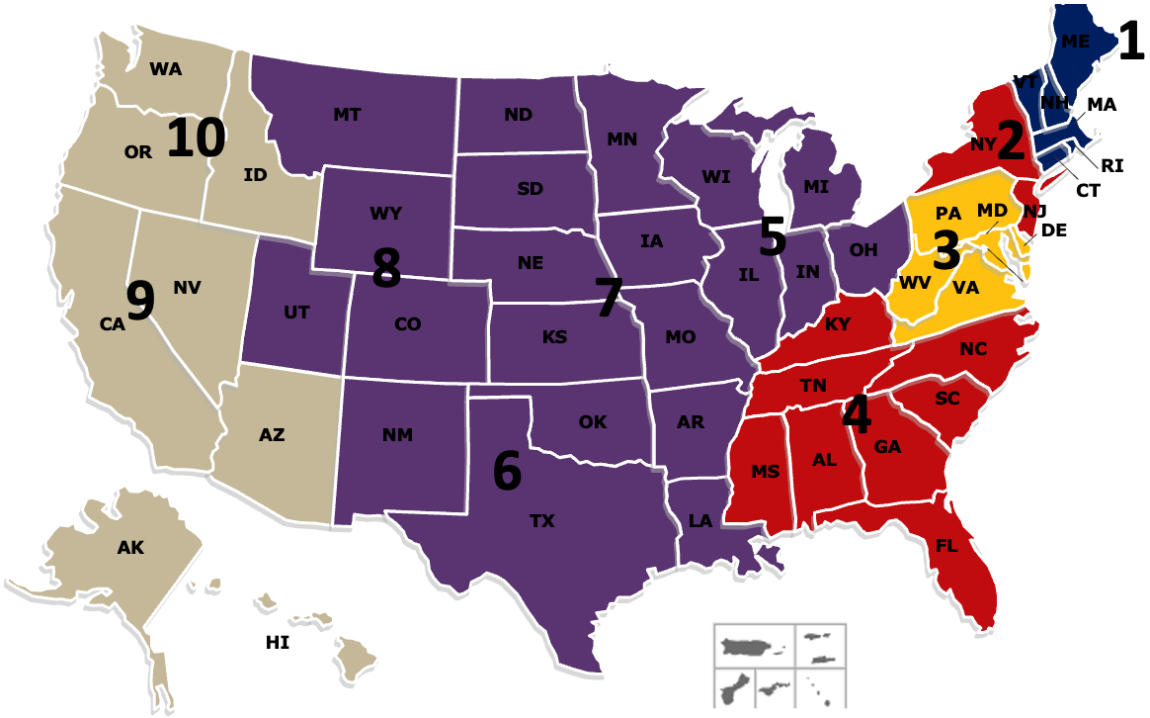
KSU TAB
Resources and Assistance

Kansas State University Technical Assistance to Brownfields Program
Scott Nightingale, KSU TAB Director for EPA Region 6
Fort Worth Brownfields Workshop; April 23, 2026

ksutab.org

Technical Assistance to Brownfields (TAB)



What is TAB?

- A national program <u>funded by U.S. EPA</u>
- Services provided are **FREE** and tailored to address specific community needs
- Assist communities with the brownfield assessment, cleanup, and redevelopment process
- Planning, environmental, and economic development expertise
- Webinars, workshop, e-tools (e.g., BiT, TAB EZ) and online resources
- And much, much more…

Who are the **TAB Service Providers?**

University of Connecticut EPA Region 1

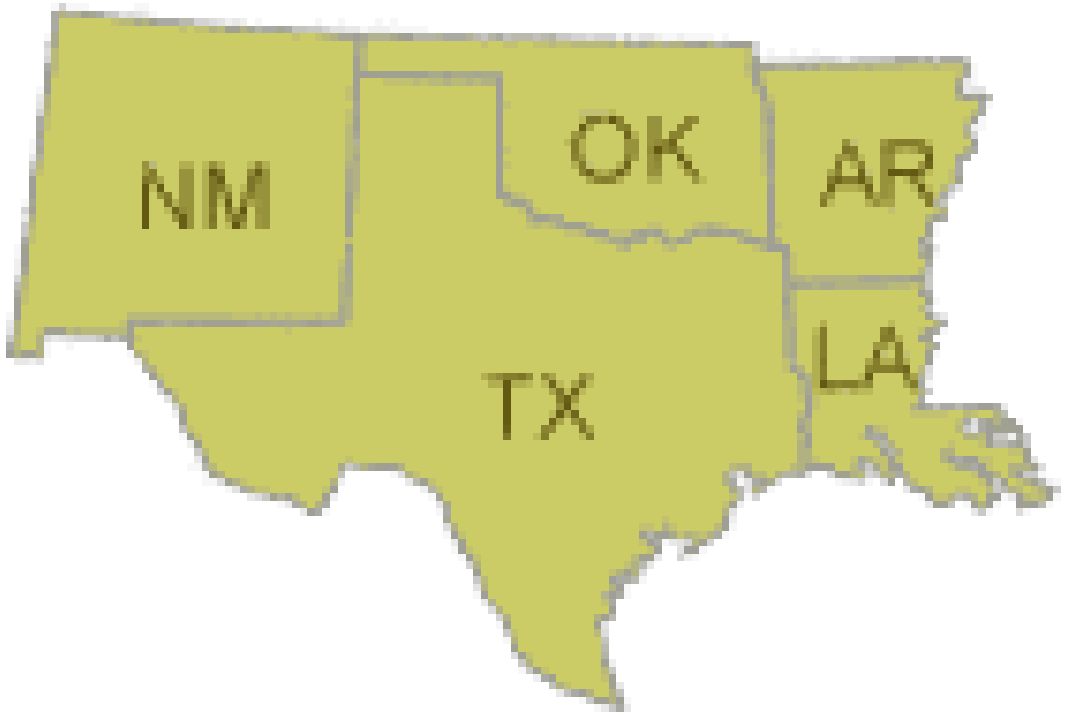
New Jersey Institute of Technology (NJIT) EPA Regions 2 & 4

The West Virginia University EPA Region 3

Kansas State University – EPA Regions 5, 6, 7 & 8

Center for Creative Land Recycling (CCLR) EPA Regions 9 & 10

KSU TAB Directors for EPA Region 6



Scott Nightingale, based in Manhattan, KS
Leslie Etzel, based in Houston, TX

KSU TAB Resources & Assistance

All services are FREE

Services are provided by:
KSU TAB Staff & as needed,
KSU TAB Partners

Three main categories of services

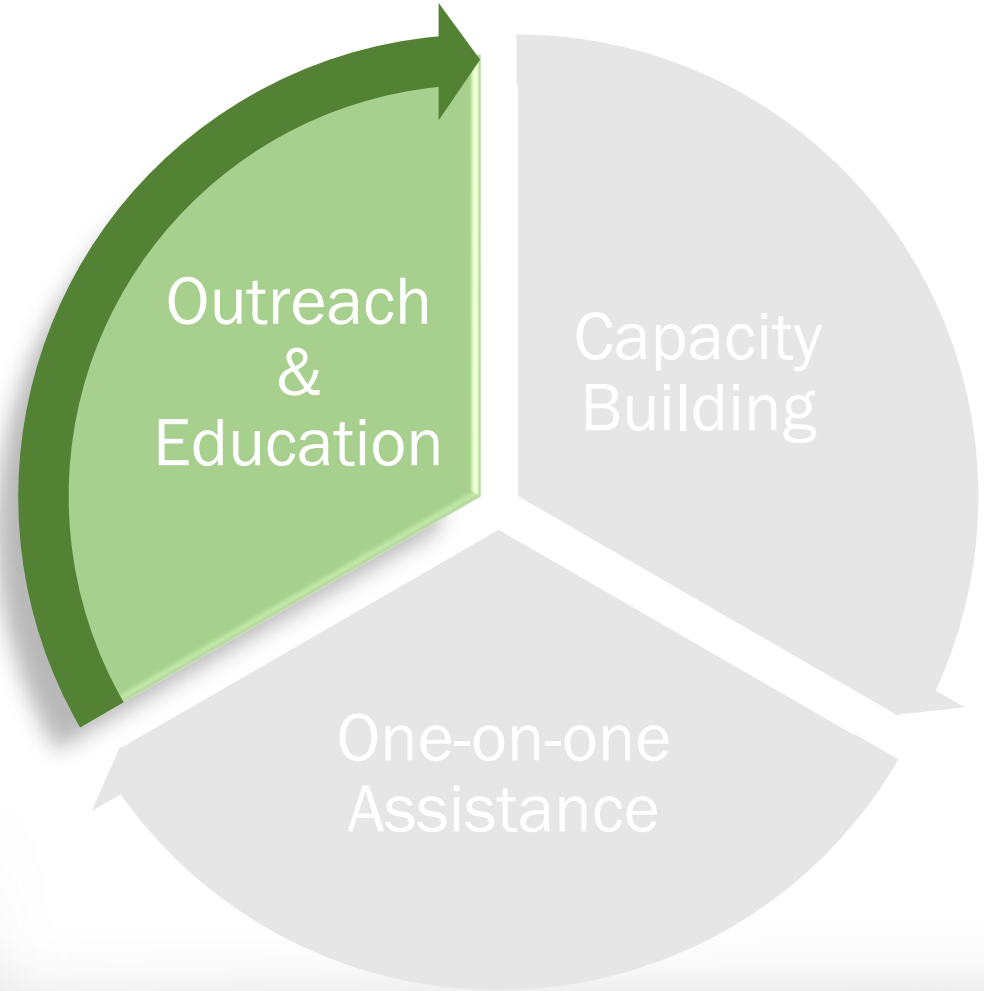
KSU TAB Resources & Assistance

To request services:

Email or call your regional TAB Directors!

