed development. Prior to purchasing property for development, parcels that are potentially degraded need to have environmental investigations completed. Additionally, the use of public funds requires that environmental investigations are completed prior to the release of these funds.

The White River has also been the cultural center of Native American villages and settlements dating several hundred years ago. Potential locations of these settlements need to be investigated concurrently with the other environmental investigations. If any projects along the White River undergo extensive digging, the project team needs to be aware of and comply with the federal Native American Graves Protection and Repatriation Act (NAGPRA) which dictates the handling of any human remains, spiritual items and artifacts found in graves.

Environmental Investigations

Environmental investigations begin with Phase 1 records research and a literature search related to various environmental factors, including hazardous materials, soils, water, fish and wildlife, air and noise quality, historic and cultural features, and social justice, among other factors. The type of project and potential environmental impacts need to be identified as part of the initial Phase 1 research.

Phase 1 research findings should identify potential constraints and the need for additional Phase 2 environmental research. This may include soil and water testing for hazardous materials or limited archaeological investigation to determine the extent of significant historic or cultural features. Findings of the limited Phase 2 investigations may indicate the need for additional detailed Phase 3 investigation. Detailed Phase 3 environmental investigations, in turn, may identify environmental features that require extensive project modifications or mitigation for environmental factors impacted by a project. Coordination with interested parties and consulting agencies should begin with correspondence during the Phase 1 investigation and continue through the duration of environmental investigation to ensure that design and environmental needs are aligned.

Proposed and future land uses influence what requirements are necessary to remediate potential environmental hazards. For instance, capping of hazardous materials may be permitted for parks and recreational land uses, while residential use of the same site may instead require removal of degraded soils to a regulated landfill and more extensive remediation.

For sites with groundwater that contains hazardous materials, the installation of monitoring wells to monitor movement of degraded groundwater may be required. Depending on the type of and extent of environmental degradation, cleanup can

be expensive and time consuming. Cleanup costs for specific projects can only be fully understood by completing environmental investigations. A knowledge of historic land uses, prior spills, and cleanups will aid in assessing a site's potential for environmental hazards prior to initiating environmental investigation or land acquisition.

design and build required utility modifications themselves. In many cases, utilities in the public right-of-way have local agreements in place regarding payment or reimbursement of required utility relocations. Determination of whether the utility or developer will be responsible for payment of utility relocations should be made early in project planning and design.

Utilities

Similar to permitting, coordination with utilities needs to occur early in project planning and design. Early coordination should encompass potential project impacts on existing utilities, including relocations, the presence of utility services needed for the project, and available utility capacities to meet the project's needs. Utility coordination can take several months. It requires determining potential relocations and extensions for a project. Once the extent of relocations or extensions is able to be determined, the project timeline should allow approximately six months to a year for the utility to complete the relocations, depending on the scope of required work.

Generally public utilities, such as water, storm, and sanitary utilities, will allow the project designer to complete the needed design of utility relocations and extensions, subject to meeting utility requirements. In comparison, private utilities, such as gas, electric, and communications companies, typically prefer to

Governance Recommendations

The large-scale transformation of the White River corridor requires a collaborative governance approach and leadership experienced in advocacy, project management, collaborations, communications and the experience necessary to deliver on the promise of the White River Vision Plan guiding principles.

Stakeholder engagement confirmed the need for a dedicated entity and helped to shape its future roles and mission. Both outreach and research determined that the ambition of the plan and its regional scope require a coordinating entity that can hold the vision of the White River Vision Plan and drive implementation. It is clear that, at present, there is not one entity operating along the White River able to deliver on the required capacities for implementation. Two options exist that are feasible as next steps. Either an existing organization would need to build capacity, or a new entity must be formed that can be equipped with all required functions.

In order to be effective, the governance entity will ultimately need to be able to balance diverse regional interests including the interests of residents of all incomes, landowners, and municipalities. It must also be

equipped with mechanisms and legal abilities to secure funding for cross jurisdictional projects. While local municipalities and/or private property owners should lead capital development and adjacent commercial development, a core responsibility of the governance entity will be to work collaboratively with these groups, adding value to the implementation of the White River Plan and bolstering existing partners. The entity will provide coordinated recommendations for implementation across the full, regional area and will also promote marketing and branding to maintain momentum and project visibility.

Stakeholder Engagement Process

The successful governance structure must be supported and aligned with existing regional systems that are already in place. To begin, stakeholder conversations were conducted with a range of regional and local entities to understand their current role, capacity, and thoughts about governance structures for the White River. These included representatives

from local/municipal government, such as the City of Indianapolis, Indy Parks & Recreation, the City of Carmel, Hamilton County, the City of Noblesville, and the Town of Fishers. This should also involve representatives from state and federal agencies, including the U.S. Army Corps of Engineers, The Indiana Department of Natural Resources, and the State of Indiana. Community organizations that were engaged in direct conversations about governance included ROW (Reconnecting to our Waterways), the White River Alliance, Visit Indy, Friends of the White River, and Hamilton County Tourism. Finally, efforts were also made to connect to significant private landowners, including Conner Prairie and other residential and business property owners.

Roles and Responsibilities

Criteria for Success

Based on stakeholder conversations and Steering Committee feedback, a set of criteria for a successful governance structure was refined. Given the urge to maintain momentum created by the Vision Plan process, timeliness and feasibility are also important criteria for success. The discussions described that the entity's effectiveness would be measured by:

- The ability to implement the organizational mission and mandate;
- The capacity to deliver required functions;
- Flexibility to evolve or change along with the project, including geographic boundaries;
- Strength to incentivize or compel action among partner jurisdictions;
- Shared vision expressed through a cohesive brand identity as applied to signage, marketing and messaging;
- Sustained continuity of vision and momentum across political cycles.

The planning and implementation efforts of the governance entity would be deemed effective if they equitably distribute benefits to the diverse users of the White River and produce "shovel-ready" projects that are able to proceed without significant planning or coordination delays.

In order to be economically sustainable, the entity needs the ability to solicit, accept, and spend funds from multiple sources. It also needs access to sufficient, reliable funding sources to execute capital program and sustain operations.

Political viability of the governance structure is critical, and requires a group that can provide accountability to the public and is viewed as adding sufficient value to generate cross jurisdictional support and participation.

The entity must be bipartisan in its structure and goals so that it is able to represent diverse regional interests.

Critical Functions

The White River Vision Plan spans two counties, fifty-eight miles of river, and three typologies of park space, which each require different levels of operating and capital investment.

- Naturalized Area: Least active in terms of highly programmed activities and design concepts. Applicable to White River Vision areas similar to Strawtown Koteewi Park which offers activities that fit well within the naturalized environment.
- Community Park: Semi-active parks, with some programming (e.g., events, educational programs), unique design elements (e.g., outdoor performance space, boat house, art installations), and potential for adjacent development. Applicable to White River areas similar to the City of Noblesville and Broad Ripple.
- Signature Urban Park: Highly active park with range of programming, design elements, and development. Applicable to the focus area around Downtown Indianapolis.

A successful governance model for the White River must be able to execute all of the following functions, including fundraising.

 Coordination: The governance entity must be able to coordinate ongoing strategic

- planning, marketing, and advocacy efforts.
- Implementation Support: The entity must support related fundraising, provide technical assistance as needed, and manage permitting/approvals.
- Capital Project Development: While capital projects will also be completed by individual jurisdictions and institutions, a collaborative governance entity should help with capital project management and capital construction and development to ensure coordination of Vision Plan principles with implemented capital projects.
- Ongoing Park Operations: Finally, the governance entity will need to work with individual jurisdictions to identify appropriate responsibilities for overarching maintenance and operations, programming planning and implementation, developing earned income programs, and overall security of public open spaces.

These functions are all critical to the long-term success of the White River, but may be phased in over time. For example, the initial phase of work, following this Vision Plan, will include ongoing Planning and Design. During this early period, coordination of strategic planning, preliminary fundraising, ongoing advocacy and consistent marketing are most important. Phase two will shift to project implementation. At this point, capital project management systems need to be in place, coupled with additional technical assistance to local implementation teams and other support for construction and development. By the

third phase, ongoing maintenance will become front and center, as well as special projects. These needs will require an entity to manage operations and maintenance, programming, and earned income.

