COORDINATION OF LOCAL MITIGATION PLANNING

PART I: Local Funding and Technical Assistance

REQUIREMENT §201.4(C)(4)(I):

The Commonwealth of Kentucky must include a description of the State process to support, through funding and technical assistance, the development of local mitigation plans.

A. Describing Generally the Commonwealth Process to Support, Through Funding and Technical Assistance, the Development of Local Mitigation Plans

The Commonwealth, through Kentucky Emergency Management (KYEM), provides funding and technical support for the development of local hazard mitigation plans.

Generally the Commonwealth provides ample and easily accessible technical and funding assistance through one (1) or all of the following three (3) agencies:

1) Kentucky Emergency Management and its specialized planning staff (KYEM)
2) University of Kentucky Martin School of Public Policy and Administration Hazard Mitigation Grant Program (UK-HMGP)
3) University of Louisville Center for Hazards Research and Policy Development (CHR)

The process by which these agencies, on behalf of the Commonwealth, provide technical and funding assistance is detailed in the section below which specifies how the Commonwealth provided such assistance for local plan development during its 2010 to 2013 plan cycle. The methods and mechanisms that will describe the process were implemented and quotidian throughout the three-year cycle since the publication of the Commonwealth of Kentucky's previous state hazard mitigation plan update in 2010.

As the methods and mechanisms to be described have provided for an efficient, thorough, and multi-faceted experience in garnering funding and technical assistance (and thus, have been a success), it is expected that these same methods and mechanisms will continue and will animate the state-to-local mitigation planning relationship. Emphasis here needs to be placed on the accessibility of technical and funding assistance available to localities throughout the Commonwealth. KYEM, UK-HMGP, and CHR are unique for bureaucratic elements in that the agencies do not exist solely to perform the work of processing federal government initiatives and providing local governance and continuity.

Regarding general technical assistance for local plan development, a major function of KYEM, UK-HMGP, and CHR is providing customer service. With some rare and idiosyncratic exceptions, a locality is easily able to contact any of these agencies at will and receive technical or funding assistance. The agencies are highly interrelated and are in constant communication with each other. There is little segmentation of institutional knowledge, yet there is efficient specialization of task. Inter-organizationally, UK-HMGP is very much a direct appendage to KYEM; and CHR, while necessarily more autonomous, derives its raison d'être primarily from KYEM. For example, a request for assistance from a locality to UK-HMGP can, if necessary, simultaneously include customer service from CHR and KYEM. The same relationship results no matter the primary agency of contact. A specialist from one of these three (3) agencies is going to be able to provide technical and funding assistance for local plan development to any representative of a Kentucky locality at any given time.

Of particular importance, Kentucky provides significant technical assistance related to National Flood Insurance Program (NFIP) participation. Most evidently, Kentucky's Division of Water (KDOW) – an executive-branch agency that serves prominently on the Kentucky Mitigation Council and is a significant partner in Kentucky's hazard mitigation program –is primarily responsible for providing technical and funding assistance targeted to participation in the NFIP. KDOW largely meets this NFIP-related technical assistance through the Community Assistance Program State Support Services Element (CAP-SSSE). Through CAP-SSSE, KDOW provides local jurisdictions with training and education on the regulatory and administrative requirements for NFIP participation.

For those localities already participating in the NFIP, KDOW (through CAP-SSSE) provides guidance regarding alternative non-structural flood hazard management and provides information on flood-loss reduction techniques and strategies. Further and related to the technical assistance that Kentucky Emergency Management (KYEM) generally provides, KDOW offers said NFIP-related technical assistance primarily through outreach: The CAP-SSSE grant allots KDOW the resources to stay in contact with NFIP non-participants in order to gradually sell participation; to make visits to localities and communities; to train and to education regarding NFIP participation; to aid in strategic planning and plan-writing; and simply to be available in a customer service sense for general technical assistance. KYEM recently has been augmenting KDOW's considerable outreach activities that communicate the importance of NFIP participation by accompanying with and directing the KDOW to the political and community leader contacts nurtured through its Intergovernmental Liaison position.

Finally, regarding the newly prominent role that NFIP-participation and repetitive-loss properties play in the Federal Emergency Management's (FEMA) updated version of its Local Plan Review Tool (a.k.a. "New Crosswalk"), KDOW has been, and will continue to be, instrumental in gathering and distributing data related to the NFIP-insured structures that have suffered repetitive losses. Again, this specific data is a new consideration to be included in the development of local hazard mitigation plans and it is data that the KDOW has been especially diligent in collecting and disseminating upon request.

Generally, it is the intention of the Commonwealth to provide mitigation funding assistance primarily through its efficient distribution of FEMA, state, and other federal funding sources. The FEMA Hazard Mitigation Program funding for both projects and planning during the 2010-2013 planning cycle for the Commonwealth was available through the following types of Grants (which currently have been changed and are subject to change anew in the future):

- Hazard Mitigation Grant Program (HMGP)
- Pre-Disaster Mitigation (PDM)
- Flood Mitigation Assistance (FMA)
- Severe Repetitive Loss (SRL)
- Repetitive Flood Claims (RFC)

KYEM, along with the University of Kentucky Martin School of Public Policy and Administration's Hazard Mitigation Grants Program office (UK-HMGP) and with the University of Louisville's Center for Hazards Research and Policy Development (CHR), have devoted, and will continue to devote, full-time staff that specialize in FEMA's funding sources. It is of particular relevance that since the 2010 state-level mitigation plan update, KYEM, UK-HMGP, and CHR have hired additional staff so as to allow project managers to specialize, not only regarding the individual FEMA funding sources (which any individual project and planning manager should possess), but also regarding particular geographic areas of Kentucky, as well.

There are fifteen Area Development Districts (ADDs) established within the Commonwealth which create a collaborative means by which local governments may access technical and professional expertise. Member governments and citizens work with their respective ADD to develop a regional Hazard Mitigation Plan which ultimately are adopted and enacted by local governments within the ADD. Prior to 2010, state-level project managers were assigned mitigation project applicants[1] in a random manner. This approach meant that project applicants, applying for and working with multiple mitigation projects, could be working with multiple state-level staff. This further implied that state-level staff struggled to gain expertise with hazard nuances across the Commonwealth of Kentucky, which affected its ability to provide the best technical and funding assistance. In 2011, with the aforementioned newly-augmented staff, KYEM assigned mitigation project applicants to KYEM (and UK-HMGP) project managers according to ADD boundaries.