No formal application process

KSU TAB Resources & Assistance



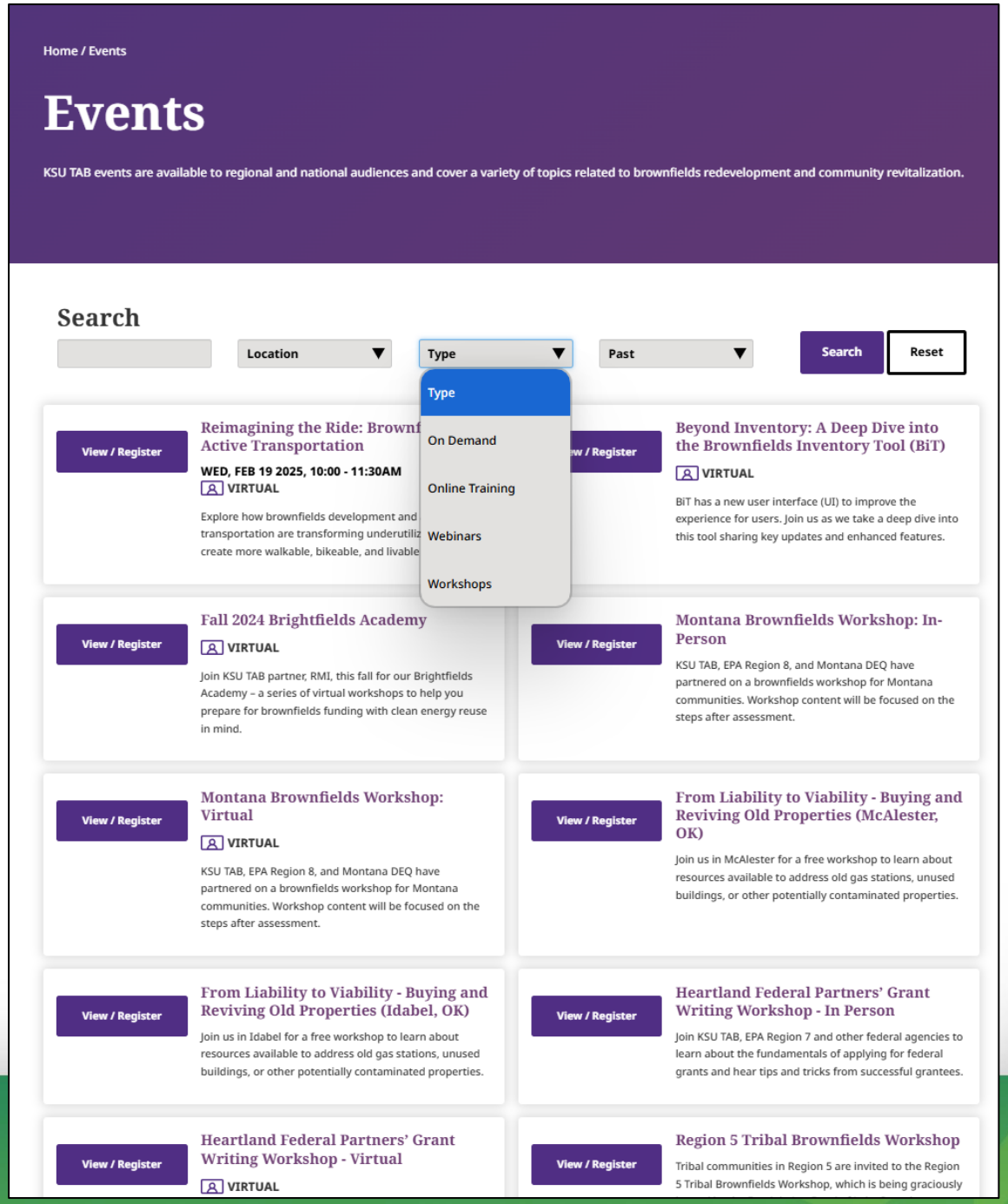
- Workshops & Webinars
- Presentations
- Resources Library

Workshops & Webinars

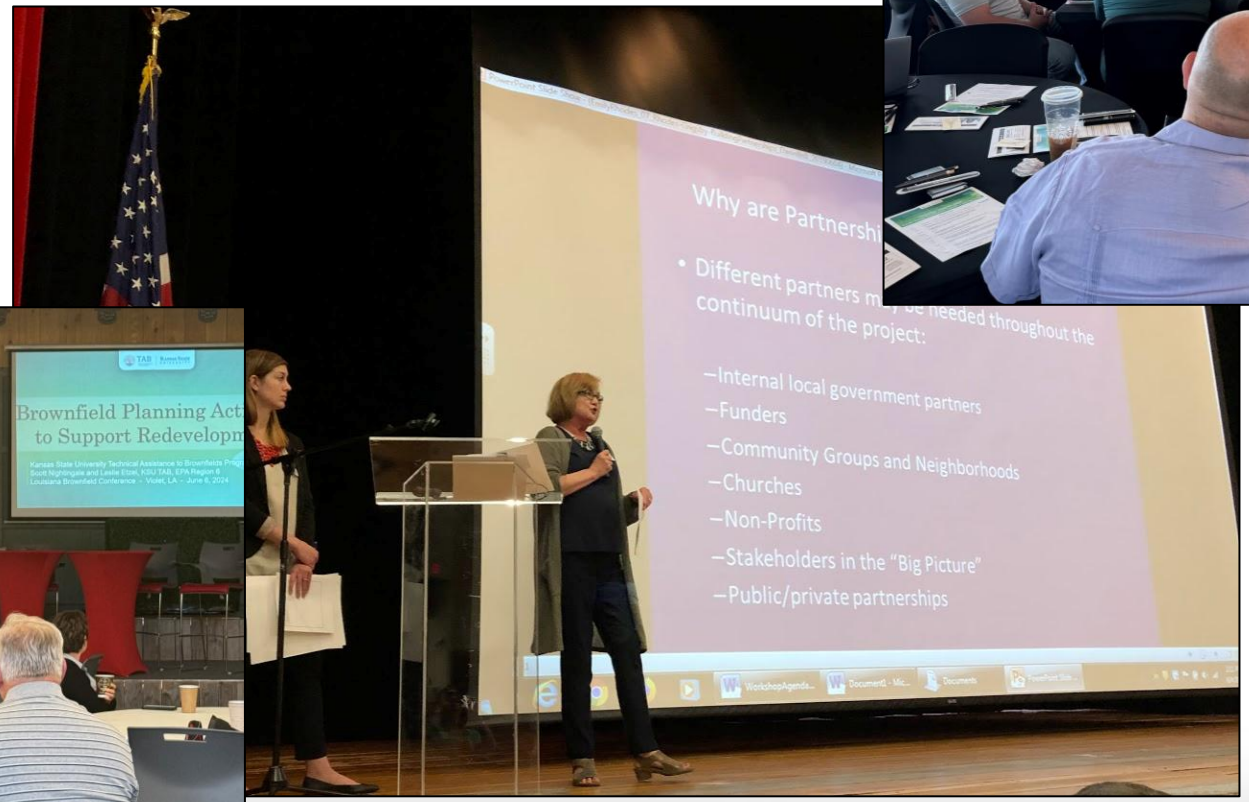
Want your community to know about Brownfields and other redevelopment resources?

KSU TAB can help you host an in-person workshop or a webinar!

KSU can help you find speakers, take registration, make invitations, agendas, and more!



Workshops & Webinars



Presentations

KSU Staff can present Brownfields information to:

- City officials
- Elected Leaders
- Regional Groups
- Public
- Focus Groups

KSU Staff can present at:

- Town halls/Public meetings
- Board meetings
- City Council meetings

Resources Library

www.ksutab.org/resources

Environmental Science and Technology Briefs for Citizens

Center for Hazardous Substance Research

Kansas State University • 104 Ward Hall • Manhattan KS 66506 • 785-532-6519 • www.engg.ksu.edu/CHSR/

CHSR

Issue 15
March 2009

Human Health Effects of Heavy Metals

Sabine Martin, Ph.D., P.G.
Wendy Griswold, Ph.D.

Introduction

Heavy metals are individual metals and metal compounds that can impact human health. Eight common heavy metals are discussed in this brief: arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver. These are all naturally occurring substances which are often present in the environment at low levels. In larger amounts, they can be dangerous.

Generally, humans are exposed to these metals by ingestion (drinking or eating) or inhalation (breathing). Working in or living near an industrial site which utilizes these metals and their compounds increases ones risk of exposure, as does living near a site where these metals have been improperly disposed. Subsistence lifestyles can also impose higher risks of exposure and health impacts because of hunting and gathering activities.

Arsenic

Aside from occurring naturally in the environment, arsenic can be released in larger quantities through volcanic activity, erosion of rocks, forest fires, and human activity. The wood preserving industry uses about 90% of the industrial arsenic in the U.S. Arsenic is also found in paints, dyes, metals, drugs, soaps and semi-conductors.

- Ingestion of very high levels can possibly result in death.
- Long-term low level exposure can cause a darkening of the skin and the appearance of small "corns" or "warts" on the palms, soles, and torso.

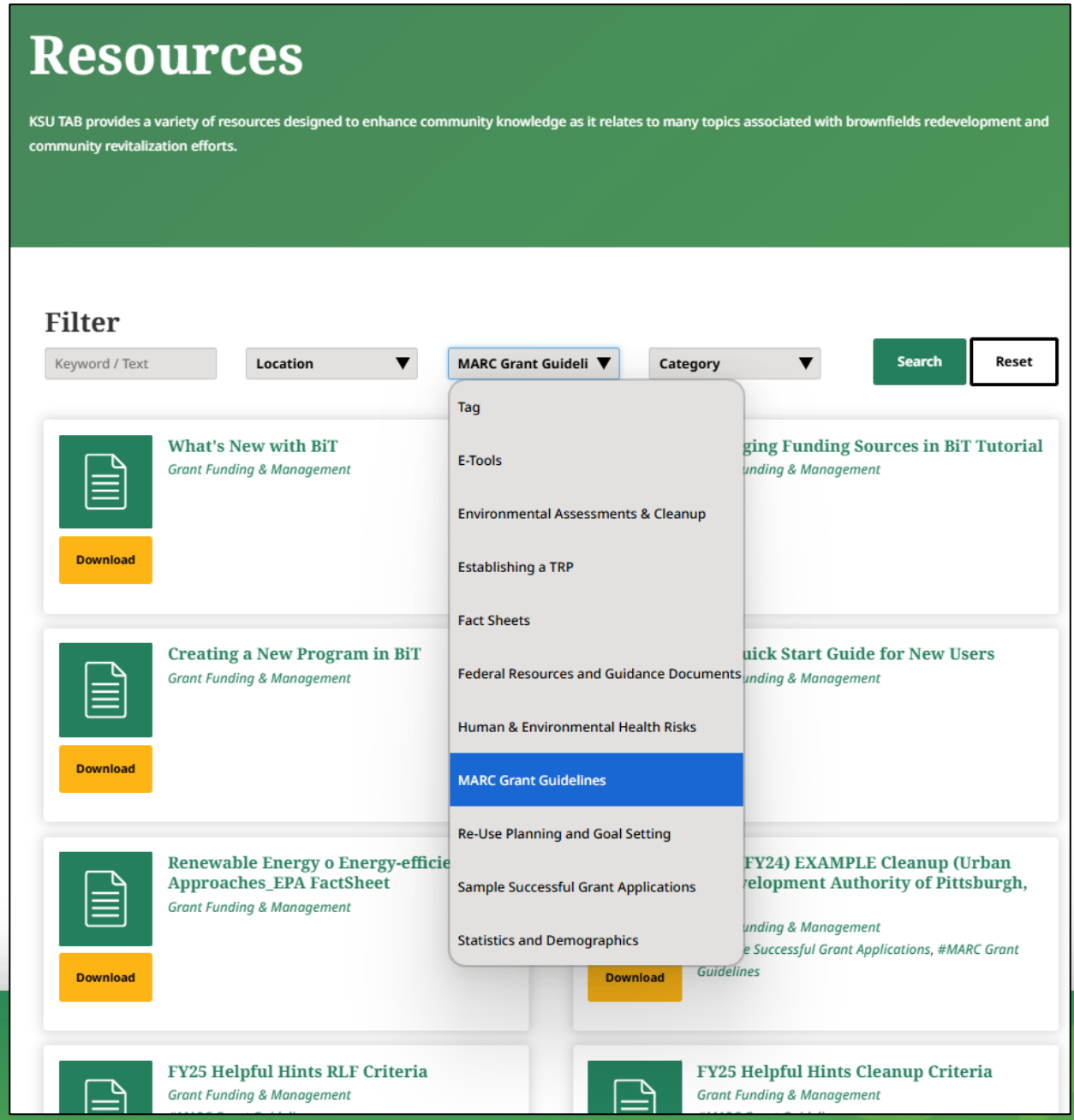
Regulatory limits

- Environmental Protection Agency (EPA) - 0.01 parts per million (ppm) in drinking water.
- Occupational Safety and Health Administration (OSHA) - 10 micrograms per cubic meter of workplace air (10 µg/ m^3) for 8 hour shifts and 40 hour work weeks.