Public Funding Opportunities

One of the primary roles of a governance structure is the ability to raise and disperse funds in order to meet these capital and operational needs and uphold the Vision Plan for decades to come. Operational costs will rely on public funding that can be raised and combined from a variety of sources. Contributed income includes donations from private individuals, foundations, and corporations to support operations/sponsor programming. It can be complemented by immediate earned income and long-term value capture. Earned income is generated by concessions, event tickets, rentals, and on-site parking. Value capture represents the value created by open space investments create for the surrounding area, monetized as new, dedicated revenue streams that mature over time.

Governance Model Options

Based on the criteria established for successful governance, two models were explored that had the potential to meet the identified criteria, albeit in different ways.

The first model tests the idea of a coordinating non-profit that could oversee all implementation, across jurisdictions and topic areas. The responsible non-profit would be responsible for coordinating multi-jurisdictional park operations while allowing maximum flexibility in fundraising and advocacy. Local municipalities would contract with the non-profit for programming or operations and participate through board membership. The White River non-profit entity could drive momentum and leverage philanthropic resources to advance planning, marketing, fundraising, and programming across jurisdictions.

The second model envisions a regional governance entity that coordinates multi-jurisdictional park operations through a representative voting body. The entity or partnership would need to be established by Federal, State, or local law or through a Memorandum of Understanding that gives it the authority to coordinate and implement across multiple jurisdictions.

Each model was compared for its fundraising and governance opportunities and challenges, which are described below. These models are not mutually exclusive and can be combined to create a phased approach.

Option 1: Coordinating Non Profit

The governance of a non-profit entity would be managed by a board of directors that can include representation from participating local municipal leadership and landowners, to engage diverse users and stakeholders in a meaningful way. It has the unique ability to operate with a lean core staff and build staffing based on capacity needs or special projects.

In terms of fundraising, a non-profit benefits from the ability to raise and accept philanthropic contributions and grants as well as to develop earned income. It cannot, however, create income through special assessment districts or state and federal contributions (this is true in general, although certain kinds of grants can only go through non-profits). Additionally, it cannot directly engage with value capture, although it can work in coordination with municipalities who can still generate this value.

Perhaps the most significant benefit of a nonprofit is that it allows for the establishment of a governance structure with relative ease by leveraging the existing capacity of partners. It also allows for a dynamic and flexible structure that will be able to evolve along with changing White River needs over time. A non-profit structure also creates flexibility to partner with municipalities, landowners and other partners through agreements that respond to individual needs.

Some challenges still exist to successful implementation of a non-profit model. In particular, the reliance on the board requires thoughtful, dedicated board appointments to ensure accountability to municipal, landowner and community partners – an important measure of success. This structure also requires building existing partner capacity and balancing existing non profit interests. And, importantly, while philanthropic sources may be most interested in providing funding through a non-profit, this structure does not generate new dedicated funding.

The White River already has strong examples of capable non profits currently operating across jurisdictions in effective and creative ways, although none have all of the required capacities needed for the White River vision. Currently, these non profits act as conduits for philanthropic contributions, grants and awards.

The table on the following page describes a potential distribution of responsibilities in the non profit model.

Role Distribution for Coordinating Non-Profit Structure

		COORDINATION NON-PROFIT	LOCAL MUNICIPALITIES	STATE & FEDERAL AGENCIES	COMMUNITY PARTNERS	PRIVATE LAND-HOLDERS
COORDINATION	STRATEGIC PLANNING					
	MARKETING					
IMPLEMENTATION SUPPORT	FUNDRAISING					
JOFFORT	PERMITTING & APPROVALS					
	TECHNICAL ASSISTANCE					
CAPITAL DEVELOPMENT	CONSTRUCTION & DEVELOPMENT					
	PROJECT MANAGEMENT					
ONGOING PARK OPERATIONS	M&O					
OPERATIONS	EARNED INCOME					
	PROGRAMMING					
	LAND OWNERSHIP					
PRIMARY R	PESPONSIBILITY	SUPPORTIN	ng responsibility	GUIDANG	CE RESPONSIBILITY	

Option 2: Regional Governance Entity

In a regional governance model, authority would be created through a board comprised of appointed members from municipal, community, and technical partners, with the opportunity to include private landholder participation. The board would be supported by dedicated staff who can provide experience, technical knowledge, capacity, and continuity.

Distinct from the non-profit, a regional governance entity does have the ability to fundraise through direct state and federal contributions, value capture like tax increment financing (no more than what individual municipalities contribute), but likely cannot accept philanthropic contributions in the same way. Similar to a non-profit, it can benefit from earned income and cannot use a special district assessment.

A regional governance entity has the benefit of developing a clear structure for representation of local municipalities and community partners to guide implementation. It provides an opportunity to coordinate the redirection of local funding resources toward coordinated park operations and facilitates access to federal/state funding sources.

Role Distribution for LA River Cooperation Committee

		LA RIVER COOPERATION COMMITTEE	LOCAL MUNICIPALITIES (15)	STATE & FEDERAL AGENCIES	COMMUNITY PARTNERS	PRIVATE LAND-HOLDERS
COORDINATION	STRATEGIC PLANNING					
	MARKETING					
IMPLEMENTATION SUPPORT	FUNDRAISING					
3011 0111	PERMITTING & APPROVALS					
	TECHNICAL ASSISTANCE					
CAPITAL DEVELOPMENT	CONSTRCTION & DEVELOPMENT					
	PROJECT MANAGEMENT					
ONGOING PARK OPERATIONS	M&O					
	EARNED INCOME					
	PROGRAMMING					
	LAND OWNERSHIP					

PRIMARY RESONSIBILITY SUPPORTING RESONSIBILITY

Challenges may include that the governance entity requires political buy-in from local municipalities and state officials to form a representative structure that meets partner interests. Likewise, in reviewing national precedents for similar organizations, they are driven by the need to coordinate across federal/state/local jurisdictions, or to empower a single municipality to advance planning on behalf of others, so diverse and equitable representation must be watched carefully and safeguarded for.

The Los Angeles River Cooperation
Committee is an example of a regional
governance entity that coordinates large-scale
design and implementation across multiple
jurisdictions. In this case, governance is
established by an MOU between the County
of Los Angeles Flood Control Division and
the City of Los Angeles to coordinate review
of projects in municipalities along the river.
Once built, the intention is that projects
will be operated and maintained by local
municipalities or private landholders. The
chart above is an illustration of roles and
relationships in this example.

Within Indiana specifically, several similar models exist: the Conservancy, Natural Resource Commission, Regional Development Authority, and Public Trust. Conservancy Districts are authorized by the Indiana Conservancy Act(IC 14 33) to address local water resource management. The Lake Lemon Conservancy is one example. Indiana's Conservancy Districts provide for participation by landowners only, leaving out municipalities and other relevant stakeholders. They also require a percentage of freeholders to petition to establish a special assessment. Given the challenges Conservancy Districts have faced statewide, this model is not recommended for the White River governance strategy.

Local Natural Resource Commissions are legislatively approved commissions that are authorized through Indiana State Code, providing for Local Resource Development Commissions (14 13) and River Basin Commissions (14 30) to establish local management for natural resource districts. Local Resource Development Commissions establish and implement development plans for natural resource preservation and protection of health and well-being of residents. Precedents illustrate a broad range of missions, board structures, and funding capacities. The most recent entity (Lincoln Hills of Indiana) was established in 1995. Other examples include the White River State Park, Ohio River Greenway, Little Calumet River Basin Development Commission, River Marina Development Commission, and Wabash River Heritage Corridor. Local River Basin Commissions manage the natural resources

within the watershed to preserve and protect the health and well-being of residents. Precedents across the state illustrate a broad range of missions, board structures, and funding capacities. The most recent entity (Transborder Water Resources Authority) was established in 2017. Other examples include the Kankakee River Basin Commission, the Upper Wabash River Basin Commission, and the St. Joseph River Basin Commission.

Regional Development Authorities are authorized through Indiana State Code (367) as public private partnerships established by adjacent counties or cities to coordinate local efforts, develop comprehensive plans, and finance projects. It also has authority to issue bonds, loans or grants. Regional Development Authorities are traditionally regional economic development entities. Regional Development entities are established to support airport authority projects, commuter transportation districts and other rail projects and services; regional transportation authority projects and services; economic development projects; intermodal transportation projects; regional trail or greenway projects; and regional transportation infrastructure projects under IC 36 9 43. The Northern Indiana Regional Development Authority is one example of this type of entity.