[1] Please note that the use of the word "applicant" here and throughout the succeeding paragraphs does not refer to the use of "applicant" that is defined specifically for use within the mitigation community, i.e. FEMA, KYEM, etc.: Within the mitigation community of Kentucky, "applicant" usually refers to the Commonwealth's role in project management. This is because, legally, it is always the Commonwealth of Kentucky applying to FEMA for funds used to reimburse those mitigation projects demanded by local governments. The local government doing the actual applying for a grant money is considered the "sub-applicant." However, contextually, this discussion has little to do with the relationship between FEMA and the Commonwealth. "Applicant" is used generally here, i.e., as the party responsible for applying for mitigation project reimbursement funding.

Now mitigation project applicants have the consistency of dealing only with a single state-level project manager, regardless of which disaster or type of FEMA mitigation funding is applicable to their projects. Additionally, the relationship between an individual project manager and the locality is not one-sided, i.e. the project manager awaiting requests for assistance from localities: As in the past, project managers will continue to proactively inform project applicants within their assigned geographic regions about the FEMA funding opportunities available for mitigation projects and for planning, as funding becomes available. Related to technical assistance, these same project managers are helping local governments within their assigned ADD regions to prepare applications prior to funding cycles or disaster funding so as to streamline the application process once competitive or disaster funding does become available.

Kentucky is somewhat unique in that it provides funding assistance by contributing a portion of the percentage of a FEMA-funded mitigation project which must be matched with nonfederal funds, which is the applicant's responsibility. If FEMA funds 75% of the cost of a mitigation project, this, of course, requires the applicant to match 25% of the project's cost. Kentucky assists applicants by providing 12% of the 25% match requirement for HMGP projects, thus offsetting fiscal constraints that can often times prevent effective hazard mitigation. Related, Kentucky houses a Department for Local Government (DLG), which generally provides funding and technical assistance by helping cities and counties to identify other "match" funding streams that could offset all or a portion of the remaining match required for hazard mitigation projects.

Specifically related to plan development, funding assistance derives from federal disaster funding (via HMGP) and from the federal and competitive Pre-Disaster Mitigation (PDM) funding. Regarding the former, 7% of federal Hazard Mitigation Grant Program funds distributed to the Commonwealth following a Presidentially-declared disaster is set aside specifically for local plan development assistance. Primarily, of course, funds for planning assistance derive from the federal distribution of money to the Commonwealth under its PDM program. Generally, looking to the future, the funding mechanisms by which local plan development in the Commonwealth will be assisted are likely to change. Funding for the PDM program at the time of this writing has been discontinued. Meanwhile, the aforementioned Severe Repetitive Loss (SRL) and Repetitive Flood Claims (RFC) competitive programs may be collapsed into the Flood Mitigation Assistance (FMA) competitive program with an adjustment that a (yet to be defined) proportion of the competitive, cyclical funds will be designated for planning related specifically to flooding.

Tying in general funding assistance for both mitigation projects and planning with, specifically, local plan development, the Commonwealth's 12% contribution to mitigation project funding, coupled with the targeted assistance provided towards individual regions of Kentucky by KYEM project managers yields more efficient, more effective, and more responsible distribution of highly-specified and limited funding assistance aimed solely toward plan development. Or otherwise stated, the Commonwealth could not provide the best possible funding assistance related specifically to plan development if it was not offering the best possible funding assistance related to regional mitigation projects and the planning process that underlies local project identification and justification and the Commonwealth's project selection and justification process.

B. ***Providing Funding and Technical Assistance to Assist Local Jurisdictions in Completing Approvable Mitigation Plans During the Past Three (3) Years***

Funding Assistance

This subsection serves as a summary of the above information related to general funding assistance provided by the Commonwealth to aid localities in plan development: There has been no systematic deviation during the past three (3) years from the general methods of providing funding assistance for local plan development described above.

During the 2010-2013 planning cycle the Commonwealth provided funding assistance through the following sources:

- Pre-Disaster Mitigation (PDM) program assistance
- The 7% of Hazard Mitigation Grant Program (HMGP) assistance legally allotted for plan development

During the 2010-2013 planning cycle, no further means for federal funding assistance was sought. The effort to do so would have been an inefficient use of time and resources for two (2) reasons:

1) Administratively, the Commonwealth is highly efficient in local plan development. Rather than directly oversee (and directly financially assist) 120 counties, the Commonwealth devolved power to the 15 regional ADDs. The ADDs, with a couple of notable exceptions, are organized according to geographic similarity, i.e., they are "regional" as typically conceived.

   By grouping Kentucky's multitudinous counties into 15 "super-counties" of sorts, each administered by an ADD that is staffed by professional administrators, grant-writers, planners, et al. and (via their semi-private nature) whose services can be partially paid for by the local government members, the Commonwealth only has to provide funding assistance to 15 areas and does not have to inefficiently micromanage the entire Commonwealth.

2) Throughout multiple state planning cycles, Kentucky experienced frequent and severe disasters warranting presidential major disaster declarations. The 7% limit reserved for plan development within the HMG Program used federally to support "presidential disaster declarations" provided sufficient funding for plan development within an unfortunately larger distribution of money provided to Kentucky by FEMA.

Technical Assistance

For much of the past three (3) years, technical assistance related to local jurisdiction planning and completion of approvable mitigation plans has derived primarily from the KYEM-sponsored[2] University of Kentucky Martin School of Public Policy and Administration Hazard Mitigation Grants Program Office (UK-HMGP). Since 2009, UK-HMGP has continuously employed a full-time hazard mitigation plan specialist devoted solely to assisting Kentucky's local jurisdictions in completing approvable mitigation plans and planning applications. The technical assistance provided to local jurisdictions from UK-HMGP has included and continues to include:

- Assisting with the interpretation of FEMA regulations which must be met in the local jurisdictional plans;
- Collecting of data when local plan-writers have had difficulty in retrieving or locating desired data;
- Interpreting of data;
- Facilitating communication between state agencies and those responsible for writing local jurisdiction plans;
- Editing and formatting of drafts of local jurisdictional plans;
- Identifying sources and plans by which, and to which, local hazard mitigation plans can be coordinated;
- Identifying cited sources for any other necessary information;
- Serving as a liaison with FEMA Region IV Mitigation Plan specialists
- Developing and editing of planning project applications;
- Tracking and updating of local jurisdiction plan application deadlines; and
- Managing local hazard mitigation plan creation and update projects.