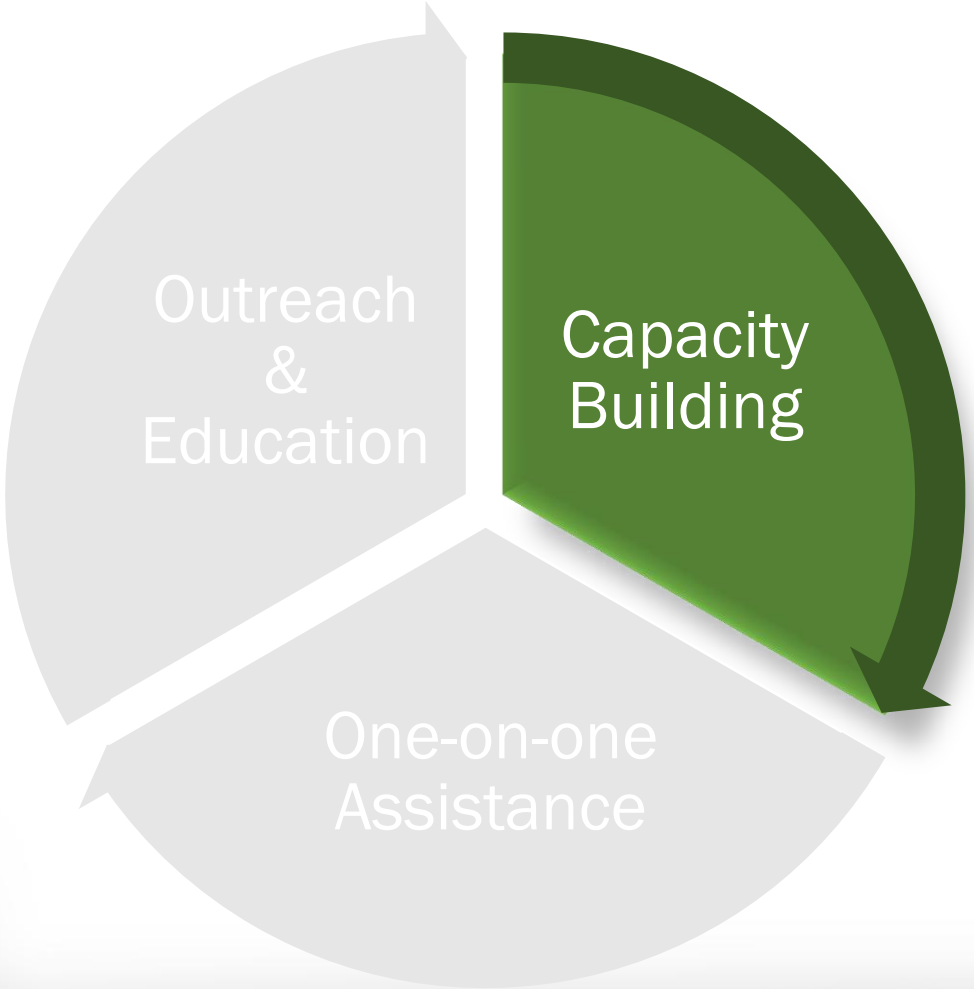
Barium

Barium is a very abundant, naturally occurring metal and is used for a variety of industrial purposes. Barium compounds, such as barium-nickel alloys are used for spark-plug electrodes and in vacuum tubes as a drying and oxygen-removing agent; barium sulfide is used in fluorescent lamps; barium sulfate is used in diagnostic medicine; barium nitrate and chlorate give fireworks a green color. Barium compounds are also used in drilling muds, paint, bricks, ceramics, glass, and rubber.

Health effects



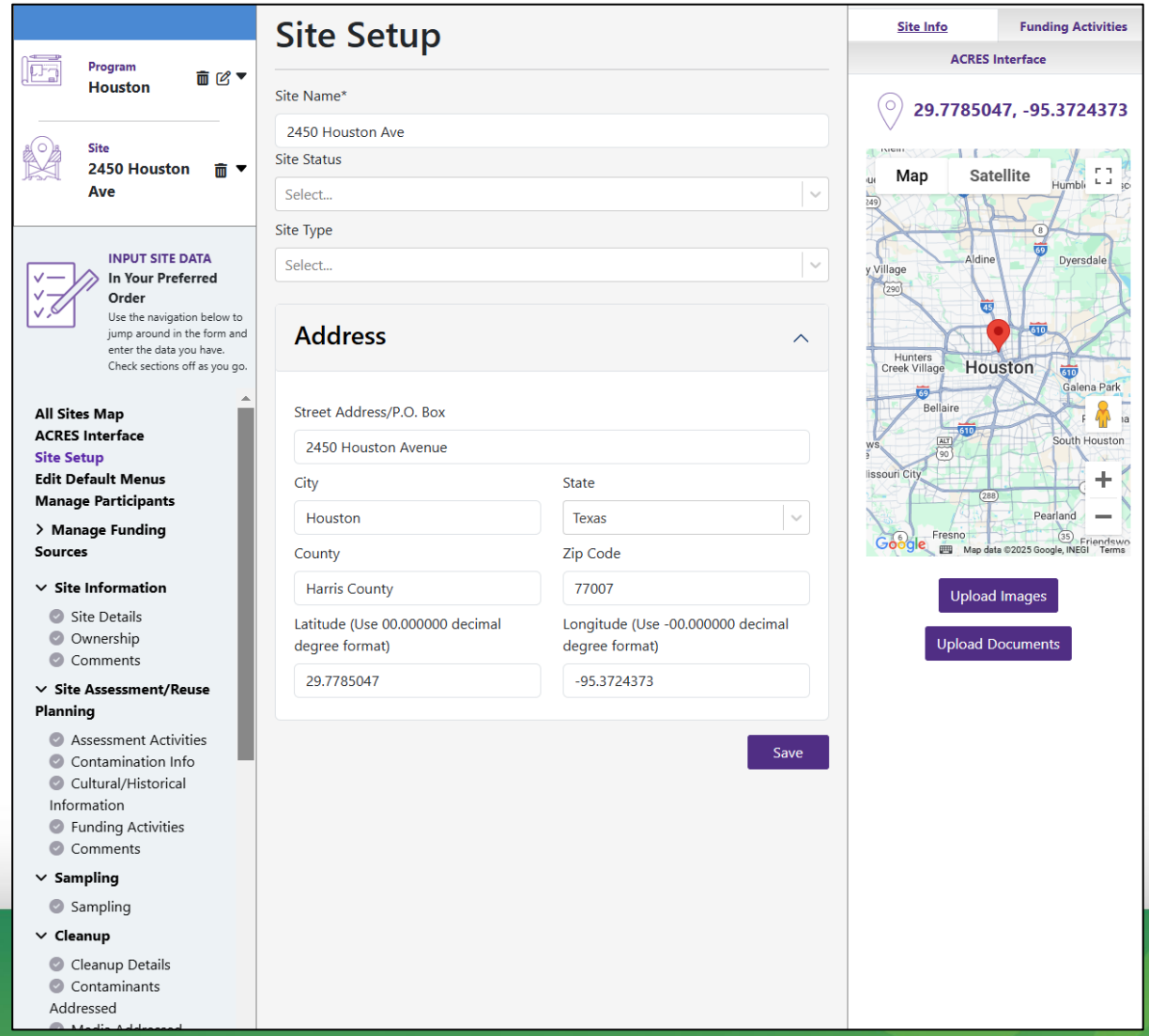
KSU TAB Resources & Assistance



- Brownfield Inventory Tool (BiT)
- Community Benefits Calculator

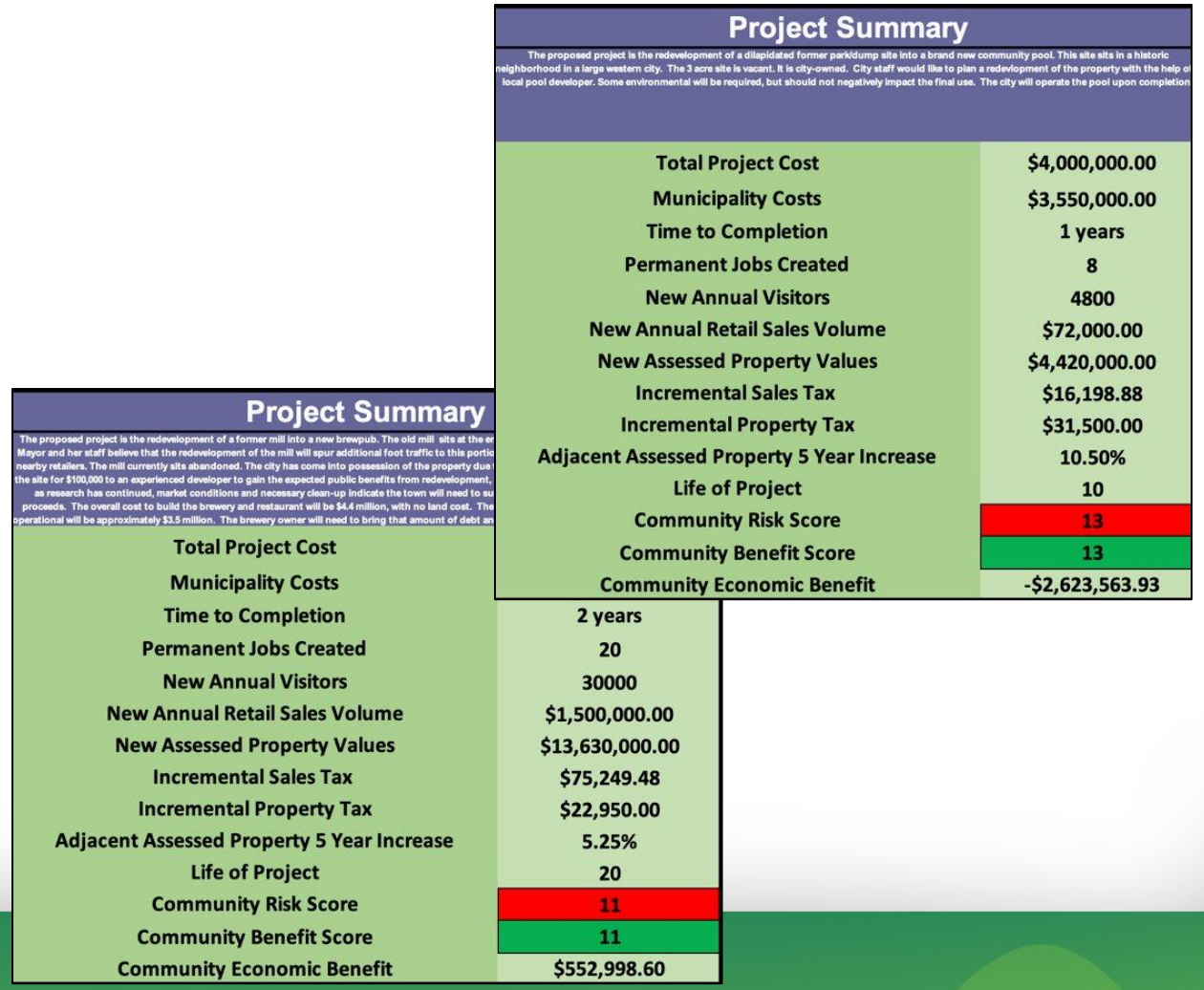
Brownfields Inventory Tool (BiT)