Finally, Public Trusts are charitable trusts managed by a public trustee to ensure assets serve a designated public purpose. Public Trusts are similar to private foundations but require the funds and assets of the trust be

Regional Governance Entity Comparison

	CONSERVANCY DISTRICT (NOT RECOMMENDED)	LOCAL NATURAL RESOURCE COMMISSION	RDAS / INVESTMENT HUBS	PUBLIC TRUSTS
PRECEDENTS	LAKE LEMON CONSERVANCY	OHIO RIVER GREENWAY	NORTHERN INDIANA REGIONAL DEVELOPMENT AUTHORITY	CITIZEN'S ENERGY GROUP
EFFECTIVENESS	ONLY REPRESENTS FREEHOLDERS	MEETS SLIDE 3 CRITERIA	GENERAL PURPOSE IS TO COORDINATE DEVELOPMENT & PLANNING, NOT NECESSARILY IMPLEMENTATION	OPERATES SIMILAR TO A PRIVATE FOUNDATION
ECONOMIC STABILITY	SPECIAL ASSESSMENT POWERS	PRECEDENT ESTABLISHES FOR SPECIAL ASSESSMENT AUTHORITY	SPECIAL ASSESSMENT POWERS CURRENTLY BEING DISCUSSED	NO ADDITIONAL FUNDING SOURCES
POLITICAL VIABILITY (CONVERSATIONS IN PROGRESS)	ONLY REPRESENTS FREEHOLDERS	TBD	ONGOING LITIGATION	TBD
FEASIBILITY	REQUIRES A PERCENTAGE OF FREEHOLD PETITIONS	REQUIRES WRITING NEW LEGISLATION	ABILITY TO FORM UNDER EXISTING RDA MODEL	REQUIRES A DEPARTMENT / AGENCY TRUSTEE

used for a public or charitable service. Citizens Energy is one example of a Public Trust that is already operating within some facets of the White River today. The City purchased Consumers Gas Trust and established the Public Trust to protect the corporate assets and to ensure the entity could operate outside political motivations to ensure the delivery of energy, water, and sewer services continue to meet the needs of Indianapolis citizens.

Hence, regional governance could take on many models. The models considered stack up very differently on their ability to deliver on each of the core criteria previously identified. The following matrix illustrates the various pros and cons of each type of regional governance entity under consideration.

Additional Policy Tools

An additional series of policy levers, typically created and implemented by individual municipalities, can supplement and augment the functions of either governance structure. These include financing measures like tax increment financing (TIF), which creates tax allocations that offset the value of future development with current tax receipts. TIF districts currently exist across the White River and can be leveraged for future project funding as well.

Several additional land use controls can also be considered that allow municipalities and governance entities to support plan goals through existing mechanisms. These include:

- Conservation Easements: Conservation easements, which can be purchased or donated, add restrictions to land holdings in order to protect and preserve resources adjacent to natural assets.
- Environmental Conservation Overlay
 Districts: Zoning and land use ordinances
 can be applied to a designated district
 to encourage a strategic pattern of
 development that better supports the
 natural resource interests.
- Property Acquisition (Land Bank):
 Land acquisition, outright or through conservation easements, can be done intentionally to preserve strategic resources for civic use and to retain interest in long-term development uses.

Preferred Direction: A Phased, Hybrid Governance Approach

Given the complexity of scope, scale and multi jurisdictional collaboration - as well as the desire to maintain momentum and start implementation quickly - the consensus approach for White River Vision Plan governance is one that enables the ability both to start quickly and to build capacity over time to advance more significant implementation. To do this, the structure needs flexibility

to adapt over time in three phases: 1) a transitional team to kick-start governance and implementation; 2) movement into a non-profit phase; and 3) the layering in of or transformation to a sustaining regional governance entity.

During all three phases, coordination and implementation support will be important tasks. To begin, ongoing planning and design will be most important to continue and initiate; these are steps that can be furthered by a knowledgeable transition team and non profit coordinator. During Phase Two, it is expected that the non profit coordinating entity will also step in to support project implementation and capital project development. In the final phase, operational responsibilities will become primary.

The strengths of a non-profit and of a regional governance entity align well with the needs of these phases. Likewise, it will take time to put the correct structures in place for a regional governance entity, whereas a non-profit can be mobilized more quickly. In phases One to Two, a non-profit coordinator should be developed and brought in to drive coordination across partners and work with local municipalities to implement projects. By phase three, the regional governance entity will be needed to provide an additional revenue stream and increase municipal engagement.

The transitional approach allows that a coordinating non-profit can be developed immediately (perhaps even by adapting an

existing non profit to take on a broader White River mission) to sustain momentum and project visibility. This rapid approach can build from the momentum generated by existing non-profits acting along the White River, by the White River Vision Plan process itself, and by the many parallel and supporting projects that are currently being undertaken by jurisdictions and private actors. As implementation proceeds, the appropriate regional governance structure can be thoughtfully vetted and tested before it is developed as a permanent entity, in addition to or replacing the non-profit entity over time. The introduction of the regional governance entity enables the creation of dedicated funding mechanisms that can sustain the White River in the long-term, including any assessments, value capture, and state/federal allocations.

Mext Steps and Ongoing Implementation

As the White River Vision Plan process ends in summer 2019, clear steps are needed to continue to explore and refine the ideal governance scenario for the long-term. The core Client Team, members of the Steering Committee, and other stakeholders will continue to be engaged to define and facilitate the implementation of near term

governance structures. In preparation for the 2020 legislative session, members of the Client Team, Steering Committee, and other stakeholders must define and help to implement near-term governance structures.

Step 1: Establish a White River Vision Plan Transition Team

The first step in the governance process is to confirm the governance functions required of the White River Vision Plan and who should own and support each. Much of this work has been done through the Vision Plan process and is summarized in the previous section. Following this clarity in function and roles, the next important step is to put in place a transitional strategy. To set up the next phases of governance and implementation, an interim team can be established that holds accountability for immediate coordination and action while building toward the future non-profit and regional governance entities.

The White River Vision Plan Transition Team will be appointed and charged with serving as the civic anchor to create the governance implementation strategy for the White River Vision Plan. The Transition Team will use the plan's nine guiding principles to shape a proposed governance structure informed by regional resident and leadership input gathered during the planning process. This group will need to consider the significant political capital and support necessary to advance any legislation required, generate fundraising support, and compel jurisdictional coopoeration and momentum on an ongoing

basis. To plan for this, participation from key private civic and philanthropic leaders at the very beginning of the process can go a long way to establish the right tone and momentum for the White River Vision Plan campaign going forward. Priorities of the transition will be to identify:

- The structure of the implementation entity now, informed by possible future scenarios based on the planning effort
- Funding for the plan's initial implementation period
- Where the entity could be based during its transition from idea to implementation
- The board make-up of this civic trust,
 bearing in mind the nine guiding principles
- Key partnerships as part of the structure and their relationships

MEMBERSHIP

Every effort will be made to diversify the transition team and to represent the plan's guiding principles. The White River Vision Plan Transition Team will consist of representatives from Marion and Hamilton Counties and include representation that will align with the various topical areas:

- Adapt/Restore Conservation, science, environmental community;
- Create Meaningful Connections Arts, humanities, alternative transportation community;

- Increase Year-Around Activities Parks, attractions/institutions community; Create Access – Planning community;
- Share the Story History, preservation community;
- Build Regional Identity Regional, marketing, branding community; and,
- Partner Across Boundaries Regional community network;
- Maintain Balance Residential, commercial, farming communities.

Action: Identify 10-15 bipartisan leaders with private and public sector representation to serve as a Task Force/Trust and whose initial involvement can mobilize broader resources and momentum.

Action: Conceptualize the Leadership Task Force/ Trust's mandate (e.g. advocate for governance entity, bring key funding and other partners to the table) and work structure (e.g. staffed by Client Group, ongoing Steering Committee advisory function). The goals, mandate, and loose structure can be documented in a Memorandum of Understanding. Building on this group, the Task Force / Trust can start to form a broader coalition as necessary and possible.

Step 2a: Further explore the opportunities and constraints of a Nonprofit Structure: Early in the process, a coordinating Nonprofit has the potential quickly to lead coordination and support implementation. Existing nonprofits that already operate along the White River may be resources to draw from. While

no one entity has the capacity to deliver required functions, additional capacity can be generated. Municipal service agreements can also provide a preliminary funding source to begin efforts, which can be expanded upon via philanthropic fundraising.