Generally, then, UK-HMGP has traditionally provided customer service to the writers of local and multi-jurisdictional hazard mitigation plans. The writer of a local plan is able to contact UK-HMGP directly at any point during the planning process to receive technical assistance and to receive contact information and coordination for further technical assistance.

More recently, within the past three (3) years, KYEM has expanded its staff with the addition of two (2) full-time employees whose time is solely devoted to state and multi-jurisdictional planning activities. However, the responsibilities for KYEM's new planning staff are more varied and broad than those of the UK-HMGP planning specialist. Responsibilities include coordinating and integrating the KYEM State Hazard Mitigation Plan with all other relevant state plans and processes; ensuring planning process continuity; designing, refining, and revising the state's planning procedures; directly and preemptively finding and updating data; and coordinating the KYEM State Hazard Mitigation Plan with the goals of the Community Hazard Assessment and Mitigation

[2] "KYEM-sponsored" is to refer to the fact that UK-HMGP (despite its technical affiliation with the University of Kentucky) exists through contracts (and thus is funded) through KYEM. While FEMA is looking for the Commonwealth to provide local jurisdictions with funding and technical assistance related to completion of approvable local mitigation plans, UK-HMGP operates on behalf of the State-cum-KYEM, and, thus, is the Commonwealth providing such funding and technical assistance.

Planning System (CHAMPS) initiative. Given the state-specific expertise of the KYEM planning staff, it also has been able, and will continue, to provide technical assistance to local jurisdictions of similar utility as that provided by UK-HMGP. This especially applies to application development and the advertisement of deadlines.

Of particular importance for local planners and plan-writers, KYEM primarily has been, and continues to be, responsible for facilitating the planning process. For the past three (3) years, KYEM has regularly held and sponsored training on planning and application development. KYEM regularly hosts application and planning workshops and seminars for KYEM, UK-HMGP, and CHR staff; for local planners and plan-writers; and for interested stakeholders. To do so, the Commonwealth has developed a pioneering weeklong Applicant Agent Certification Course which is delivered quarterly. One day of this course is devoted to training regarding mitigation planning, project development, and program requirements. The Applicant Agent Certification Course is discussed more thoroughly within the *Mitigation Strategy* section of this hazard mitigation plan, as it is a significant "state capability."

Further, KYEM also has coordinated meetings with the ADDs and individual jurisdictions; notifying elected officials of planning meetings, sending out its staff (sometimes accompanied by UK-HMGP staff) to facilitate stakeholder meetings, eliciting feedback and opinions regarding hazard risks and mitigation strategies, and describing effective plan-writing for local jurisdictions. This is discussed more systematically in the *Planning Process* section of this hazard mitigation plan.

During the past three (3) years, the University of Louisville's Center for Hazards Research and Policy Development (CHR) has provided, and continues to provide, technical assistance to local planners and plan-writers in completing approved hazard mitigation plans, as well. The assistance provided by CHR tends to be more focused and specific. CHR primarily provides technical assistance regarding risk assessments, risk vulnerabilities, hazard analyses, and various assessment studies pertaining to local jurisdictions. Whereas KYEM technical assistance for local plan development during the past three (3) years can be characterized as "administrative" and UK-HMGP's technical assistance can best be characterized as "customer service," CHR has and can continue to be characterized as the more "technical" in the delivery of technical assistance.

Via its unique status, CHR has also served (and continues to serve) as a subcontractor of some local entities with the responsibility of coordinating and writing a jurisdictional (or, in Kentucky's most-oft case, multi-jurisdictional) local hazard mitigation plan. These entities have been (and continue to be) able to hire CHR to manage and facilitate the planning process, collect data, conduct risk analyses, and complete a final (multi-) jurisdictional local hazard mitigation plan for review and subsequent approval by FEMA.

Finally, KYEM and UK-HMGP operate as facilitators between local planners and state bureaucracy. KYEM and UK-HMGP has facilitated, and will continue to facilitate, contact with, collect data from, and direct assistance with the appropriate and applicable state agencies from which the best technical assistance and information can be obtained.

COORDINATION OF LOCAL MITIGATION PLANNING

PART II: Local Plan Integration

REQUIREMENT §201.4(C)(4)(II):

The Commonwealth of Kentucky must include a description of the State process and timeframe by which the local plans will be reviewed, coordinated, and linked to the State Mitigation Plan.

A. Commonwealth (State)-Established Process and Timeframe for Reviewing Local Mitigation Plans

As previously mentioned, during the planning process KYEM, UK-HMGP, and/or CHR provide technical and financial support and assistance.

However, once a local hazard mitigation plan has been completed, KYEM has established the following process and timeframe for the review of the completed local hazard mitigation plan.

The completed draft of a local jurisdiction's hazard mitigation plan is sent either to the KYEM or UK-HMGP planning specialist responsible for management of the planning grant awarded to develop or update the hazard mitigation plan. Traditionally, this role for managing the project under which a local hazard mitigation plan is funded and for subsequent reviewing of the completed draft of a local hazard mitigation plan has belonged to UK-HMGP due to UK-HMGP's niche and need as being a KYEM designee that can be most directly responsible and, hence, most directly accessible to local jurisdictions' planners and plan-writers.

PLANNING TERMINOLOGY

Original Submittal: the 1st plan submitted for FEMA review

Revised Submittal: a plan submittal with revisions required per FEMA's Original Submittal review

Approval Pending Adoption (APA): a plan which will be deemed as FEMA-approved after adoption by the applicable jurisdictions(s)

Upon receipt of a completed draft of a local hazard mitigation plan, the KYEM or UK-HMGP reviewer reads through the local hazard mitigation plan in its entirety, making notes and checking that each of FEMA's requirements for plan approval is met before the draft is sent as an "original submittal" to FEMA for review. The process by which a KYEM or UK-HMGP reviewer confirms that FEMA requirements have been met is accomplished by using FEMA's updated Local Plan Review Tool, which is colloquially referred to as FEMA's "New Crosswalk."