- Site details & information
- Structured to mirror the brownfields redevelopment process
- Assessment, cleanup, institutional controls
- Redevelopment
- Upload photos and documents
- Funding Summary
- Import and Export data
- https://etools.ksutab.org/tools/bit



Community Benefits Calculator

- Assist communities in evaluating potential reuse options for brownfields redevelopment and other real estate development projects.
- The CBC prompts the user to gather information and answer questions to as well as whether the project supports current public priorities.
- The CBC is not intended for use in making final decisions about projects.
- https://www.ksutab.org/resource/community-benefits-calculator



Project Summary

The proposed project is the redevelopment of a dilapidated former park/dump site into a brand new community pool. This site sits in a historic neighborhood in a large western city. The 3 acre site is vacant. It is city-owned. City staff would like to plan a redevelopment of the property with the help of local pool developer. Some environmental will be required, but should not negatively impact the final use. The city will operate the pool upon completion

Total Project Cost	$4,000,000.00
Municipality Costs	$3,550,000.00
Time to Completion	1 years
Permanent Jobs Created	8
New Annual Visitors	4800
New Annual Retail Sales Volume	$72,000.00
New Assessed Property Values	$4,420,000.00
Incremental Sales Tax	$16,198.88
Incremental Property Tax	$31,500.00
Adjacent Assessed Property 5 Year Increase	10.50%
Life of Project	10
Community Risk Score	13
Community Benefit Score	13
Community Economic Benefit	-$2,623,563.93

Project Summary

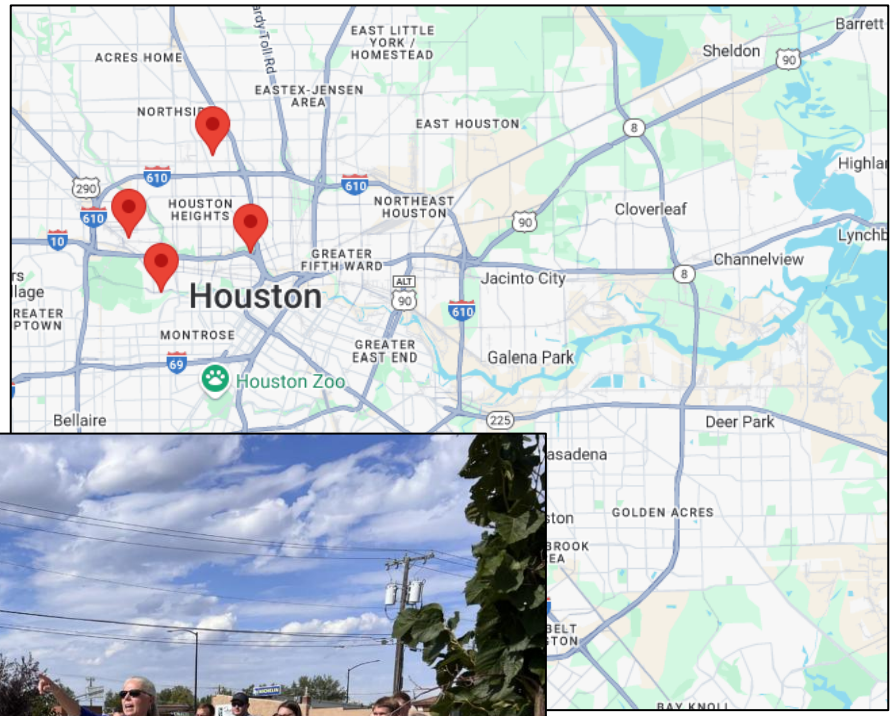
The proposed project is the redevelopment of a former mill into a new brewpub. The old mill sits at the er
Mayor and her staff believe that the redevelopment of the mill will spur additional foot traffic to this portio
nearby retailers. The mill currently sits abandoned. The city has come into possession of the property due
the site for $100,000 to an experienced developer to gain the expected public benefits from redevelopment,
as research has continued, market conditions and necessary clean-up indicate the town will need to su
proceeds. The overall cost to build the brewery and restaurant will be $4.4 million, with no land cost. The
operational will be approximately $3.5 million. The brewery owner will need to bring that amount of debt an

Total Project Cost	2 years
Municipality Costs	20
Time to Completion	30000
Permanent Jobs Created	$1,500,000.00
New Annual Visitors	$13,630,000.00
New Annual Retail Sales Volume	$75,249.48
New Assessed Property Values	$22,950.00
Incremental Sales Tax	5.25%
Incremental Property Tax	20
Adjacent Assessed Property 5 Year Increase	11
Life of Project	11
Community Risk Score	$552,998.60
Community Benefit Score	
Community Economic Benefit	

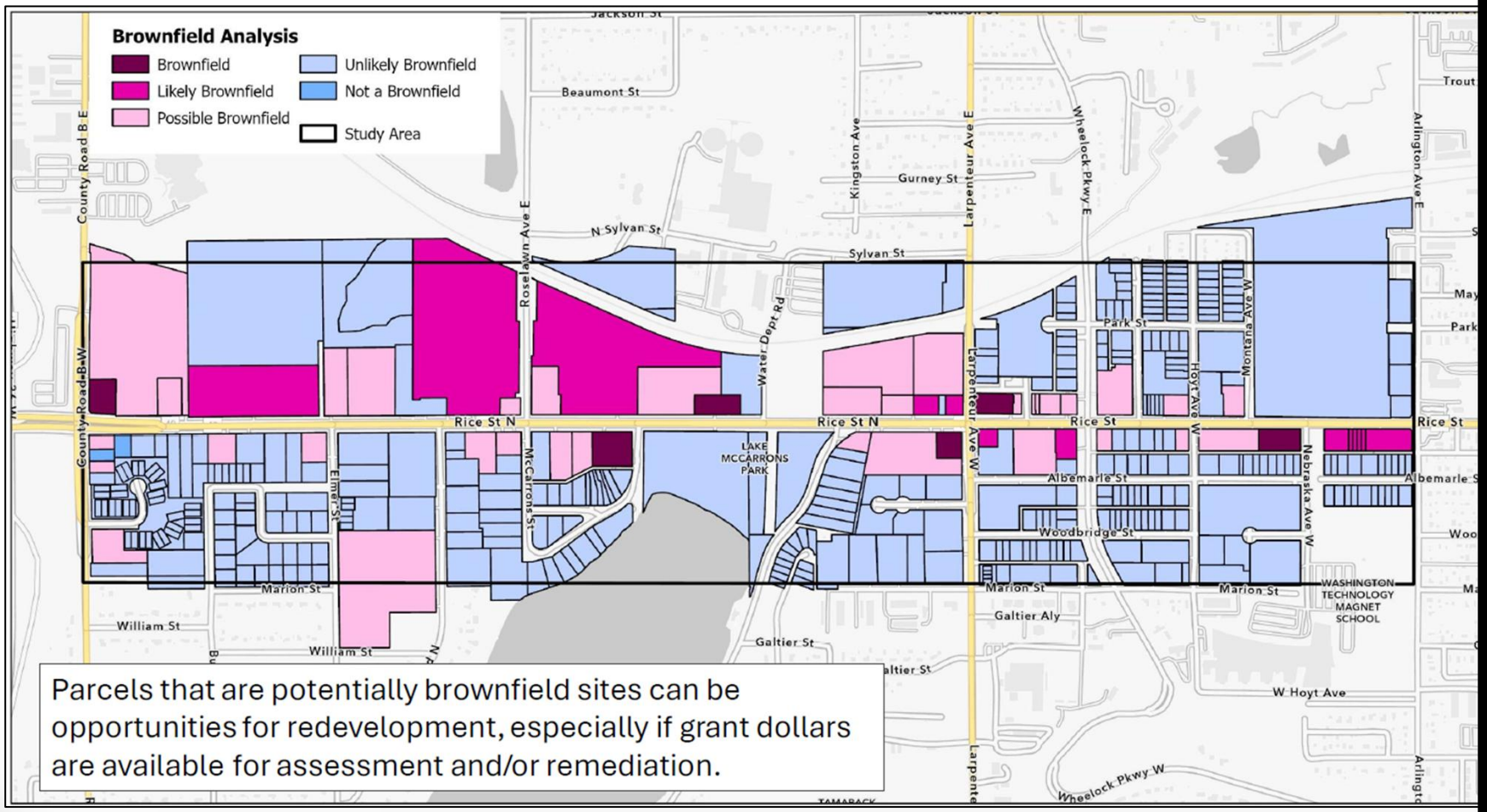
KSU TAB Resources & Assistance

- Identify & Prioritize Sites
- Strategic Planning and Redevelopment Visioning
- Conceptual Renderings
- Market Analysis, Proformas, & Feasibility Studies
- Resource Roadmaps
- Technical Report Reviews
- EPA MARC Grant Application Assistance