Action: Gauge interest in and map capacity for participation among existing nonprofits in Hamilton and Marion Counties.

Action: Conduct field research by meeting with representatives of the LA River, Boston Harbor Now, and Friends of the (Ohio River) Greenway to identify relevant lessons learned for non-profit structures paired with government entities and to develop a support network for going forward.

Action: Define a new or modified structure for this phase, including topics like: functions, Board composition and voting rights, staffing structure and needs, anticipated funding sources and needs, and partnerships and required MOUs.

Step 2b: Further explore the opportunities and constraints of a Regional Governance Entity

A regional governance entity may allow for the creation of a long-term funding and governance structure to support the White River, although there have been some challenges to similar recent attempts. Several precedent models already exist in Indiana; however, there is not one model to look to for how regional entities must be structured to be authorized in the State. For the White River implementation, considerations will include

the entity's ability to leverage an assessment and/or secure dedicated State funding for operations/maintenance and capital; and, ways to ensure the Board composition remains accountable to jurisdictions and property owners across election cycles.

Action: Given legislative flexibility, define exact purpose for regional governance entity and review relevant models developed during the Vision Plan process to identify best practices in partnership with the Legislative Services Agency.

Action: Define key elements of the regional governance entity include: 1) Ideal size, type of board structure, and means for representation of municipalities, landowners, etc.; 2) Needed fundraising capabilities (e.g., special tax assessment, TIF); and 3) Necessary votes and/or legislative support to enact the strategy.

Step 3: Continue to build capacity and political buy-in

Ultimately, this step will set up creating and authorizing the desired governance structure(s), and securing needed funding for early implementation and governance actions.

Action: Convene relevant stakeholders to support creation of regional governance entity and establish or adapt a non-profit, charged with holding the vision and marketing opportunities along the White River.

Action: Staff up / build capacity as needed for the governance entity.

Action: Launch a capital fundraising campaign.

Action: Collaborate with municipalities to offer river-wide programming/events and with the White River Caucus, Governor's office, and DNR to introduce legislation calling for dedicated funding and, if appropriate for this year, enabling the creation of a White River regional governance entity.

Gase Study: Boston Harbor Islands

This approach has some similarities to the layered governance created for the Boston Harbor Islands. There, the Boston Harbor

PRIMARY RESONSIBILITY

Islands Partnership operates regional governance and works in concert with Boston Harbor Now, a local non-profit. This partnership illustrates the potential to layer functions of governance structures to take advantage of the core capacities of each entity.

This collaborative governance has allowed the two entities to work together to implement cleanup of the Boston Harbor Islands as well as to provide connectivity improvements, programming and increased access to these iconic spaces. It enables creative public-private funding for capital projects, city and state grants that support operations and maintenance, and coordination across four separate jurisdictions.

		BOSTON HARBOR ISLANDS PARTNERSHIP (REGIONAL ENTITY)	BOSTON HARBOR NOW (COORDINATING NON-PROFIT)	CITY OF BOSTON	STATE & FEDERAL AGENCIES	PRIVATE LAND-HOLDERS
COORDINATION	STRATEGIC PLANNING					
	MARKETING					
IMPLEMENTATION SUPPORT	FUNDRAISING					
JOPPORT	PERMITTING & APPROVALS					
	TECHNICAL ASSISTANCE					
CAPITAL DECELOPMENT	CONSTRCTION & DEVELOPMENT					
	PROJECT MANAGEMENT					
ONGOING PARK OPERATIONS	M&O					
OPERATIONS	EARNED INCOME					
	PROGRAMMING					
	LAND OWNERSHIP					

SUPPORTING RESONSIBILITY

Boston Harbor Islands Partnership

ADVISORY COUNCIL	FEDERAL	NATIONAL PARK SERVICE, US COASTGUARD
	STATE	DEPT. OF CONSERVATION & RECREATION, MASS. WATER RESOURCES AUTHORITY (MWRA), MASSPORT
	MUNICIPAL	CITY OF BOSTON; BOSTON PLANNING AND DEVELOPMENT AUTHORITY
	PRIVATE	BOSTON HARBOR NOW, TRUSTEES OF THE RESERVATION, THOMPSON ISLAND OUTWARD BOUD EDUCATION CENTER



The Boston Harbor Islands Partnership is a regional governance entity that coordinates harbor clean-up and management of the island park, with representatives from a range of government and nonprofit agencies. The Partnership is advised by an Advisory Council on ongoing park operations. Members are appointed by the Secretary of the Interior and includes representatives from local municipalities, tribes, not-for-profit organizations, advocates, and businesses.

Capital projects typically require a mix of federal, state, local, and private funding. A separate non-profit was established for raising and managing philanthropic funds; that non-profit is now known as Boston Harbor Now. The impetus was a major project to clean up the harbor, which was funded primarily by a state agency, the Massachusetts Water Resources Authority (MWRA). Federal

legislation mandated that three dollars of matching funds were obtained for every dollar of federal funds for typical projects. Matching funds were provided by local municipalities, the State, non-profits, and private fundraising. Boston Harbor Now was established as a nonprofit to solicit philanthropic support for the islands.

Boston Harbor Now's mission and role has evolved over time. Non-profits can also raise and/or generate operating funds from events, earned income, and programming. Today, Boston Harbor Now is also responsible for cultivating philanthropy and generating earned income from retail sales and earned income. There is currently no committed funding from public agency partners. Public funds may be secured when specific projects are initiated as part of a five-year strategic plan.

Capital Improvements Implementation

The governing entity will be key to developing partnerships between communities, public agencies, and not-for-profit groups that can help identify funding mechanisms and opportunities for the many implementation projects described below in this section. This section provides cost estimates that are intended to serve as tools for implementation of various capital improvement projects recommended in the focus areas and riverwide.

Capital improvement projects are described in this section with broad assumptions that provide a basis for quantifying project elements and establishing a method for understanding costs. Each focus area includes catalytic opportunities that both improve local experiences and can be applied on a riverwide basis.

These focus areas include the following:

- Strawtown Koteewi Park Area
- Downtown Noblesville Area
- Allisonville Road Stretch Area
- Oliver's Crossing Area
- Broad Ripple Area
- Downtown Indianapolis Area
- Southwestway Park Area

Gost Methodology

Given the White River Vision Plan's expansive scope and long-range implementation, the cost estimates for the project were generated and are discussed here in several ways. One way is as a tool kit that can be used and adjusted flexibly over time as projects arise. A second way is a set of examples of capital improvement projects, based on the catalytic

opportunities in each focus area, where costs are grouped together to complete a comprehensive project cost estimate.

Project Assemblies: A "kit of parts" approach was used to create costs for common project components. To do this, a set of costs for each potential future project element was developed, then assembled together into common types that will be used over and over across the entire river area. These types are called "project assemblies" in this document. The project assemblies are comprised of individual, detailed costs that are grouped together into different types of trails or park elements that can be used to estimate costs in the future.

Capital Improvement Project Examples:
Approximate project costs, in high, medium, and low ranges were developed for the seven capital improvement projects in each focus area by combining the appropriate assemblies. To define preliminary budgets for each project, a hybrid of detailed assembly costs was used, depending on the relative complexity and difficulty of implementation for that project. In each project, complicating factors can include permitting, environmental constraints, multijurisdictional partnering, or management and land acquisition.

Over time, many projects will emerge that go beyond these catalytic sites. Approximate costs for the wide variety of potential design elements are included as a "kit of parts" tool kit that can be used as for budgeting as potential projects are defined. High, medium, and low costs are indicated for each design element.

All costs are provided in 2019 dollars. As specific riverwide projects are defined over time, assembly costs should be adjusted to reflect current construction costs. To generate assembly costs, various construction activities and appropriate design elements have been itemized and given a range of high, medium or low assembly costs. Multiple research sources have been utilized to generate these costs; they include Indiana Department of Transportation, "2018 Pay Item Unit Price Summaries," R.S. Means Online Cost Data for the Second Quarter of 2019, and available bid histories for projects in the area.

Riverwide Project Assemblies

For future projects across the entire White River geography, high, medium, and low assembly costs are provided to enable decision makers to develop informed understandings of capital improvement costs for specific projects. Assemblies are described below and noted in the cost table for trail improvements, water access, dam modifications, roadway, parking, parks and various other improvements related to implementation of river access and pedestrian enhancements. Assemblies are also intended to assist with budgeting non-design related project costs such as environmental remediation. A description of improvements included with each assembly is provided below.