FEMA's "New Crosswalk" divides the review of a local or multi-jurisdictional hazard mitigation plan into four[3] (4) "Elements":

I. "Element A" refers to the "Planning Process" portion of a local multi-jurisdictional hazard mitigation plan. For a local hazard mitigation plan to be approved by FEMA, the following considerations must be present in the local hazard mitigation plan:

1. Documentation of the planning process, including how it was prepared and who was involved in the process
2. Documentation that neighboring communities (and local and regional agencies that would have any involvement in hazard mitigation activities) have the authority to regulate development and other relevant interests and were involved in the planning process
3. Documentation that the public was involved during and throughout the planning process, specifically during the drafting stage and prior to plan approval
4. A description that the local hazard mitigation plan reviewed and incorporated existing plans, studies, reports, and technical information
5. A discussion of the method by which the community or multi-jurisdictions will continue public participation during the plan maintenance process
6. A description of the method and schedule for keeping the local hazard mitigation plan current, i.e., monitoring, evaluating, and updating the local hazard mitigation plan within a five-year cycle

[3] There are technically five (5) parts: "Element E" refers to the need for local jurisdictions covered under a (multi-jurisdictional) hazard mitigation plan to adopt a completed plan. The review of adoptions of a local hazard mitigation plan will *not* be a part of the initial review process of a local hazard mitigation plan. A local hazard mitigation plan can be reviewed and approved by FEMA without any adoptions. The plan is not implemented and hazard mitigation projects cannot be proposed or approved for a jurisdiction until it adopts the plan. In the case of a multi-jurisdictional local hazard mitigation plan, the plan will be implemented when only *one* local jurisdiction adopts the FEMA-approved local hazard mitigation plan.

II. "Element B" refers to the "Hazard Identification and Risk Assessment" portion of a local or multi-jurisdictional hazard mitigation plan. For a local hazard mitigation plan to be approved by FEMA, the following considerations must be present:

1. Descriptions of the type, location, and extent of all natural hazards that can affect each jurisdiction[4]
2. Information on previous occurrences of hazard events and the probability of future hazard events for each jurisdiction
3. Description of each identified hazard's impact on the community accompanied by an overall summary of the community's vulnerability to each identified hazard for each jurisdiction covered in the local hazard mitigation plan
4. Explicit language addressing of NFIP[5]-insured structures (within each jurisdiction covered under the local hazard mitigation plan) that have been repetitively damaged by floods

[4] ***Note***: This requirement by FEMA involves identifying the individual natural hazards that most affect the area for which you are planning. This implies a ranking and a justification for the ranking: For the jurisdiction or multiple jurisdictions for which the local hazard mitigation plan is being written, which natural hazards do you worry about most, the "second-most," the least? Why? Once identification is done, this requirement by FEMA involves identifying where each of the identified relevant natural hazards typically occur and locations where relevant natural hazards are most susceptible. Finally, this requirement by FEMA asks how bad, how serious an identified natural hazard can become. This implies relating the past events that would have informed the identification and ranking of your hazards to some standard, e.g., the worst event of a particular natural hazard to have occurred within or surrounding the area about which the local hazard mitigation plan is written.

[5] NFIP refers to "National Flood Insurance Program."

III. "Element C" refers to the "Mitigation Strategy" portion of a local or multi-jurisdictional hazard mitigation plan. For a local hazard mitigation plan to be approved by FEMA, the following considerations must be present in the local hazard mitigation plan:

1. Documentation of the existing authorities, policies, programs, and resources of each jurisdiction (covered under a local hazard mitigation plan) coupled with documentation of the jurisdiction's ability to expand on and improve these existing policies and programs
2. Explicit language addressing of each jurisdiction's participation in the NFIP and each jurisdiction's continued compliance with the NFIP, if relevant and applicable
3. Inclusion of goals to reduce or avoid long-term vulnerabilities to the hazards identified in the local hazard mitigation plan
4. Identification and analysis of a comprehensive range of specific mitigation actions and projects that are being considered to reduce the effects of hazards - This range applies to each jurisdiction covered under a local hazard mitigation plan, i.e. each jurisdiction must consider and include its own "comprehensive range" of mitigation actions and projects that address each of the hazards identified for the area covered under the local hazard mitigation plan as a whole. The range of mitigation actions must demonstrate an emphasis mitigating hazards which may affect new and existing buildings and structures.
5. Description of how the previously-identified mitigation actions will be prioritized, implemented, and administered by each jurisdiction - as part of the prioritization of mitigation actions, cost-benefit analysis must be explicitly considered as a means of prioritization.
6. Description of the process by which local governments will integrate the requirements of the local hazard mitigation plan into other planning mechanisms such as capital improvement plans and comprehensive plans

IV. "Element D" refers to review criteria relevant for local hazard mitigation plan *updates only*. For a local hazard mitigation plan *update* to be approved by FEMA, the following considerations must be present within the local hazard mitigation plan. The update must demonstrate that the local hazard mitigation plan was revised to reflect:

1. Changes in development, i.e., changes in the physical, structural, and economic development of the jurisdictions covered under the plan;
2. Progressive local mitigation efforts; i.e., it must be obvious and explicit that the mitigation actions identified and prioritized during the local hazard mitigation plan update represent an updated list from the one presented in the previous iteration of the local hazard mitigation plan; and
3. Changes in the priorities of the jurisdictions covered under a local hazard mitigation plan.

The State, through KYEM and UK-HMGP will comment specifically upon the local hazard mitigation plan's inclusion of the aforementioned "Elements" and the sub-elements that comprise them.

The State will complete its review within two (2) weeks upon receipt of the local hazard mitigation plan.

Upon completion of its review, the State will communicate directly with the point-of-contact (usually the planner) responsible for submitting the local hazard mitigation plan for review. In its correspondence with the point-of-contact, the State will detail any deficiencies related to the aforementioned "Elements" of review which must be addressed, corrected, improved, and included. This must be accomplished before sending the local hazard mitigation plan to FEMA for review as an "original submittal."

Before the "original submittal" of the local hazard mitigation plan is made to FEMA for initial review, the local hazard mitigation planner must address all deficiencies identified during the State's review.

Finally, upon receipt of the original submittal of the local hazard mitigation plan, FEMA will review the plan and will either: send the local hazard mitigation plan back for correction of deficiencies FEMA identified, or it will approve the local hazard mitigation plan "pending adoption[6]." If the former occurs, as with the State's process, the local hazard mitigation planner must address the deficiencies detailed by FEMA. Upon addressing the deficiencies, the local hazard mitigation plan will be sent back to the State. The State will review the revisions and, barring any further deficiencies, the State will send the revised local hazard mitigation plan to FEMA as a "revised submittal" for review and eventual approval "pending adoption." The State's review of the revisions requested by FEMA will require approximately one (1) week.