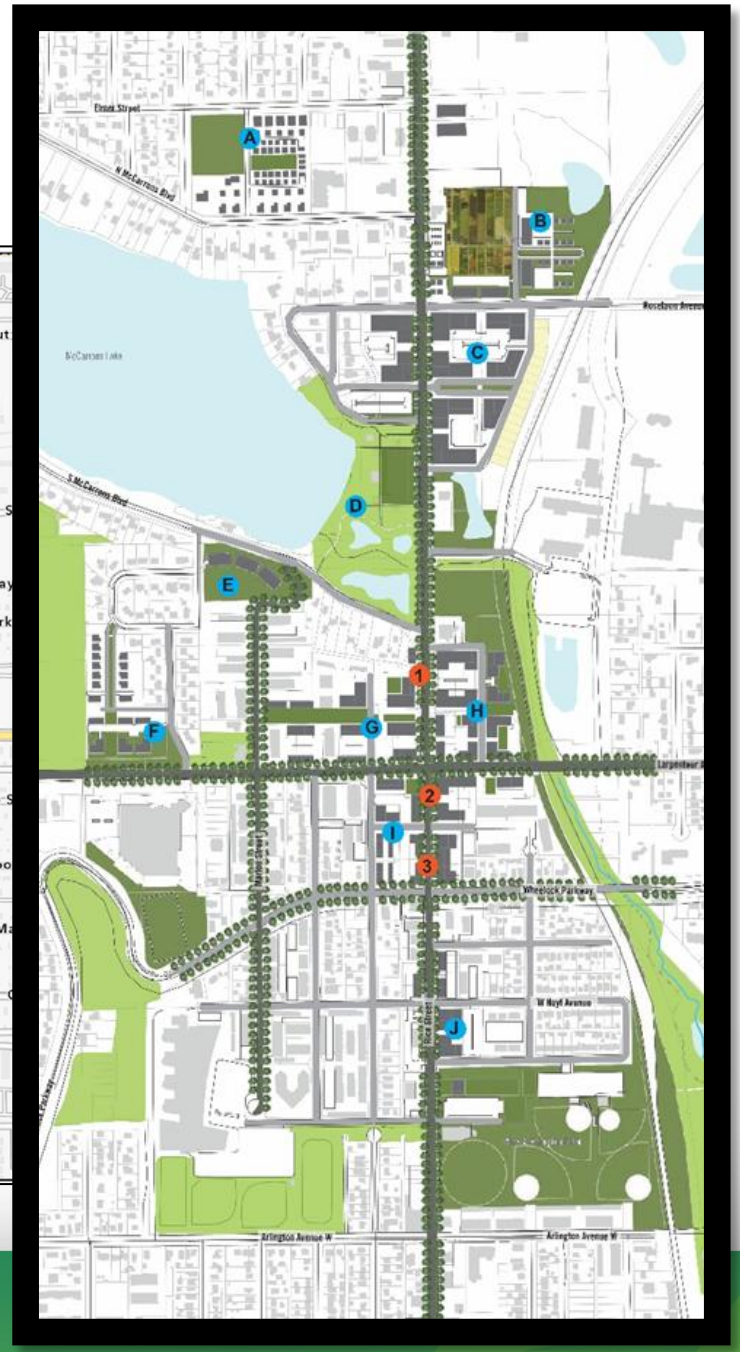
Identify & Prioritize Sites



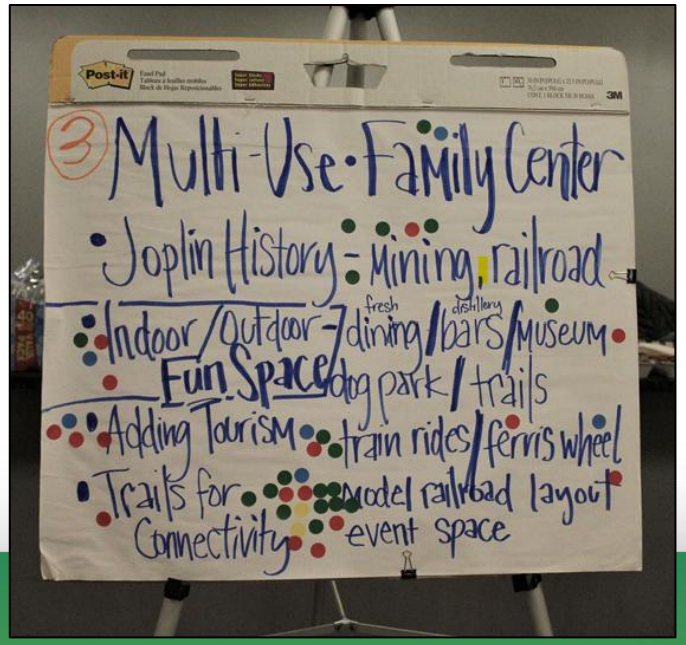
Identify & Prioritize Sites

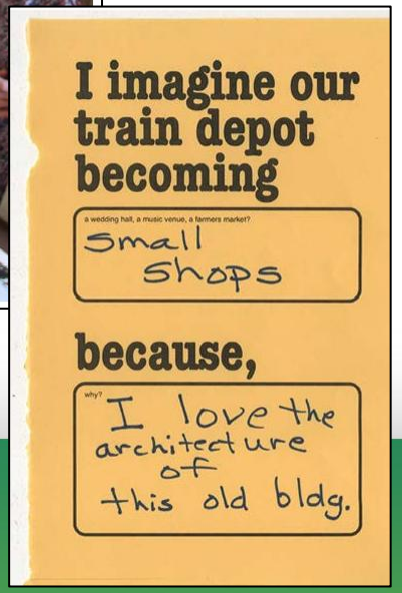


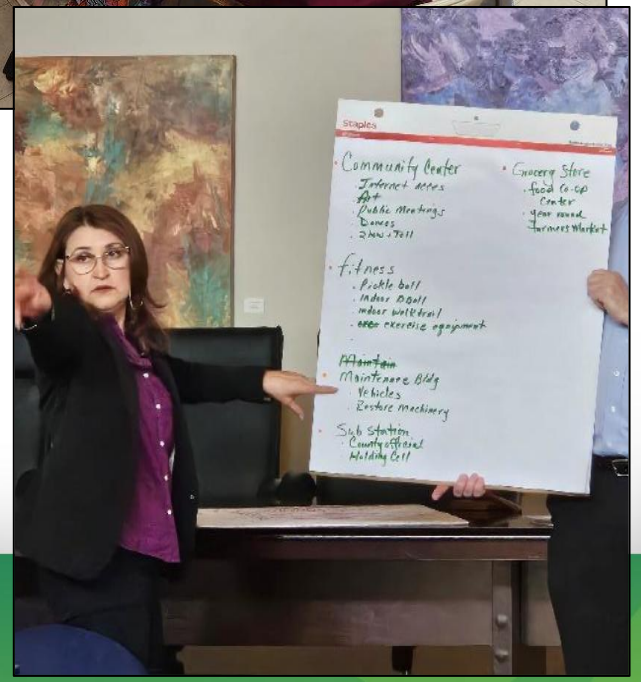
Parcels that are potentially brownfield sites can be opportunities for redevelopment, especially if grant dollars are available for assessment and/or remediation.



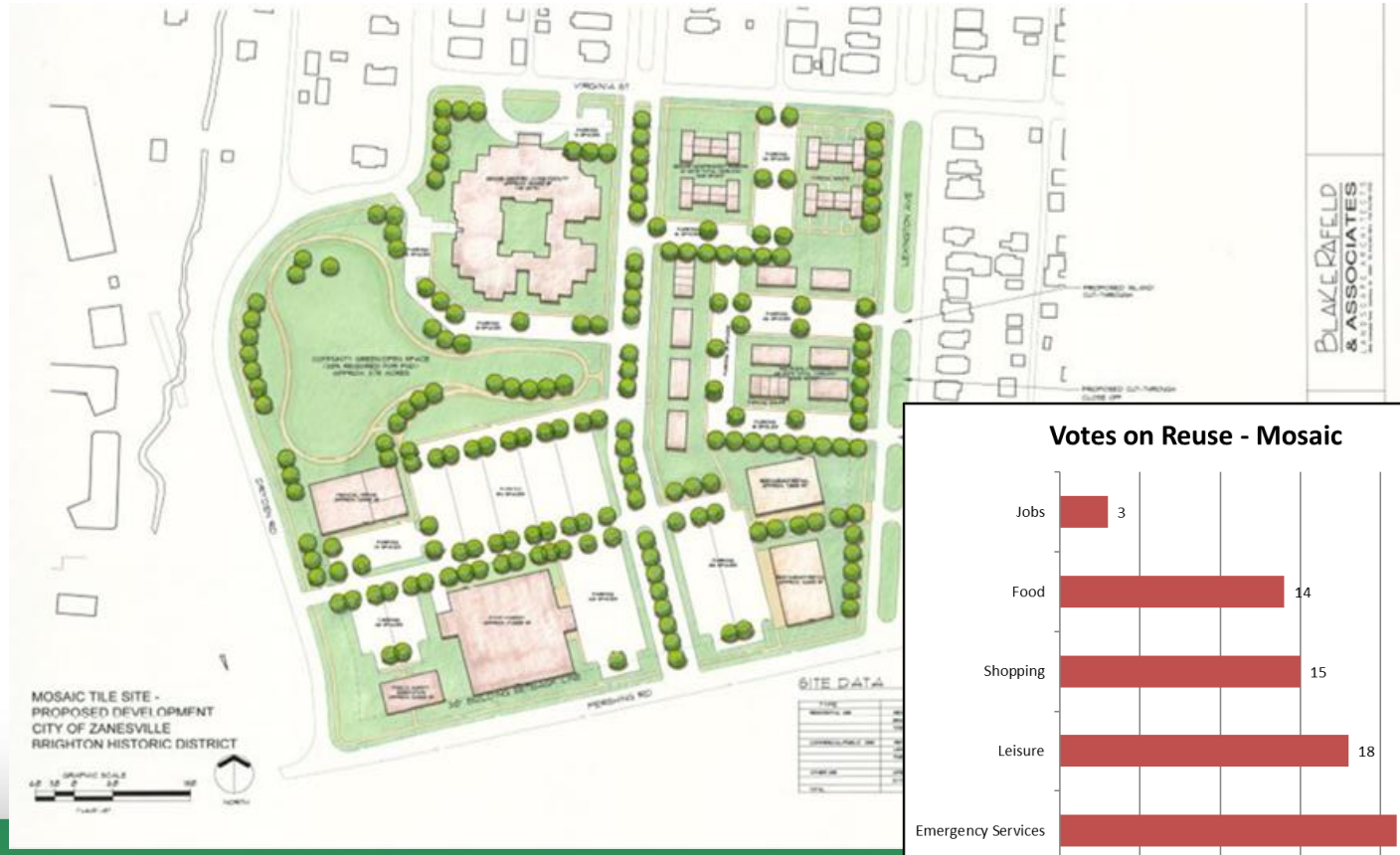
Planning & Visioning







Conceptual Renderings (with community engagement)



Conceptual Renderings

Market Analysis

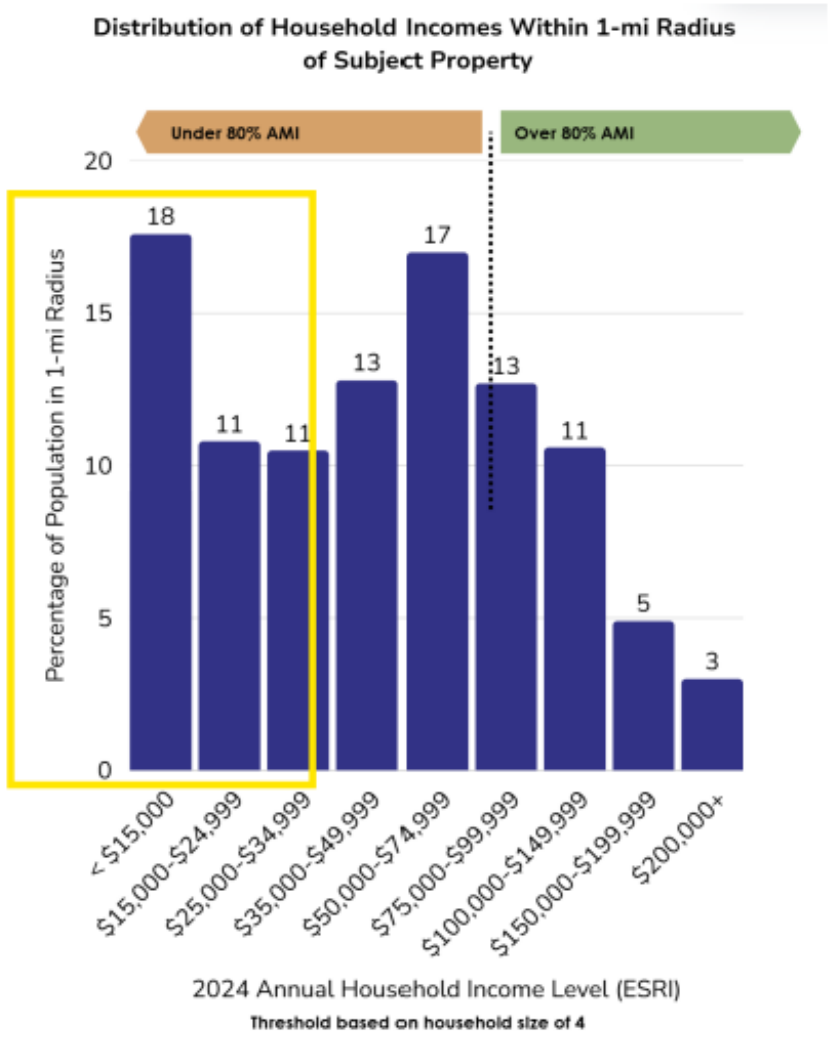
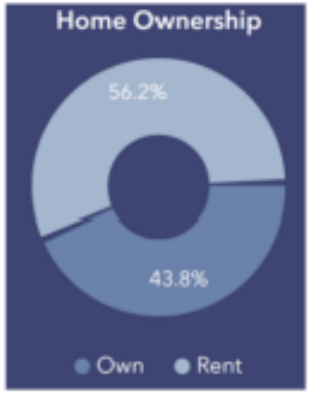