Cost estimates are provided for a range of interventions tied to high, medium and low assembly costs; these costs are representative of current construction costs in 2019 in the region. A contingency factor of thirty percent has been added to each assembly cost to account for unknowns such as utility costs and land acquisition. In addition, an annual inflation factor should be included for projects as implementation occurs during the plan implementation timetable. For example, a \$100 million project in 2019 with an inflation factor of five percent annually would cost approximately \$160 million in ten years; that same project in thirty years would cost approximately \$430 million.

Trail Assemblies

Individual assembly costs are provided for trail-related design elements such as trailheads, trail nodes, shared right-of-way trails and boardwalks or promenades.

Urban Trail Assembly

Urban trails are trails in urban environments with high levels of usage, such as those in downtown Indianapolis, Noblesville, Broad Ripple, and Oliver's Crossing areas. Urban trails have been assumed to have right-of-way widths of forty feet with trail widths of fourteen feet and twelve feet, depending on their quality. Urban trails with a high level of investment consist of asphalt unit pavers with four-foot-wide concrete shoulders. Medium investment urban trails include a fourteen-feet-wide asphalt trail with two-feet and six-feet gravel shoulders. Lower investment urban trails are narrower at twelve-feet wide; with twelve-feet-wide turf shoulders.

Common urban trail design elements include site clearing, earthmoving, lighting, interpretive signs, guide signage and various crossing controls. Assemblies for a high investment urban trail have materials and finishes like the Indianapolis Cultural Trail; this includes continuous lighting, extensive use of unit pavers, continuous tree plantings, understory plants and high-quality crossing controls. Medium investment urban trails include the above elements, but to a lesser extent. Lower investment urban trails are consistent with many trails constructed in the area with a twelve-foot-wide asphalt trail width

and turf shoulders. Allowances for interpretive signs and trail railing to varying degrees are provided for the high- and medium-quality urban trails.

Community Trail Assembly

Community trail assemblies consist of trails in neighborhoods and less densely populated areas with moderate levels of use. As with urban trails, design elements include site clearing, earthmoving, trail lighting, interpretive signs, guide signs, and crossing controls to varying degrees. For high- and medium- investment community trails, allowances for tree planting and wood railings are provided.

Like urban trails a forty-foot-wide right-of-way is considered for the high- and medium-investment trails. Both high- quality and medium-investment trails consist of two-foot-wide gravel shoulders. The higher investment trail is a wider fourteen-foot-wide asphalt trail. A narrower twenty-five-foot-wide right-of-way is used for the lower investment community trail, along with a ten-foot-wide stone fines trail surface and two-foot-wide turf shoulders.

Natural Area Trail Assembly

Natural area trails should be provided in park settings and sensitive natural areas; application of trail design elements vary depending on trail usage. Right-of-way widths gradually narrow from thirty feet to twenty feet for each rural trail type. High- and medium-cost trails have an asphalt surfaces of twelve feet and eight feet, respectively.

Site clearing, earthmoving, and trail drainage are applied to each assembly. Varied crossing controls are provided for the high- and medium-cost trails. Guide signage and tree planting is applied to the high investment rural trail assembly. For implementation of trails in sensitive environmental areas, care should be exercised to align trails to minimize clearing and earthwork activities.

Shared Right-of-Way Bike Lane Assembly

Shared right-of-way trails and bike lanes vary from separate twelve-foot wide trails in a shared roadway right-of-way for a high-cost trail, to a lower investment assembly consistent with "sharrow" type trail striping combined with a road diet or limiting travel and parking lanes. The medium-cost trail assembly provides road widening combined with a raised concrete center curb and separate one-way trails in the roadway area. Lighting and railing allowances are included for the high investment trail assembly.

Boardwalk / Promenade Assembly

Promenades are a type of continuous walkway along the riverfront and top of bank in high-activity urban areas. Costs for a high-cost promenade assembly assume construction of unit pavers on a structural concrete deck and engineered fill with continuous sheet piling along the water's edge. A medium-cost promenade assembly consists of a decorative concrete topping slab on top of a

structural concrete deck and steel "H" piles that are open below, allowing water to flow below the deck. Both promenade assemblies include provision for amenities, such as site furnishings, railings, and lighting. Shelters are included with the high cost promenade assembly.

Boardwalks should be considered in sensitive environmental areas such as wetlands. The low-cost boardwalk assembly consists of a composite wood deck and railings on a structural metal frame and helical screw anchors. Boardwalk costs also include furnishing items such as benches and litter receptacles.

Trailhead / Node Assembly

Trailheads and nodes (small destinations or "pause places") should be considered to varying degrees along all trails, promenades, and boardwalks. Trailheads with more extensive facilities should be considered approximately every five miles. Medium investment trailheads should be spaced two to three miles apart and lower-level trail nodes placed approximately one mile apart. Trailheads and node spacing is flexible and adjustable depending on usage and the trail location.

Trailhead and node assemblies are considered separately from the various trail assemblies due to the widely variable application of trailheads depending on trail access, usage, and connections. Each trail head assembly includes lighting, site clearing, earthwork activities, and parking. Pavement types range

from unit pavers to concrete surface. Trailhead and node sizes vary, as does the extent of site furnishings, landscape plantings and parking. High-investment trailhead assemblies include an allowance for amenities or art elements.

Streets and Parking Assemblies

Individual assembly costs are provided for vehicular-related design elements such as parking areas, streets, drives, crossings and intersections.

Vehicular Parking Assembly

Parking must be considered for many riverwide implementation projects. As capital improvement implementation projects are defined, parking assemblies should be included in the project budget depending on project requirements. Application of high, medium, or low parking costs to individual projects will vary depending on the project type and location. For instance, parking with greater amenities, and higher costs, should be considered for larger facilities in the urban environment. Low-cost, lower-impact parking assemblies should be considered in sensitive natural and park areas.

Vehicular parking assembly costs range from high-cost options with curbed, lighted, landscaped parking facilities with lighting to low-cost options with gravel parking lots with surface drainage and no lighting. Medium-cost parking assemblies consist of lighted asphalt paved lots with surface drainage and tree planting.

Roadway / Park Drive Assembly

Like vehicular parking assemblies, roadway and park drive assemblies vary depending on applicability to the type of project and area the roadway is in. High-cost roadway assemblies are lighted, with a thirty-foot-wide street-like curbed pavement and sidewalks, and a tree lawn between the sidewalk and curb. Medium-cost roadway assemblies have a narrower twenty-foot-wide asphalt pavement with gravel shoulders. The low-cost roadway assembly is a twenty-foot-wide gravel surface that is appropriate in sensitive environmental and rural areas.

Streetscape Assembly

Focus areas that envision the need for streetscape assemblies include Oliver's Crossing along 86th Street, downtown Indianapolis, and Noblesville. High- and medium- cost streetscape assemblies include improvements such as intersection enhancements and landscaped medians. Supplemental streetscape lighting, wide decorative concrete sidewalks and tree plantings are included in the high- and medium- cost assemblies. A site furnishing allowance is included in the high-cost assembly. Provision of green infrastructure and stormwater best management practices are included for the high- and medium-cost streetscape assemblies.

For the low-cost streetscape assembly, intersection improvements are limited to

enhanced crosswalk striping. Additional lower investment assembly items include lighting, sidewalks and tree planting.

Signage / Wayfinding Assembly

Various combinations of signs and other wayfinding elements should be added to project assemblies including trails, roadways, plazas, streetscapes, and parks. Wayfinding elements may include interpretive signs, use of logos and branding, and directional and informational signs. Interpretive sign costs include the cost of research and graphic arts design. High- and medium-cost signage and wayfinding assemblies include varied interpretive signs and custom guide and directional signs. The low-cost signage assembly is limited to an allowance for standard guide type signs used along a trail.

River Crossing / Bridge Assembly

River crossing and bridge assembly costs range from a high-cost custom cable-stayed structure to a standard three-span prefabricated pedestrian bridge, at the lower end. Each assembly is intended for both pedestrian and non-motorized vehicle use. The high- and medium-cost assemblies assume a single span structure of approximately 400 feet. The medium-cost river crossing includes a precast concrete or steel structure and railings. An allowance is provided for overlooks for the high- and medium-cost bridge assemblies.