[6] "pending adoption": Despite a local hazard mitigation plan being approved by FEMA, the plan cannot be implemented until the local jurisdiction covered under the plan formally adopts the plan. This a jurisdiction does through an "adoption resolution." In the case of a multi-jurisdictional local hazard mitigation plan, the plan can be implemented with only one adoption resolution. However, the plan can only be implemented *for those jurisdictions* that have adopted and to no others. Finally, a local hazard mitigation plan must be updated every five (5) years. The five-year expiration date depends upon when the first jurisdiction adopts the plan.

B. ***Commonwealth (State)-Established Process and Timeframe to Coordinate and Link Local Mitigation Plans***

Coordination

It is obvious the State's role in the *review* of local hazard mitigation plans – through KYEM, UK-HMGP, and CHR – is to ensure quality plans which comply with FEMA standards and requirements. This is a justifiable post hoc role. Localities are asking the federal government (and, thus, taxpayers) for funding. Further, they are requesting a commitment of funds before producing a product. Even though the federal money will be distributed as a reimbursement for expenses paid by the localities, the request for funds is made before a project that is supposed to achieve the expressed shared goals of the locality and of FEMA (i.e., to protect populations against hazards) has begun. Localities are not requesting a loan or issuing debt by which either the lender or the bond-issuer will receive payment for the risk taken in the form of interest regardless of whether or not the project succeeds in achieving the goal(s) that justified it.

Consequently FEMA, in its responsibility to protect taxpayer resources, must have mechanisms to determine which projects, in which cases, best deserve the limited resources within FEMA's discretion. Further, these decision-making mechanisms must be standardized. Providing a plan by which a locality presents that it has a grand strategy accompanied by multiple implementation strategies to achieve the shared goals of FEMA serves as an effective mechanism by which FEMA can determine the distribution of the requested funding. To evaluate hazard mitigation plans written uniquely by heterogeneous localities, FEMA must maintain standardized criteria for comparison of dissimilar local hazard mitigation plans. So, it is obvious the utility and necessity of the State (in the abstract) and the Commonwealth (specifically) to review the mitigation plans of its localities to ensure FEMA's standards are met, so that FEMA can best make decisions as to where to distribute its money, and so that localities can best present the case that their requests take equal or relative priority over other requests.

However, it is less clear the Commonwealth's role and that role's justification in many of the "pre-planning" activities of local hazard mitigation plans. The Commonwealth attempts to its utmost to coordinate a locality's goals of hazard mitigation with the projects and actions for which it will request reimbursement from FEMA.

In its hazard mitigation plan, a locality is expected to articulate the hazards likely to affect it; to prioritize which hazards the population should mitigate according to a logical and clearly-defined method; to conceive of general strategies by which to address the most important and most prioritized hazards; and to identify general actions or specific projects that would best mitigate against those hazards that are of most consequence to the locality. Having such a plan communicates to FEMA that such a locality is a safe place towards which to distribute money to achieve the goal of mitigation against hazards.

This connection between hazard identification, prioritization, and project reimbursement is not always so easily made. Certainly, other factors impede the continual link between hazard prioritization and mitigation projects. Politics, for example and of course, can break this link. However, most likely and most ambivalently, simply the perceptions of different stakeholders of how best to mitigate which hazards impedes or complicates what should be the direct connection between a hazard and the projects meant to mitigate it.

Thus, during a locality's planning process the Commonwealth advises, trains toward, and edits local hazard mitigation plans to ensure coordination between the identified and prioritized hazards and the projects meant to mitigate such hazards. Much of this planning process work has been described above in elaborating how the Commonwealth (KYEM, UK-HMGP, and CHR) provides technical assistance for local plan development by[7]:

- Specializing in different aspects of the planning process (KYEM, UK-HMGP, and CHR);
- Aiding localities with hazard identification and assessment (CHR);
- Providing customer service and editing services both proactively and upon request (UK-HMGP);
- Coordinating and facilitating stakeholder and planning meetings with individual ADDs where coordination serves a disproportionate focus (KYEM, UK-HMGP); as well as
- Serving as a hub from which individual assistance in coordination needs can be requested (KYEM)

Further, KYEM, UK-HMGP, and CHR provide coordination in the following two (2) ways:

1) *With project funding and funding assistance:* A locality must submit to KYEM (through UK-HMGP, or CHR, or directly[8]) Mitigation Action Forms (MAFs)[9] for review by KYEM before being allowed formally to apply for FEMA funding for mitigation projects and actions. The MAFs are used primarily by KYEM for coordination purposes. The locality's proposed mitigation action is compared with its hazard mitigation plan and assigned priority for funding, with the prioritization decision being significantly based upon how the action aligns with the mitigation goals and strategies articulated in the locality's hazard mitigation plan. If the locality expresses interest in a mitigation project or action to UK-HMGP or to CHR, those agencies will also help in coordinating the action with the strategies and goals of the locality before KYEM sees the MAF and makes funding prioritization decisions.

[7] Accompanied by which of the Commonwealth's hazard mitigation-specific agencies are most responsible for said technical assistance in brackets.
[8]Mitigation Action Forms (MAFsare entered into Kentucky's Community Hazard Assessment and Mitigation Planning System (CHAMPS) for reviewed by Kentucky Emergency Management.
[9] With the increasing use and reliance upon Kentucky's Community Hazard Assessment and Mitigation Planning System (CHAMPS), the term for LOI has been changed since the 2010-2013 planning cycle. "Letters of Intent" are now "Mitigation Action Forms (MAFs)."

2) *Through the plan amendment process:* KYEM, UK-HMGP, and CHR, in their customer service roles, are coordinating mitigation actions with mitigation goals, objectives, and strategies throughout the planning cycles of localities and the Commonwealth. Any of the above agencies will stress and aid in developing (with the Area Development Districts) amendments to local hazard mitigation plans upon notice that certain mitigation projects or actions should be receiving high funding priority for applicants whose local mitigation plan goals and strategies are not coordinating smoothly.