Figure 3: Household income breakdown, within 1-mi radius (via ESRI)



Households by Size	Number	Percent
Total Households	5,437	-
1-Person Household	1,928	35%
2-Person Household	1,440	26%
3-Person Household	818	15%
4-Person Household	575	11%
5-Person Household	368	7%
6-Person Household	191	4%
7+ Person Household	117	2%
Average Household Size	2.49	-

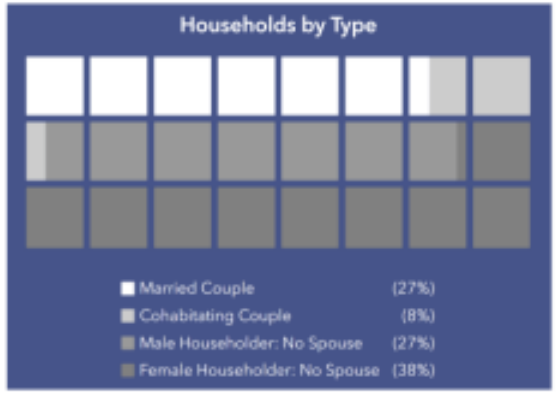


Figure 4: Household data breakdown, within 1-mi radius (via ESRI)

Age Profile: 5 Year Increments	Females	Males	Harris County (Females)	Harris County (Males)
0-4	6.0%	6.5%	6.4%	6.7%
5-9	5.7%	6.5%	6.5%	6.8%
10-14	5.4%	6.0%	6.7%	7.0%
15-19	6.1%	5.9%	6.8%	7.2%
20-24	6.2%	7.2%	7.2%	7.5%
25-29	6.5%	6.3%	7.4%	7.7%
30-34	7.8%	7.7%	7.8%	8.0%
35-39	7.3%	8.0%	7.3%	7.6%
40-44	6.9%	7.4%	7.1%	7.3%
45-49	5.6%	6.1%	6.3%	6.3%
50-54	5.7%	6.2%	6.1%	6.2%
55-59	5.5%	5.9%	5.3%	5.4%
60-64	6.1%	6.0%	5.2%	5.1%
65-69	6.3%	5.5%	4.6%	4.2%
70-74	4.7%	3.9%	3.5%	3.1%
75-79	3.2%	2.6%	2.5%	2.1%
80-84	2.3%	1.4%	1.5%	1.1%
85	2.7%	0.9%	1.5%	0.8%

Compare with: Harris County

Figure 5: Age breakdown by sex for 1-mile radius, compared to Harris County (via ESRI)

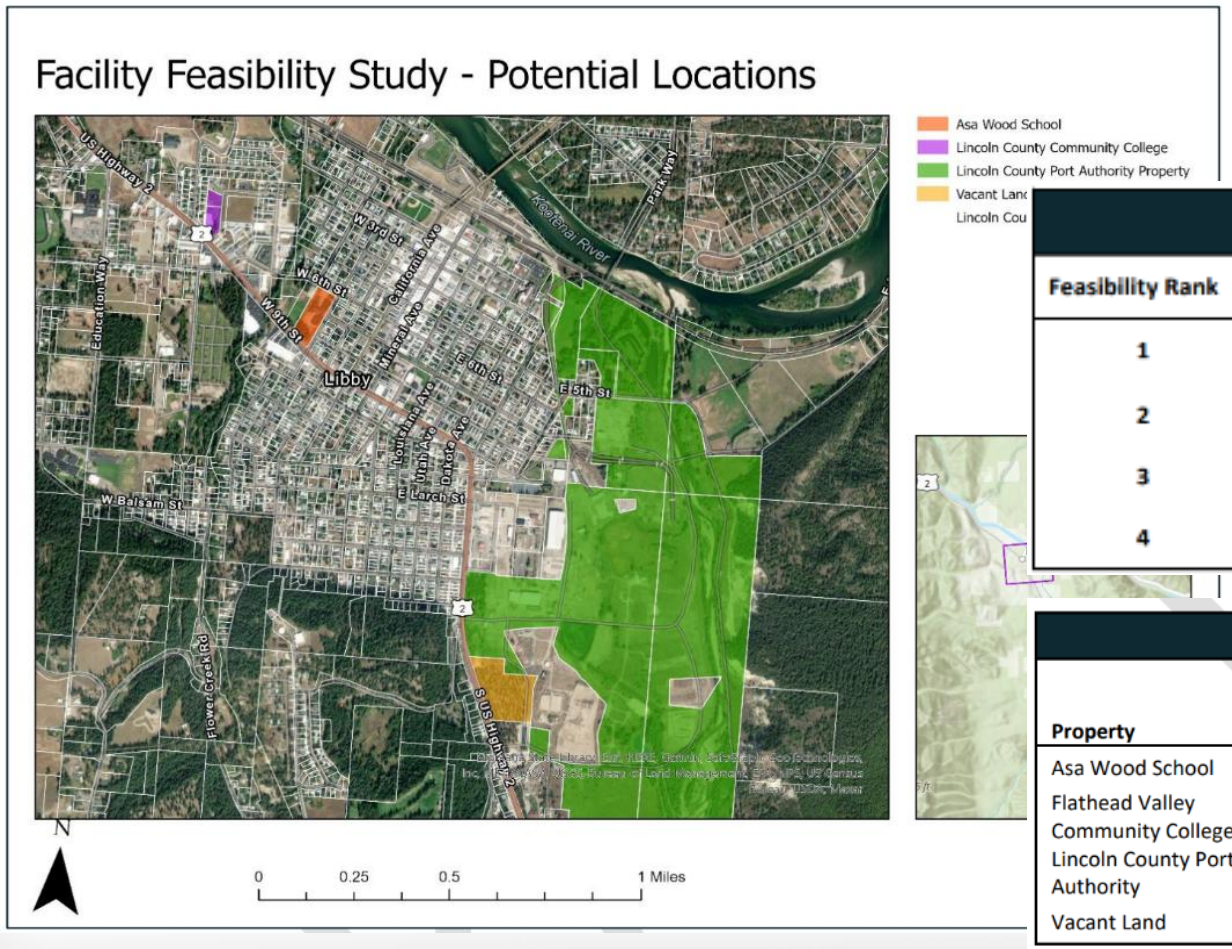
Market Analysis

Commerical Real Estate Development Opportunities

In the 1-mile radius trade area the following retailers and select personal service providers are in demand:

Business Category	Goods or Services Provider	Business Examples	Property Type	Estimated Square Feet Supported	Typical Business Size (sf)	Estimated Number Businesses Supported
Motor Vehicle & Parts Dealers	Goods	Auto Zone, O'Reilly Automotive	• Retail Storefront • Main Street, mall, or Free-standing	79,287	7,000	11
Bldg Materials, Garden Equip. & Supply Stores	Goods	Home Depot, ACE Hardware	• Retail Storefront • Industrial/warehouse flex • Main Street, mall, or Free-standing	18,128	10,500	2
Electronics & Appliance Stores	Goods	Best Buy, Game Stop	• Retail Storefront • Main Street, mall, or Free-standing	8,299	30,000	1
Miscellaneous Store Retailers	Goods	Petsmart, Office Depot, Gymboree, Barnes & Noble, Dollar Store	• Retail Storefront • Main Street, mall, or Free-standing	13,644	20,000	1

Feasibility Studies



Facility Feasibility Score

Feasibility Rank	Property	Proximity to Downtown	Available Space	Construction Costs	Total Feasibility Score[6]
1	Asa Wood School	1	3	2	6
2	Lincoln County Port Authority	3	1	3	7
3	Flathead Valley Community College	2	4	1	7
4	Vacant Land	4	2	4	10

Feasible Space Analysis

Property	Acres	Infrastructure Reduction	Min. Building Improvement SF	Min. Parking Space SF	Total SF Required (rounded)	Available SF	Remainder
Asa Wood School	5.4	35%	37,000	56,531	127,000	235,224	108,224
Flathead Valley Community College	3.0	35%	37,000	56,531	127,000	130,452	3,452
Lincoln County Port Authority	398.7	35%	37,000	56,531	127,000	17,368,243	17,241,243
Vacant Land	15.2	35%	37,000	56,531	127,000	663,985	536,985

ProFormas

Scenario 1			
Cleanup	Asbestos Abatement		$1,230,000
	Soil Excavation		$3,025,000
	Vapor Mitigation		$1,195,000
	Groundwater		$400,000
Site Prep	Demolition		$984,000
	Site Preparation		
Construction	Commercial Highway Frontage	3 units	15,00
	Anchor Retail	1 unit	126,00
	Retail Strip (Multiple Tenants)	1 unit	88,00
	Retail Strip (second tier tenants	1 unit	67,00
	Warehouse	1 unit	200,00
Other	Architects, Brokers, etc		
			To
Development Costs	Carry Costs for 3 years		7.5% of
	Brownfields Tax Credit		20% of Total Developr
			Total Developm
Net Operating Income	Commercial Highway Frontage	3 units	15,00
	Anchor Retail	1 unit	126,00
	Retail Strip (Multiple Tenants)	1 unit	88,00
	Retail Strip (second tier tenants	1 unit	67,00
	Warehouse	1 unit	200,00
Projection Valuation & Capitilization	Project Sale Value	Cap Rate	