Intersection Crossing Assembly

Intersection improvements that are part of a streetscape are considered separately from the streetscape assemblies. Each intersection crossing assembly is based on a four-lane divided street approach. The high-cost intersection crossing assembly includes pavement removal and replacement with unit pavers. The medium-cost assembly provides for pavement milling and resurfacing with a decorative imprinted asphalt surface. The low-cost assembly replaces the decorative imprinted asphalt surface with painted crosswalk striping.

Park Assemblies

Individual assembly costs are provided for open space amenities like parks and plazas, as well as natural areas.

Plaza Assembly

Many projects in focus areas such as downtown Indianapolis, Noblesville, and Broad Ripple will warrant the inclusion of plaza spaces near the White River that enable gathering and create social spaces for all types of uses. Plaza assembly costs for spaces like outdoor classrooms and amphitheaters are also provided so that they can be included in the focus area project assembly costs.

Plaza assemblies vary in the extent and type of hard surface pavement, site furnishings, tree and landscape planting, lighting, amenities, and special features such as sculpture and art elements. The higher investment plaza spaces include allowances for a shelter, changes in the ground plane, and retaining walls. Tree grates and specialized underground root growth medium are provided in the high- and medium- plaza assemblies.

Park Assembly

Per acre unit prices for high-, medium- and low-cost signature, community and natural parks are provided based on previous costs for similar planning efforts. Signature parks are appropriate in urban centers as a central gathering and recreation space. Community parks serve neighborhoods and smaller communities. Natural parks like Southwestway and Strawtown-Koteewi Parks are appropriate in less densely populated and natural settings.

Wetland / Naturalized Area Assembly

The White River Vision Plan values improved environmental quality of areas near and in the river as fundamental to the realization of the plan. The plan emphasizes habitat and water quality improvements across all different focus areas. As with the other capital improvements, projects assembly costs are provided for high-, medium- and lower-cost naturalized areas.

Higher-cost naturalized area assemblies provide a forested wetland area with extensive earthwork and erosion control scope. A medium-cost wetland or naturalized area includes herbaceous prairie or wetland plants combined with moderate amounts of earthwork and erosion control. Low

cost naturalized areas include native prairie seeding combined with minimal earthwork. Allowances are provided in each assembly for invasive species removal and variable clearing activities.

Water Access Assembly

Increased and improved water access and quality are hallmarks of the White River Vision Plan. Various water access components are considered in building high-, medium- and low- cost water access assembly costs. These include temporary construction techniques such as sheet piling and dewatering, clearing, and earthwork activities. Variable water access improvements include lighting, water access ramp surfaces, restroom facilities, parking, site furnishings, and accessible water access elements. The costs also include connections such as trails and park drives.

Dam Modification Assembly

The current need for dam infrastructure improvements provides an excellent opportunity to achieve multiple aspirations of the guiding principles envisioned by this planning document. As each of the low-head dams in the project area are different, varying vertical change has been provided in the dam modification assemblies, ranging from ten feet to four feet of vertical change. The intent of the activities noted in the dam modification assemblies is to provide for easier fish and wildlife and river user passage across the dams. The variable improvements include manual locks or rock rapids for canoes and kayaks, fish

ladders, and partial reconstruction of existing dams. Each assembly assumes a length of approximately 350 feet of dam modification improvements.

Economic Development / Site Development Assembly

Successful public investment in and along the White River will spur additional private investment. To support the ability to assess private investment opportunities, various per-acre economic development building costs have been compiled. Each assembly includes building construction costs, site improvements and indirect "soft costs" such as design, permitting, environmental and land acquisition. A multi-use building of approximately four stories in height is used as a cost basis.

Environmental Remediation Assembly

Many industrial areas along the White River will require environmental cleanup efforts to return to productive reuse compatible with the plan's vision. The extent of environmental degradation of many of these sites is largely unknown and will require environmental testing to determine the cleanup needed on each project site. High-cost environmental cleanup costs are included for larger industrial sites with extensive environmental degradation requiring removal of soils to regulated hazardous materials landfills, underground tank removal, groundwater cleanup, and ongoing site monitoring.

Medium-cost environmental remediation assemblies are consistent with smaller one to five-acre sites, with limited soil and underground tank removal. Low-cost environmental assemblies are limited to sites of approximately one acre in size, and the environmental remediation scope there is limited to earthwork and underground tank removal.

Assembly costs are not included for utility relocations or potential land acquisition, as these are both highly variable depending on individual project requirements. Potential utility relocation and land acquisition costs are appropriately included as contingency costs for each assembly.

Focus Area Gapital Improvement Projects

The detailed assembly costs described in the previous section can be used as a basis for estimating capital improvement costs for the comprehensive focus area projects. The general assembly costs have been adjusted based on the overall extent of the assembly, relative focus area project complexity, activity, and type of area, i.e. urban versus natural area. As with the Riverwide Project Assembly costs, a thirty percent contingency factor has been added to the Focus Area Capital Improvement Project costs to accommodate factors that are still unknown at this planning level. The contingency is intended to cover unforeseen items such as environmental remediation, utility relocations, land acquisition, permitting, and project related design and planning.

The following section describes the way that costs were created for each of the focus area projects, drawing from the broad assumptions of project activities explained elsewhere in this report. A brief description of materials, design elements, improvement scope, and general construction methods is provided for each project.

Strawtown - Koteewi Park Projects

The Strawtown-Koteewi Park area project, centered around this northern Hamilton County Park, includes trail connections to the White River from Cicero, trail and water access improvements within the park, expanded facilities, and enhanced recreational opportunities. The project places an emphasis on efforts to restore and enhance natural areas along the White River. Key assumptions of the project and its cost estimate are:

- Trail access: The project includes a trail running from Potters Bridge Park to Cicero along Cumberland Road; however, costs are not included for this project since they are already accounted for as part of a previous trail master plan. The six and three quarter mile trail has a one and a half mile spur to the east along 234th Street to Strawtown Koteewi Park. This trail is envisioned as a separate paved trail in shared right-of-way. In Strawtown Koteewi Park trails and boardwalks are included to open flood prone areas of the park to pedestrian access. This component provides an additional two miles of unpaved natural trail and one half-mile of composite wood boardwalk.
- Floodplain restoration: The project includes floodway and floodplain restoration and enhancement that encompasses invasive species removal and planting of native trees, plants, and shrubs to reforest the floodplain, savanna and prairie areas along

- the river. Budget is provided in the capital improvement costs for the Strawtown-Koteewi area for 1,150 acres of enhanced natural area. An allowance of between \$100,000 and \$200,000 is included for annual coordination, with the Natural Resources Conservation District and area farmers to incentivize cover cropping and no-till farming on approximately 100-acres of farmland.
- Environmental education: Awareness of natural features and cultural resources is an important factor in enhancing these elements and their impact on the community. To expand environmental awareness, seventeen interpretive signs and wayfinding stations are provided along three-and-one-third miles of existing trails in Strawtown-Koteewi Park. Costs for these signs as well as two additional interpretive signs are included to assist in telling the story of the early Native American and pioneer settlements in the Strawtown-Koteewi area.
- Strawtown-Koteewi Park Master Plan implementation and additional recreation: Many proposed investments in Strawtown-Koteewi Park include projects that have already been identified in the previous park master plan. The master plan project list was augmented during the White River Vision Plan process with additional ideas to expand economic development, ecological health, and recreational opportunities. The existing park master plan includes a tenacre expansion of the existing park lake, a 20,000 square foot conference center, 10,000-square-foot expansion of the Taylor Natural History Center, additional archery

opportunities and six acres of additional native prairie. Recreation improvements in Strawtown-Koteewi Park identified in the White River Vision Plan include a three-acre area for a multi-level viewing platform and zip-line attraction. Components of this project include 100 parking spaces, a half-mile trail and park drive.

Downtown Noblesville Projects

In Noblesville, one emphasis of the proposed capital improvement projects is to expand on current efforts to connect to and along the White River. Key elements to realize these ambitions include:

- Water access: Various opportunities to access the water and launch canoes or kayaks are upgraded or added. Three existing boat launches at Forest Park are proposed for upgrades and accessibility improvements. New boat launch facilities south of the proposed Pleasant Street extension are identified for construction.
- Universal access: The project also plans for universal access to the river through interpretive wayfinding elements along the existing Riverwalk. Capital improvement budgets are included for four trailheads and wayfinding assemblies.
- Trail and bridge access: Recommendations and cost estimates account for previously planned extensions of the Noblesville Riverwalk and Pleasant Street west across the White River, as well as proposed trail extensions along the river that were added as part of this planning effort.