Linking I: Generally

The Commonwealth of Kentucky's hazard mitigation plan is to incorporate resources provided by its local hazard mitigation plans and is to be used by and useful for local hazard mitigation plans. This establishes the mutually beneficial link between the Commonwealth's hazard mitigation plan and its local hazard mitigation plans. Alternatively stated, local hazard mitigation plans are linked quite directly to the Commonwealth of Kentucky's hazard mitigation plan: It is the local hazard mitigation plans that, ultimately, provide the majority of the Commonwealth's mitigation measures. As stated previously, save for definitional "public goods" considerations that help the Commonwealth coordinate and facilitate the mitigation activities of its localities, the Commonwealth should not have mitigation goals separate from the goals and subsequent actions of the localities that actually suffer the effects from hazards.

A further link between the Commonwealth's plan and the plans of its localities is provided through the mechanism that the Commonwealth uses for evaluating and prioritizing mitigation measures deriving from its localities: Localities' hazard mitigation plans provide (sometimes through implication) the ranking and prioritization of types of hazards that help dictate how their mitigation measures submitted to the Commonwealth for approval should be prioritized.

As more fully described in the *Mitigation Strategy* section of this plan, the prioritization of mitigation actions by the Commonwealth involves two (2) factors: 1.Whether or not the project protects critical facilities (determining whether the project is an "A-Project" vs. a "B-Project") and 2. from what priority of hazard *within a locality* the action protects (i.e. whether the locality deems the hazard "high-," "medium/moderate-," or "low-risk").

This accompanying element to the prioritization of mitigation measures using local plans' determination of risk from types of hazards serves as a direct link between the Commonwealth's hazard mitigation plan and the plans of its localities.

Linking II: Local Hazard Mitigation Plans Using the Commonwealth Mitigation Plan:

The Commonwealth of Kentucky's hazard mitigation plan has been and continues to be useful for its local hazard mitigation plans as:

- **It establishes constant structures and streams of communication and interaction between the various levels of government.** The content and goals of local hazard mitigation plans cannot deviate liberally from the content and goals of the Commonwealth's hazard mitigation plan. Thus, in planning and writing, a locality must constantly communicate with the Commonwealth and the Commonwealth must constantly communicate with the locality.

- **It serves as a template for local plan development.** Local hazard mitigation plans have and can take their narrative, formatting, and plan organizational cues from the Commonwealth's mitigation plan. Confusion or difficulty in addressing all of FEMA's concerns has been, and can be, partially alleviated by looking to the Commonwealth's hazard mitigation plan and how it has addressed FEMA's planning requirements.

- **It serves as a source for data and methodology.** Especially related to the work of CHR with past plans and with this current Commonwealth hazard mitigation plan, local plans have incorporated and will continue to incorporate the methodology for hazard identification and vulnerability assessment used in the Commonwealth plan. The data sources used in the Commonwealth's hazard mitigation plan have frequently guided local mitigation planners.

- **It serves as an information verifier.** A local hazard mitigation plan uses its own data and insights to identify hazards, assess vulnerability, and consider strategies for addressing said hazards. As alluded above, many times these sources are inspired by the sources used in the Commonwealth's plan. However, more often, the sources for both the Commonwealth's and for localities' plans simply derive from the same public data sources. Thus, the locality's use of the public data source (e.g. for identifying critical facilities) can be checked and verified with the Commonwealth's use of those same public sources.

- **It serves as context.** The Commonwealth hazard mitigation plan has provided, and will continue to provide, fundamental information about the process of hazard mitigation. It provides context for the localities by identifying and assessing Kentucky's hazards and vulnerabilities.

Linking III: Commonwealth Hazard Mitigation Plans Using Local Mitigation Plans

Local hazard mitigation plans have been, and continue to be, useful and necessary for the development of the Commonwealth's hazard mitigation plan as:

- **Local hazard mitigation plans provide and incentivize necessary aspects to the planning process.** The Commonwealth hazard mitigation plan cannot be written in a vacuum. In every step of the planning process, local jurisdictions and, subsequently, their mitigation plans, guide the Commonwealth planning process. Local plans provide insight into the hazard assessment and vulnerability process. Most importantly, local mitigation plans guide the selection of the Commonwealth's hazard mitigation strategy and its subsequent mitigation actions.

- **Local hazard mitigation plans serve as a source and guide for data.** The collection and use of data is not unidirectional. Local plans guide which data to collect and include in the Commonwealth hazard mitigation plan. For the future, the Commonwealth intends to influence the data relationship to be disproportionately skewed toward its local jurisdictions. Ideally, the Commonwealth's hazard mitigation plan should primarily rely on data collected by jurisdictions to substitute for and enhance public data typically used by both localities and the Commonwealth. With such an ideal, the Commonwealth's plan would rely far more on the local jurisdictions' mitigation plans.

- **Local hazard mitigation plans serve as context.** A considerable portion of the background context provided in the Commonwealth hazard mitigation plan derives, and is contributed, from local hazard mitigation plans. The State certainly does not guide the context that animates the Commonwealth hazard mitigation plans and the plans of its localities. The Commonwealth mitigation plan serves more as an aggregator of local insight and context. The local hazard mitigation plans serve a crucial role in animating the Commonwealth mitigation plan with its context.

- **Local hazard mitigation plans make hazard mitigation relevant for local government officials.** It is not the Commonwealth's hazard mitigation plan itself that spurs interest in mitigation planning at the local level. Rather, it is the local planning and local plan incorporation and relevance to the Commonwealth's plan that legitimizes hazard mitigation planning efforts of the Commonwealth.

PART III:
Prioritizing Local Assistance

REQUIREMENT §201.4 (C) (4) (III):

The Commonwealth of Kentucky must include criteria for prioritizing communities and local jurisdictions that would receive planning and project grants under available funding programs, which should include consideration for communities with the highest risks, repetitive-loss properties, and most intense development pressures.

Further, that for non-planning grants, a principal criterion for prioritizing grants shall be the extent to which benefits are maximized according to a cost-benefit review of proposed projects and their associated costs.

A. Providing Criteria for Prioritizing Communities and Local Jurisdictions That Would Receive Planning and Project Grants Under Available Mitigation Funding Programs

The prioritization process for planning and project grants under available mitigation funding programs is fully described in the *Mitigation Strategy* portion of this 2013 update of the Commonwealth of Kentucky's hazard mitigation plan.

It is implicit from the Commonwealth of Kentucky's prioritization approach how communities and local jurisdictions receive prioritization. The implicitness derives from the communities and local jurisdictions (through their hazard mitigation plans) very much driving and determining the prioritization process.