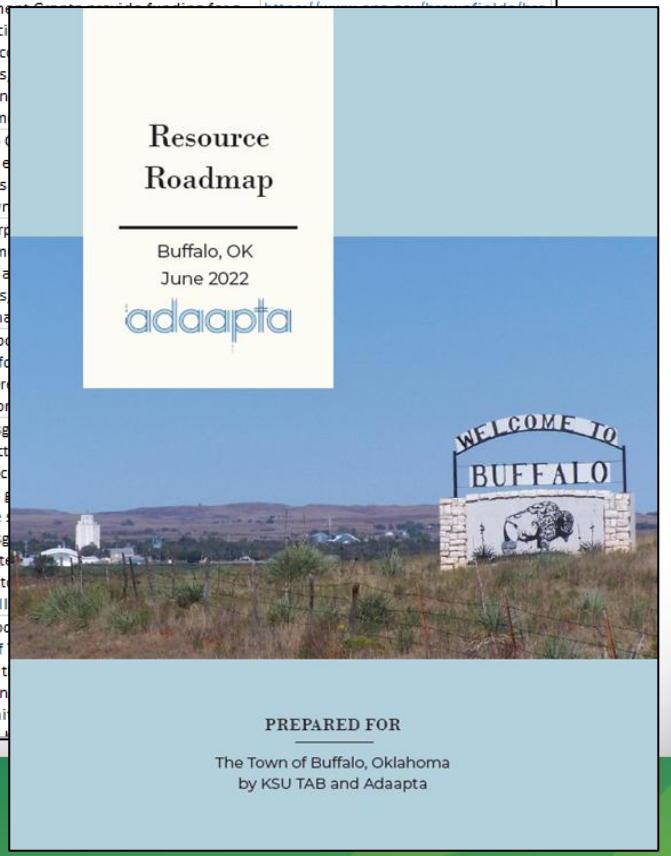
Scenario 2					
Cleanup	Asbestos Abatement				$1,230,000
	Soil Excavation				$3,025,000
	Vapor Mitigation				$1,425,000
	Groundwater				$400,000
Site Prep	Demolition				$984,000
	Site Preparation				$1,180,000
Construction	Commercial Highway Frontage	3 units	15,000 SF	$200/SF	$3,000,000
	Warehouse distribution	1 u			
	Multi-Tenant Industrial Flex	1 u			
	Multi-Tenant Industrial Flex	1 u			
Other	Architects, Brokers, etc				
Development Costs	Carry Costs for 3 years				
	Brownfields Tax Credit	20% of T			
					Tota
Net Operating Income	Commercial Highway Frontage	3 ur			
	Warehouse distribution	1 u			
	Multi-Tenant Industrial Flex	1 u			
	Multi-Tenant Industrial Flex	1 u			
Projection Valuation & Capitilization	Project Sale Value				

Scenario 3					
Cleanup	Asbestos Abatement				$1,230,000
	Soil Excavation				$3,025,000
	Vapor Mitigation				$1,425,000
	Groundwater				$400,000
Site Prep	Demolition				$984,000
	Site Preparation				$1,180,000
Construction	Commercial Highway Frontage	3 units	5,000 SF	$200/SF	$3,000,000
	Mid-Tier Hotel	100 units	89,000 SF	$440/SF	$39,160,000
	Self-Storage Building	1 unit	70,000 SF	$50/SF	$3,500,000
	Self-Storage Lot	1 unit	70,000 SF	$5/SF	$350,000
Other	Architects, Brokers, etc				$10,850,800
				Total Development Costs	**$65,104,800**
Development Costs	Carry Costs for 3 years			7.5% of Total Development Costs	$14,648,580
	Brownfields Tax Credit			20% of Total Development Costs + Carry Costs	**-$15,950,676**
				Total Development Costs Over 3 years	**$63,802,704**
Net Operating Income	Commercial Highway Frontage	3 units	5,000 SF	$18/SF	$270,000
	Mid-Tier Hotel	100 units	89,000 SF	$140/SF	$3,679,200
	Self-Storage Building	1 unit	70,000 SF	$1.75/SF	$122,500
	Self-Storage Lot	1 unit	70,000 SF	$1.25/SF	$52,500
	Renewable Energy		34 Acres	$1,000/Acre	$34,000
				Total NOI	**$4,428,200**
Projection Valuation &	Project Sale Value	Cap Rate		**7.0%**	$63,260,000
				Profit	**-$542,704**
				Cash on Cash Return	**-0.85%**

Resource Roadmaps

Uses	
Total Development Budget	$21,775,893
Sources	
Great Southern Bank (money market)	$600,000
Great Southern Bank (11 mo CD)	$252,500
Security National Bank (cash on hand)	$ 199,000
Gilchrist Foundation and Matches	$ 153,500
Bluestem Fund (Fieges Pledge)	$ 500,000
Pledges Committed	$ 1,175,000
Margaret Ann Martin Everist	$ 75,000
Brownfield Tax Credit	$ 1,500,000
MRHD Grant	$ 1,000,000
State Historic Tax Credit	$ 4,400,000
Margaret Ann Martin Everist (2nd Grant)	$ 75,000
Enhance Iowa	$ 500,000
Bluestem Fund II	$ 500,000
Sources Total	$10,930,000
Gap	**$ 10,845,983**

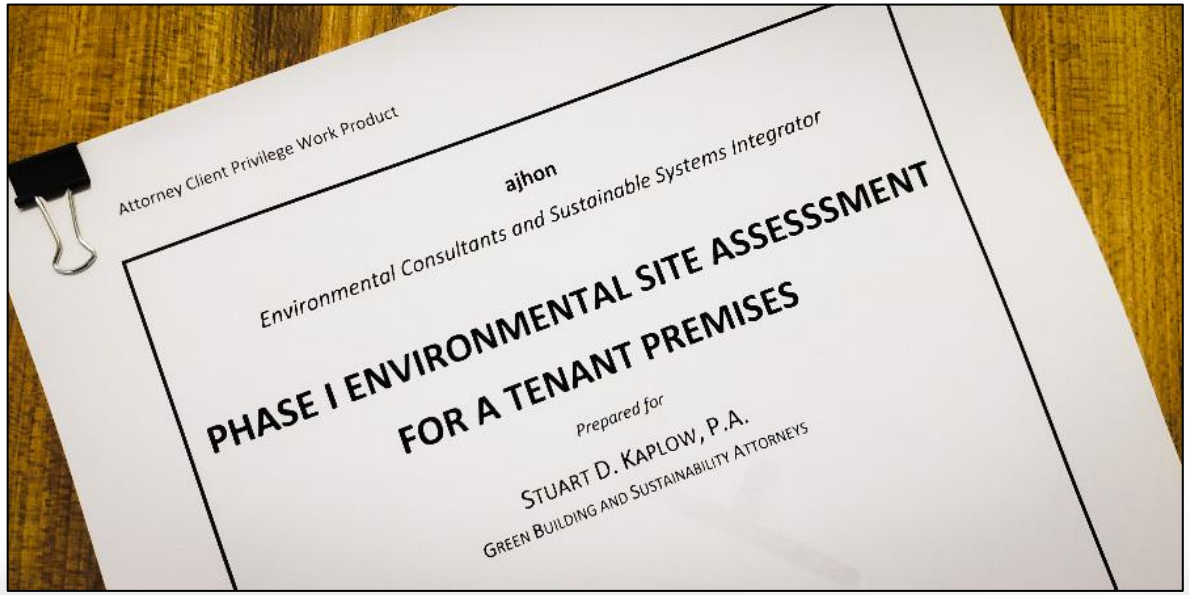
Category	Program Name	Agency/Department/Organization	Type	Amount	Cost Share?	Application Deadline	Eligibility	Notes	Link
Brownfields	EPA Region 6 Targeted Brownfields Assessment	EPA Region 6	Other	Varies	No	Rolling	Public, quasi-public, tribal, and non-profit entities	Free Phase I and Phase II Environmental Site Assessments; assistance can also include brownfield inventories, area-wide planning, and cleanup planning.	https://www.epa.gov/brownfields/region-6-targeted-brownfields-assessment
	Dry Cleaner Remediation Program	Texas Commission on Environmental Quality	Other	Varies	$5,000 deductible	Rolling	Current and former operators of dry cleaners and owners of properties that currently or formerly contained a dry cleaner	Sites must be added to the priority list and meet ranking criteria in order to be eligible.	https://www.tceq.texas.gov/remediation/dry_cleaners/index.html
	Brownfields Assessment Grant	US EPA	Grant	$500,000	No	Annually in the fall; typically due in October or November	City and county governments, state agencies, other governmental bodies, and 501c3 organizations	Assessm grant reci assess, c activities plans, an engagem	
	Brownfields Cleanup Grant	US EPA	Grant	Three funding tiers up to $5 million	No	Annually in the fall; typically due in October or November	City and county governments, state agencies, other governmental bodies, and	Cleanup C eligible e activities must own	
	Brownfields Multipurpose Grant	US EPA	Grant	$1 million	No	Every other year in the fall; typically due in October or November	City and county governments, state agencies, other governmental bodies, and 501c3 organizations	Multipurp for comm eligible a activities additiona	
	Brownfields Revolving Loan Fund	City of Texarkana	Loans	Not specified	N/A	Rolling	Public, private, and nonprofit entities	The purp avenue fo low inter of enviro	
	Human Services Grant	Kresge Foundation	Grant	Unknown; typically between $10,000 and $500,000.	Unknown	Unknown	Unknown	The Kresg to project these foc which is g promote The Kresg unsolicite be able t open call	
Programs/Amenities	Moody Foundation Grants	Moody Foundation	Grant	Unknown; typically between $25,000 and $200,000	Unknown	Applications are reviewed quarterly; length of time from application to approval is typically around 6 months	Nonprofits	The Mood future of projects t make lon communi arts and	



Technical Report Reviews

KSU TAB Staff can provide technical reviews of:

- Phase I and II Environmental Site Assessments
- Analysis of Brownfield Cleanup Alternatives
- Cleanup Plans
- Cleanup Reports
- Quality Assurance Project Plans
- Sampling and Analysis Plans
- Other technical reports



TAB EZ

Grant Writing Help

- Free and user friendly
- Collaborative
- “Helpful Hints” for addressing grant criteria
- View Ranking Criteria and Evaluation

IV.E.1.a.i Overview of Brownfield Challenges and Description of Target Area

Discuss the brownfield challenges and their impact on the city(ies), town(s), or geographic area(s) targeted by this application. Provide a brief overview of how this grant may help address those challenges and impacts.