- Easements and acquisitions: Right-ofway easements and voluntary direct land acquisition were incorporated into the cost calculations for the one and a quarter-mile Riverwalk extension (an urban trail assembly type) and include two additional trailheads. The trail extension will connect to the planned Nickel Plate Trail with an approximately half-mile urban trail spur. This spur is most feasible where the Nickel Plate Trail is proposed to cross Allisonville Road. The Pleasant Street Extension project, which is already planned and funding needs identified, will allow for the reuse of a railway truss bridge for pedestrian and bike use only that gets people across the river and into community trail networks to the west.
- State Road 19 connectivity project: A key component in the creation of a cohesive riverfront experience in downtown Noblesville is the closure or relocation. of State Road 19 between Connor and Logan streets. By closing this road, Federal Hill Commons Park can be expanded and connected directly to the White River. Components of the budget for the proposal to connect Federal Hill Commons Park include a highway relocation feasibility study, a utility relocation allowance to move utilities away from the river, a two-and-three-quarter acre expansion of Federal Hill Commons Park as a signature park, a one acre riverfront plaza, and approximately half a mile of bank stabilization terracing.
- Walkability improvements: The plan recommends walkability improvements on existing streets and rights-of-way in

nearby Noblesville neighborhoods and the downtown area. These improvements integrate green infrastructure and stormwater best management practices, and create one mile of streetscape improvements and one mile of sharedright-of way trails.

• Natural area restoration: In keeping with the plan's goals for improving the natural environment and river habitat, the Noblesville project budget includes thirtyfive acres of invasive plant species clearing and reforestation with native trees, shrubs and plants.

The City of Noblesville's proposed connectivity, Riverwalk, and water access improvements will also support the creation of resilient riverfront development on approximately two-and-aquarter acres of public property south of Conner Street near 6th Street. The city's 2016 Residential Market Analysis confirmed a need for more diverse housing types and identifies opportunities for the strategic plan to modify development regulations to encourage denser development patterns and discourages development in the floodplain. In flood-prone areas, new development should elevate finished floors above anticipated flood levels, limiting parking to lower levels in flood prone areas. Ground level retail and utility connections should be designed and located on less flood-prone areas of the site. Upper levels of the building may consist of a mix of retail, office and residential uses. The costs account for credits that may be included for the land transfer to a developer, with allowances provided to accommodate the environmental remediation that may be required.

Allisonville Stretch Projects

The Allisonville Stretch is less urbanized than many other areas, creating significant opportunities for habitat restoration and enhancement. Habitat restoration and environmental enhancement in the Allisonville Stretch includes several components:

- Natural area restoration: The first is the removal of invasive species and the reforestation of 885 acres of White River floodway and floodplain areas. The invasive species removal and reforestation will be supported by a program that establishes on-going monitoring to help ensure success of reforestation efforts. The budget for this component does not include land acquisition or securing conservation easements.
- Wildlife habitat restoration: The third component proposes an additional 300 acres of wildlife habitat restoration. This restoration project includes partnerships and coordination with the Central Indiana Land Trust and the Indianapolis Office of Land Stewardship to construct wildlife enhancement features and secure conservation easements.
- Future land use planning: Cost estimates for Allisonville also include a range of costs that may be needed to develop a concept plan to identify appropriate locations for future development and open space, with the assumption that these additional projects will include collaboration with developers to move concepts forward to construction.

In addition to environmental restoration projects, the Allisonville Stretch is also a priority area for improving connections to the river:

- Pedestrian access: The project cost includes a budget for pedestrian improvements to thirty-two intersections between Logan Street in Noblesville and 116th Street in Fishers. These intersections are all intersections with planned trail or sidewalk improvements within a half mile of the river. Improvements are focused on signage, traffic lights with pedestrian signalized crossings and any enhancements to or new sidewalks.
- Land acquisition: It also accounts for the acquisition of the former Noblesville Landfill site (Frash Property), which will enhance trail connectivity along and across the White River. Specifically, project costs include acquisition of the 146-acre landfill property, construction of two miles of urban riverfront trail, a quartermile promenade, one and a half miles of suburban trail, one trailhead and one bridge crossing assembly. Land valuation is based on the current true tax value of approximately \$4,000 per acre. Between Allisonville Road and the White River north of Sommerwood Drive, the purchase of the eighty-five acre Beal Bank property will provide an additional half-mile of publicly available White River frontage.

The Allisonville focus area contains many active gravel quarry and mining operations near the river. These areas can be repositioned for other uses as quarrying declines. Future potential uses may include additional flood

storage capacity, recreation zones, and habitat enhancement areas. For budgeting purposes, coordination and partnering with the quarry operators and landowners is recommended, as well as the preparation of feasibility studies to determine potential flood storage capacity, floodwater routing and recreational opportunities for each of these quarry properties.

Oliver's Crossing Projects

The Oliver's Crossing focus area encompasses the White River from north of 96th Street to just south of the Keystone at the Crossing commercial district along 86th Street. Today, this stretch of the river is nearly invisible as it passes through extensively developed retail areas and is crossed by Interstate 465. Oliver's Woods sits within the center of this area and is a high-quality, sixty-acre natural area along the river owned by the Central Indiana Land Trust. Capital improvement recommendations in this area emphasize improvements to river visibility, river access, habitat enhancement, pedestrian non-motorized connectivity, and development / redevelopment opportunities that are compatible with the White River's natural environment and habitat. Key projects accounted for in the cost estimates include:

• Natural area restoration: Habitat enhancement and improvement of the natural river environment include invasive species removal and reforestation with native trees, shrubs and plants on 100 acres of land. Construction of a three mile long natural trail along the river through these enhanced environmental areas is also included. Land acquisition for this plan element is not included in the capital improvement budget.

- river access: The budget includes additional river access provided via a multi-modal trail network through the Oliver's Crossing area. This network provides natural trails and shared right-of-way trails connecting to the Monon and planned Nickel Plate Trails. The network will construct 1.2 miles of natural trail on the east side of the White River and four miles of shared right-of-way trail.
- Water access: Oliver's Crossing also includes projects that expand water access into the White River. To make this happen, the project budget includes acquisition of 130-acres of unused riverfront land east of the river north of 96th Street, as well as purchase and reuse of the Carmel Wastewater Treatment Plant on the west bank of the river. The budget for reuse of the approximately eight-acre Wastewater Treatment Plant site includes development of a riverfront interpretive park with an outdoor learning laboratory and an allowance for environmental remediation that may be required for this site. In developed portions of the focus area, a series of "campus quad districts" are envisioned to provide water access and "touch points." To accomplish this, the budget includes implementation of four, one-acre plazas and water access assemblies.
- Visual access: Improved visual access to the White River from Interstate 465 will greatly increase the perceived prominence of the river across the Indianapolis

metropolitan area. To do this, the project proposes replacing railings along the interstate with a more transparent crashtested barrier rail, which is accounted for in the cost estimates. Ideally, this element would be constructed as part of the independent, planned Clear Path 465 project.

Public improvement recommendations also include plan elements that help to make existing roadways safer for pedestrians and bicyclists and to reduce development impacts on the river.

- These projects include construction of 1.7 miles of streetscape with green infrastructure and stormwater best management practices and an additional five acres of rain gardens along other streets and parking lots to treat and retain stormwater on the surface prior to underground release. For all stormwater improvement projects, opportunities for groundwater infiltration should be investigated during the design process.
- Private development: The extensive public improvements in the Oliver's Crossing focus area create opportunities for compatible private investment.

 One example of this is a proposed 45,000 square foot resilient, mixed-use development project. The project includes a one-quarter mile streetscape and one-acre plaza. It provides resilient, sustainable, affordable housing options that are connected to mass transit and employment centers.

Broad Ripple Projects

The Broad Ripple focus area is centered around Broad Ripple Village, a regional entertainment destination that is surrounded by popular residential neighborhoods and criss-crossed by several White River meanders. The key projects that have been identified in the Broad Ripple area will work together to enhance the natural environment along the river, improve visual and physical access, and promote compatible, private economic development. Key projects accounted for in the cost estimates include:

- Natural area restoration: Natural habitat restoration and vegetation enhancements in the floodway and floodplain that will restore and enhance 260 acres of public and private natural areas through invasive plant species removal and native tree, shrub and prairie plant reforestation. A reforestation monitoring program should be implemented to help ensure long-term success of these areas.
- Dam modification: Modifications to the Broad Ripple dam will enhance the ability of fish to swim up or down the river unimpeded, combined with additional pool and riffle areas. Dam modifications should be designed to allow canoers and kayakers to safely pass through this area without taking their boats out of the water. This may include construction of small manually operated locks or rock rapids to traverse the dam.