A summary, then, of the mitigation action prioritization process found in the *Mitigation Strategy* section of this 2013 update of the Commonwealth of Kentucky's hazard mitigation plan, discretely linking the *mitigation action* prioritization with the prioritization of *local jurisdictions and communities*:

First, there are, essentially three (3) separate categories of mitigation action:

1. Acquisition and Demolitions
2. Education Campaigns et al.
3. All Other Types of Mitigation Action

Regarding (1.), acquisitions and demolition projects are the *only* hazard mitigation projects that completely and fully and for all calculable time mitigate hazards. This is, of course, because once property has been acquired and demolished, no property and no one ever is in danger again from a hazard hitting that area. Nothing exists and no one lives, or works, on that property: Perfect mitigation. Acquisition and demolition projects, due to the abovementioned unique nature, are considered and prioritized separately from most other types of hazard mitigation action/project. Further, even amongst and across all project types, due to the "perfect mitigation" result from such projects, they likely are prioritized above any other project type.

Regarding (2.), educational campaigns et al. also are considered a separate project type category. This, like acquisition and demolition projects, results from their unique status as a mitigation project. The uniqueness, though, is of a far different nature than the uniqueness surrounding acquisition and demolition actions: They are "enduring[10]" projects. While important, they are of tertiary concern if proposed as a stand-alone project. This is due largely to the inability physically to count the results of such campaigns toward meeting goals of mitigation. Consequently, educational campaigns et al. are usually or can be supplements to other mitigation projects. Most generally and using cliché, including educational campaigns et al. in a comprehensive list of all types of mitigation actions would require comparing apples to oranges. An educational campaign simply cannot be compared to a drainage project using similar criteria.

Acquisition and demolition mitigation actions (1.) and educational campaigns et al. (2.), again due to their unique natures, can be prioritized solely relying upon Cost-Benefit Analysis. (This is described below.)

Regarding (3.), any other mitigation action that is NOT an acquisition and demolition or an educational campaign et al. is sub-categorized into one of two (2) project categories: *A-Projects* or *B-Projects*.

> *A-Projects* are all those relevant mitigation actions that protect critical facilities.
>
> *B-Projects* are those relevant mitigation actions that protect only populations.

It is assumed, of course, that all mitigation actions and projects protect populations. So, the prioritization difference reflects that those projects that also protect critical facilities receive de juris (not necessarily de facto) higher ranking than those that do not.

Within *A-Project* and *B-Project* categories, mitigation actions are further prioritized into ascending numerical categories:

A1 refers to *A-Projects* that mitigate "low-risk" hazards;
A2 refers to *A-Projects* that mitigate "medium/moderate-risk" hazards;
A3 refers to *A-Projects* that mitigate "high-risk" hazards.

The same prioritization symbolism applies to *B-Projects*, i.e. B1, B2, B3.

It is this above sub-ranking criteria that provides for the prioritization of communities and local jurisdictions in receiving planning and project grants: Whether an *A-Project* or *B-Project* is ranked within each category as 1 (Low), 2 (Medium/Moderate), or 3 (High) is entirely dependent upon *how the local jurisdictions prioritized their susceptibility to hazard types* (through their local, multi-jurisdictional hazard mitigation plans). The Commonwealth of Kentucky (through Kentucky Emergency Management) is not deciding for its localities which hazard types affect them most prominently.

[10] "Enduring" is a specifically-defined term here: They are projects with uncountable results, i.e., they should never be completed. See this plan's *Mitigation Strategy* section.

To illustrate that prioritizing planning and project grants according to how communities and local jurisdictions prioritize their vulnerability to hazard types is de facto prioritizing communities and local jurisdictions themselves, consider the following example:

Hickman County applies for mitigation grant funding for a project that would fortify a hospital in the county against earthquakes. Metcalfe County also applies for mitigation grant funding to build a tornado safe room to protect a population using a public park in the event of a tornado. Kenton County similarly applies for mitigation grant funding to build a tornado safe room to protect a population in similar circumstances to that described in Metcalfe County.

Now, Hickman County resides within the jurisdiction of the (Jackson) Purchase Area Development District (PADD) multi-jurisdictional hazard mitigation plan. According to this local plan and the subsequent stakeholders involved in Purchase Area planning, earthquakes are a (very) high-risk hazard for not only Hickman County but for all of the Jackson Purchase area. (After all, Hickman County is located within the New Madrid Seismic Zone). Further, the fictitious fortification project proposed by Hickman County above protects a hospital, which is fairly universally considered a "critical facility."

Metcalfe County resides within the jurisdiction of the Barren River Area Development District (BRADD) multi-jurisdictional hazard mitigation plan. According to this local plan and the subsequent stakeholders involved in "Barren River Area" planning, tornadoes similarly rank "high" as a hazard risk.

Kenton County resides within the jurisdiction of the Northern Kentucky Area Development District (NKADD) multi-jurisdictional hazard mitigation plan. According to this local plan and the subsequent stakeholders involved in "Northern Kentucky Area" planning, tornadoes are ranked below flooding and the effects from winter storms.

According, then, to Kentucky Emergency Management (KYEM) (and, by proxy, the Commonwealth of Kentucky), these project submissions would be ranked accordingly:

- The fortification-against-earthquake mitigation project in Hickman County would be considered A3.
- The tornado safe room mitigation project in Metcalfe County would be considered B3.
- The tornado safe room mitigation project in Kenton County would be considered B2.

Therefore:

- Hickman County is considered A3.
- Metcalfe County is considered B3.
- Kenton County is considered B2.

The prioritization of planning and project grants using the prioritization of hazard-type vulnerability determined by local jurisdictions results in a prioritization of local jurisdictions themselves. Quod erat demonstrandum (QED).

B. *Including (for Non-Planning Grants) the Consideration of Benefit Maximization According to Benefit-Cost Analysis Methodology*

Prioritizing local assistance using the mechanism described above and in the *Mitigation Strategy* section of this 2013 update of the Commonwealth of Kentucky's hazard mitigation plan is thoroughly linked with the extent to which benefits are maximized according to a "cost-benefit" review of proposed projects (and their associated costs), i.e. Benefit-Cost Analysis (BCA).