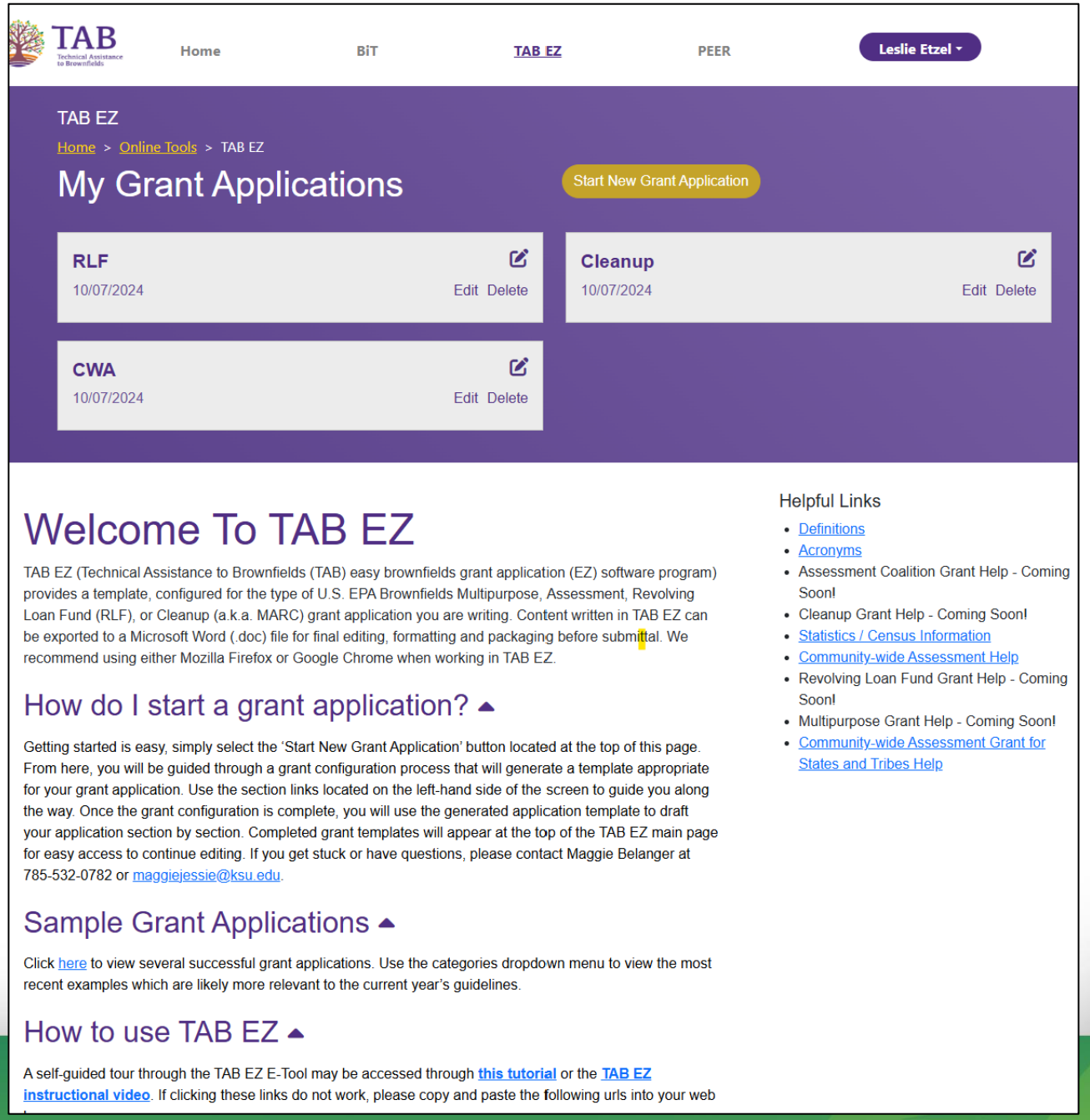
Within the city(ies), town(s), or geographic area(s), identify and describe the specific target area(s) where you plan to perform the grant activities, such as a neighborhood, district, corridor, or census tract. *Depending on the scope and design of your project, one or more target areas may be presented.*

Evaluation Criteria for Cleanup Grants

This section is worth **5 points**. Your application will be evaluated on the extent to which:

- the brownfield challenges are clearly discussed and the degree to which the brownfield challenges impact the city(ies), town(s), or geographic area(s) targeted by this application;
- this grant may help address those challenges and impacts; and,
- the applicant clearly identifies and describes the specific target area(s) within city(ies), town(s), or geographic area(s) where it plans to perform grant activities.

HELPFUL HINTS

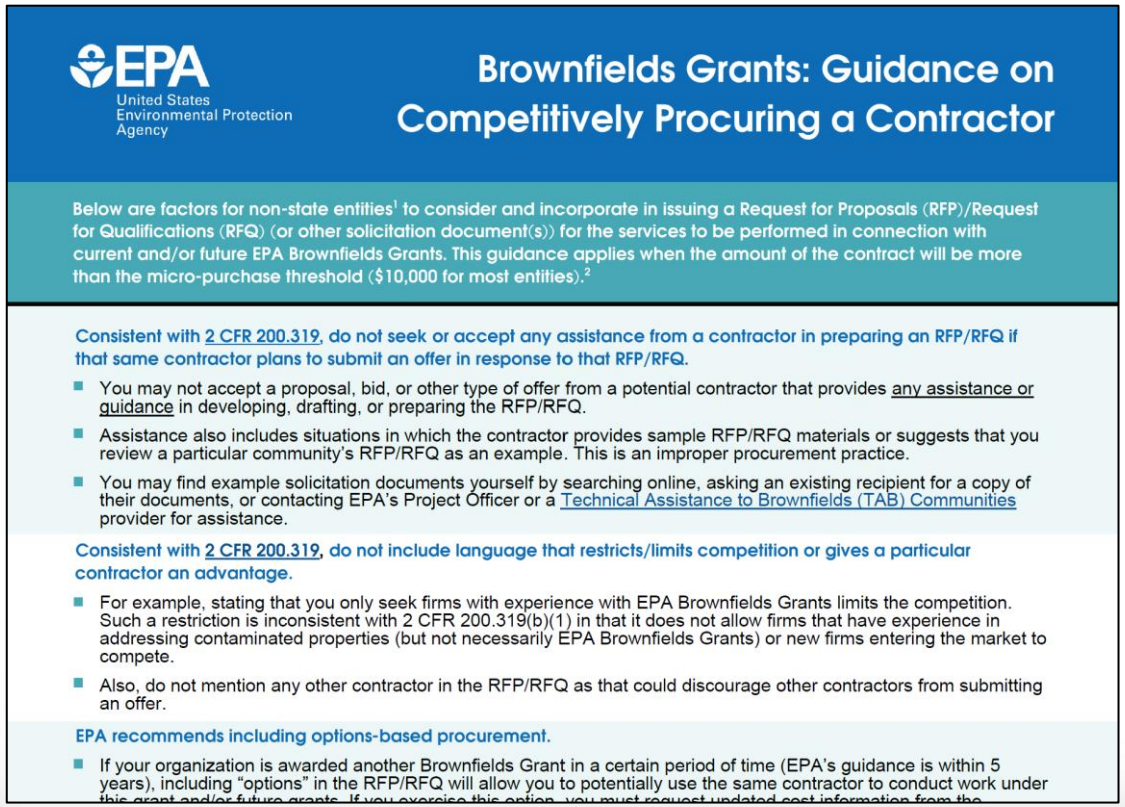


MARC Grant Review

KSU TAB staff will provide a thorough review of your EPA MARC Grant Application.

You can request a review at any time, but generally reviews begin once the EPA releases grant guidelines in the fall. **Review Time: ~3 to 4 business days.**

RFP/RFQ Template



EPA United States Environmental Protection Agency

Brownfields Grants: Guidance on Competitively Procuring a Contractor

Below are factors for non-state entities[1] to consider and incorporate in issuing a Request for Proposals (RFP)/Request for Qualifications (RFQ) (or other solicitation document(s)) for the services to be performed in connection with current and/or future EPA Brownfields Grants. This guidance applies when the amount of the contract will be more than the micro-purchase threshold ($10,000 for most entities).[2]

Consistent with 2 CFR 200.319, do not seek or accept any assistance from a contractor in preparing an RFP/RFQ if that same contractor plans to submit an offer in response to that RFP/RFQ.

- You may not accept a proposal, bid, or other type of offer from a potential contractor that provides any assistance or guidance in developing, drafting, or preparing the RFP/RFQ.
- Assistance also includes situations in which the contractor provides sample RFP/RFQ materials or suggests that you review a particular community's RFP/RFQ as an example. This is an improper procurement practice.
- You may find example solicitation documents yourself by searching online, asking an existing recipient for a copy of their documents, or contacting EPA's Project Officer or a Technical Assistance to Brownfields (TAB) Communities provider for assistance.

Consistent with 2 CFR 200.319, do not include language that restricts/limits competition or gives a particular contractor an advantage.

- For example, stating that you only seek firms with experience with EPA Brownfields Grants limits the competition. Such a restriction is inconsistent with 2 CFR 200.319(b)(1) in that it does not allow firms that have experience in addressing contaminated properties (but not necessarily EPA Brownfields Grants) or new firms entering the market to compete.
- Also, do not mention any other contractor in the RFP/RFQ as that could discourage other contractors from submitting an offer.

EPA recommends including options-based procurement.

- If your organization is awarded another Brownfields Grant in a certain period of time (EPA's guidance is within 5 years), including "options" in the RFP/RFQ will allow you to potentially use the same contractor to conduct work under this grant and/or future grants. If you exercise this option, you must request updated cost information from the

Organization Letterhead

REQUEST FOR QUALIFICATIONS AND PROPOSALS (RFQP)
Professional Environmental Services for
[Insert City] Brownfield Community-wide Assessment Grant

Submittal Due Date and Time:
Month XX, 2023 by 12:00 pm CT/MT

Question Submittal Deadline:
Month XX, 2023 by 12:00 pm CT/MT

Mail or deliver documents to:
Name, Title
City of XXXX
Address
City, ST 55555
Email address
(000) 555-5555

Introduction

The [Grant Applicant Name/Entity requesting services], hereafter known as "the City" is soliciting qualifications and proposals for professional environmental services from qualified environmental consulting firms (Respondents) to provide environmental assessment services to the City with the needs outlined in the RFQP. The City plans to select a single Respondent that meets the threshold and selection criteria outlined in this RFQP.

The RFQP is open to all qualified environmental professionals (QEPs) capable and qualified to meet the objectives and requirements described in this document. Qualified Woman-owned businesses (WBE) Minority-owned businesses (MBE) and/or Veteran-owned businesses (VBE) organizations are encouraged to respond.

Only proposals received no later than **12:00 pm on Month, XX, 2023** will be considered. Upon receipt, all RFQP submissions will be reviewed for completeness in accordance with the threshold and selection criteria contained herein. If threshold criteria are satisfied, the City will assess each Respondent's qualifications based upon the selection criteria. Once the selection committee has reviewed and ranked all Respondent proposals, if determined necessary, the top X scoring Respondents will be selected for an interview with the selection committee. Interviews will be held **during the week of Month XX, 2023** with specific date and time to be determined.

Questions must be submitted via email to [Contact First and Last Name], [email address], by **12:00 pm MT [Weekday Month XX].** Questions and written responses will be provided to all

RMI, a KSU TAB Partner

RMI Support includes:

- Identifying the most promising brightfield sites that achieve local goals
- Engaging productively and strategically with utilities
- Unpacking funding and incentives relevant to specific projects
- Accelerating procurement with market-based insights
- Connecting proposed projects into the brightfields market when ready

For Brownfields Technical Assistance in Texas, please contact:

Leslie Etzel
KSU TAB Asst. Director for EPA Region 6
leslieetzel@ksu.edu
864.404.5421

Scott Nightingale
KSU TAB Director for EPA Region 6
scottnight@ksu.edu
785.207.6021

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TAB
Technical Assistance to Brownfields

KANSAS STATE UNIVERSITY

Thank you.

Questions?

ksutab.org