Greater appreciation of this enhanced river environment will come with improved access along and to the river.

- Trail access: Planned capital improvements will construct two miles of paved or unpaved natural trail, a half-mile urban trail and a quarter-mile promenade in Broad Ripple Village.
- Pedestrian bridge and viewing areas: A pedestrian bridge over the levee at 64th Street will provide access to Holliday Park. Two viewing platforms or overlooks, approximately a quarter-acre in size each are included to provide greater visual appreciation of the river.
- Community park: In Broad Ripple Village a quarter mile promenade and a 2.5-acre community park will provide redeveloped vibrant spaces accessible to and near White River and the Indianapolis Water Company Canal. To construct the community park, parking may need to be relocated. A program providing guidelines, recommendations and incentives for shared parking, parking availability, and parking demand will help to alleviate parking problems.

Several capital improvement projects identified in this section implement recommendations of earlier planning efforts, including the Broad Ripple Park Master Plan and Phase 1 from the North Midtown RiverWalk plan.

 Broad Ripple Park Master Plan: Broad Ripple Park Master Plan implementation includes a half-mile promenade and bank terracing, a canoe / kayak launch and water access. Costs for bank restoration are included with overall Broad Ripple area bank restoration costs above.

North Midtown RiverWalk: North Midtown RiverWalk, Phase 1 improvements include construction of a half-mile streetscape between the Monon Trail and the Broad Ripple Park entrance and a plaza or trailhead at the Monon Trail.

Implementation of WRVP enhancements will create increased interest in private development and cultural arts in this already popular area.

- Mixed-use development project: An allowance for a five-acre mixed-use development with between 100,000 and 200,000 square feet of building construction is included in the capital improvement costs; these include land acquisition, building and site development and a half-mile streetscape.
- Art: The Indianapolis Arts Center sits on the banks of the White River in the Broad Ripple area. To extend and increase the impact of the arts along the river in Broad Ripple, the budget includes an allowance for the installation of art and sculpture along streets, promenades, parks and plazas. This allowance anticipates installation of up to five pieces priced between \$100,000 to \$300,000 each.

Downtown Indianapolis Projects

The portion of the White River corridor through the Downtown Indianapolis area is already the most well-connected part of the river through the study area. Additional connectivity and other improvements are addressed in several capital improvement projects:

- River crossing improvements: There are seven vehicular river crossings in this area. Pedestrian and river visibility improvements are envisioned for each of these crossings including railing replacement, shared right-of-way trails crossing the bridges, and pavement striping.
- Water and multi-modal access: Water access and connectivity is improved with four additional water access and canoe / kayak launch assemblies and two miles of urban trail. These activities focus in and around Downtown Indianapolis, specifically near the abandoned railroad bridge between 10th Street and Emrichsville Dam. A budget is provided to refurbish this bridge for pedestrian and multi-modal use connecting nearby westside neighborhoods and Mozel Sanders Park with the new 16Tech Biotechnology Development District.
- Neighborhood connectivity: While the railroad bridge adaptive reuse will assist in neighborhood revitalization, several other connectivity elements in Downtown Indianapolis will also further contribute. They include creation of

neighborhood entry and gateway features and construction of a green infrastructure pilot project on Belmont Street. The Belmont Street project consists of a half-mile streetscape with green infrastructure and improved intersection crossings for pedestrians. A total of twenty neighborhood entry and gateway elements are budgeted, including ten major gateway elements ranging in cost from \$500,000 to \$1,000,000 each and ten minor gateway elements ranging in cost from \$200,000 to \$500,000 each.

Park development in underdeveloped and underserved portions of the Downtown Indianapolis area is a priority of capital improvement implementation.

Riverfront beach park: One park area is recommended to be an eleven-acre signature park on the west side of the White River between Emrichsville Dam and 10th Street, adjacent to Mozel Sanders Park, opposite the Fall Creek outfall. Included with this project are land acquisition and park development. Additional park elements include important modifications to Emrichsville Dam and refurbishing the abandoned railroad bridge crossing to the 16Tech development area, which is discussed above. Implementation of the Riverfront Beach signature park above provides opportunities to realize changes for the sixteen-acre Mozel Sanders Park on the west side of White River Parkway West as a community park with enhanced riverfront access and opportunities to engage with the water.

- Riverside Park Master Plan: Completed in 2017, the Riverside Regional Park Master Plan identified nearly \$70,000,000 in recommended park improvements in four phases, over approximately twenty years for this 862-acre park. The recommended Riverside Regional Park Master Plan implementation budget is consistent with the nature park assembly included with this report and has been included without changes.
- Natural area restoration: The plan calls for capital improvements related to habitat restoration and environmental enhancement in Downtown Indianapolis, including invasive plant species removal, installation of native prairie plantings, and reforestation of fifty acres along the river. Native prairie and reforested areas should be monitored for long-term success.
- failures, Emrichsville Dam requires rehabilitation. This provides an excellent opportunity to elevate this site to a high-priority project that improves stream health and water habitat, including fish ladders and rock arch rapids; it also creates a recreational river runs for boaters. A budget between \$4M and \$9M has been identified for this project in consultation with Citizens Energy Group.

The area south of Downtown Indianapolis and north of Southwestway Park is home to many industrial entities and has the potential for long-term redevelopment and transformation through public-private partnerships, in close consultation with the property owners. An example of a project that could potentially

be implemented through this long-term conceptual planning is the extension of the White River Parkway south from its current terminus at Raymond Street to Southwestway Park. An allowance of \$250,000 to \$750,000 has been noted for feasibility studies to further investigate long-term land use change and connectivity in this area.

Southwestway Park Projects

Similar to the northernmost anchor for the study area in Hamilton County at Strawtown Koteewi Park, the Southwestway Park area emphasizes the natural environment and represents a tremendous opportunity to provide large uninterrupted areas of high-quality natural habitat along the White River. Key projects to further these goals include:

Natural area restoration: Projects that will protect ecological conditions along the river in this area will reforest fortynine acres of park area and will serve to protect approximately 5,000 acres of farmland from development combined with implementation of sustainable farming practices. Additional natural area enhancement projects budgeted as part of capital improvement recommendations will purchase 200-acres of land adjacent to Southwestway Park and dedicate this area as a set aside for enhancement of the natural environment. Restoration activities including removal of invasive plant species and reforestation with a mix of native tree, shrub, and prairie plantings is budgeted for half of the 200-acre land acquisition.

Southwestway Park represents an excellent opportunity to exhibit and tell the story of the natural environment of the White River. To further this opportunity, key elements include:

- enhancements and facilities are included in the capital improvement recommendations. A component of this is a new park entrance proposed off Southport Road. Traffic is expected to increase on Southport Road since it is planned to be extended to the west connecting to Ameriplex Boulevard and the airport. The new park entrance includes a quarter-mile park drive, twenty-five parking spaces, one park shelter with furnishings and an allowance for a new park monument sign at the entry.
- Environmental education and access: A variety of water access points, including boat launch opportunities with overlooks, interpretive sign stations and outdoor learning labs and classrooms are provided. Allowances include water access points at up to eight locations, two outdoor learning labs or classroom amphitheaters, and interpretive sign plazas at four locations.
- Nature Center: A nature center is included in the capital improvement budget that will include construction of a 2,500-square-foot nature center building, with a park ranger outpost, an outdoor amphitheater, and one-to-two-acre plaza space for ranger-led talks and four interpretive sign stations. Additional park facilities include an area for hosting regional events, concerts and overnight camping. Components include construction of a

one-to-two acre multi-use area at forty to fifty dollars per square foot, parking for fifty cars, a half-mile park drive, two restroom facilities, and 100 primitive campsites budgeted with an allowance between \$1,000 to \$1,500 each.

 Quarry repositioning: Acquisition of the existing gravel quarries and post-industrial use of areas east of Southwestway Park and the White River are included as long-term planning items. An allowance between \$100,000 to \$300,000 is allocated for reuse planning for these areas.