BCA is directly responsible for the prioritization of those proposed projects labeled "acquisition and demolition" and "educational campaign et al." As aforementioned, these projects provide unique mitigation results that disallow their inclusion into a more systematic method of prioritization that occurs with all other mitigation project types. Thus, within a set of "acquisition and demolition" projects and within a set of "educational campaign et al." projects, BCA takes on heightened and more direct importance in prioritization. The extent of the benefits exceeding the costs of the project, on a project-by-project basis and regardless of location, has been determined the primary and fairest method of project prioritization of these two project types.

Amongst all other projects, the relevance of BCA (and the subsequent consideration of it) is more implicit (yet no less important): If projects are being categorized and prioritized by their ability to protect critical facilities and then further by whether they protect against what a locality has deemed its "high-" versus "medium/moderate-" versus "low-risk" hazards, then, in practice, they are also being categorized and prioritized by the extent to which the benefits of a project exceed its cost, i.e. the Benefit-Cost Ratio (BCR). Using the symbols described above and within the *Mitigation Strategy* section of this plan, an A3 project (protection of critical facilities and from a locality's highest risk hazard-type) will very likely correlate with a comparatively high BCR vis-à-vis a B1 project (no protection of critical facilities and protection from a locality's lowest-rank hazard-type).

However, there will likely be instances where prioritization is less obvious: Should an A1 project (protection of critical facility but from a locality's lowest-ranking hazard) be prioritized over a B3 project (no focus on critical facilities, but protection from a locality's highest-ranking hazard)? In such situations, an ex post facto BCA and subsequent comparison of the A1 project's BCR vis-à-vis the B3 project's BCR is obviously relevant. And in these instances, BCA (and the subsequent BCR) provide a more direct role in prioritization of projects similar to its role in the prioritization of "acquisition and demolition" and "educational campaign et al." projects.

C. Including Considerations for Communities with the Highest Risk

That the 2013 Update of the Commonwealth of Kentucky's hazard mitigation plan includes considerations for communities with the highest risk is implicit in its planning and project grant selection criteria and in the role of the Benefit-Cost Analysis (BCA):

If project grant prioritization is a function of whether or not grant funding intends to protect critical facilities within a jurisdiction and by what degree of hazard-type affects the local jurisdiction according to the local jurisdiction itself, then (partially at least) a de facto "highest-risk" consideration is a part of the prioritization calculus. Those project grants that protect the critical facilities of communities from what said communities feel are one of its highest-risk hazard types are project grants that simultaneously address the highest-risk communities.

The further reliance of Benefit-Cost Analysis acts as a check that "high-risk" communities consistently are being considered: The highest risk communities likely will provide benefits that exceed the costs of planning or of a project that addresses the hazard mitigation needs of those communities. This is especially so if benefits address difficult-to-quantify benefits such as "social vulnerability."

Further consideration for the highest-risk communities naturally result from the Commonwealth of Kentucky's role and ultimate mitigation goal of facilitating and coordinating the mitigation needs of its communities: Previously discussed was the role of *deductive planning*. Simplifying, *deductive planning* refers to the ability of Kentucky Emergency Management (KYEM) et al. to enhance the planning and project grant application capabilities of local jurisdictions by presenting them a wider array of mitigation options to consider in future planning and project considerations. This *deductive planning* implies a consideration for Kentucky's highest-risk communities as such communities would naturally be the focus of such administrative efforts. This is especially so if there are high-risk communities that do not have a very deep history in pursuing hazard mitigation activities.

D. *Considering Repetitive-Loss Properties*

The same logic that implies consideration for Kentucky's highest-risk communities largely applies to Kentucky's consideration of those areas with repetitive-loss properties.

Benefit-Cost Analysis should aid considerably in consideration of areas with repetitive-loss properties: By definition, a property (or set of properties) that experiences losses repeatedly through a given span of time will provide benefits that considerably exceed the cost of mitigating these repeated losses.

Again, as in the case with Kentucky's highest-risk communities, the *deductive planning* efforts of Kentucky Emergency Management (KYEM), the University of Kentucky Martin School of Public Policy and Administration's Hazard Mitigation Grants Program (UK-HMGP), and the University of Louisville's Center for Hazards Research and Policy Development (CHR) naturally will focus on those communities that have properties that suffer from repetitive losses.

The difference between Kentucky's considerations of its highest-risk communities and its consideration of communities' repetitive-loss properties lies in the practice of prioritization of project grants that would inevitably occur: Repetitive-loss properties are most commonly addressed through acquisition and demolition project grants. As previously discussed earlier in this section and in the *Mitigation Strategy* section of this plan, acquisition and demolition projects are not prioritized in the same way and with other types of mitigation projects due to the unique nature of acquisition and demolition projects. Consequently, the system that would apply to most other mitigation activity-types (i.e. the prioritization of project grants into *A-Projects* and *B-Projects* with sub-prioritization by degree of vulnerability from hazard types per definition of individual jurisdictions) does not apply to acquisition and demolition projects.

Acquisition and demolition project grants are considered separately and are prioritized on a case-by-case basis relying heavily on Benefit-Cost Analysis. That said, in practice prioritization naturally will favor project grants that address repetitive-loss properties due to the likelihood of benefits considerably exceeding the costs of acquiring/demolishing the properties, due to the self-selection that occurs whereby most acquisition/demolition project grant applications will consist of repetitive-loss properties, and due to common sense.

E. Considering Communities with the Most Intense Development Pressures

Regarding the consideration of communities applying for grant funding for mitigation activities and projects that have intense development pressures, a heavy reliance upon Kentucky Emergency Management (KYEM) and its university affiliates' role in *deductive planning* will be necessary.

In terms of the ability to apply for grant funding to pursue necessary mitigation activity in Kentucky jurisdictions that experience intense development pressures, the difficulty mainly concerns that grant funding is distributed through reimbursement rather than upfront. Communities with intense development pressures will have difficulty contributing the upfront capital necessary to pursue mitigation activity that would later be (partially) reimbursed.

Generally, technical assistance regarding the financial pressures that communities with intense development pressures face in having to pay for a mitigation project upfront that will later be reimbursed derives mainly from the individual project management relationship that KYEM and the University of Kentucky Martin School of Public Policy and Administration's Hazard Mitigation Grants Program (UK-HMGP) administration promotes.

While individual communities themselves apply for mitigation project grant funding, once a mitigation project has been selected it is assigned a project manager from either KYEM or UK-HMGP. This means that any mitigation project is administered by at least two (2) individuals: The community's project manager (who becomes the "sub-applicant") and KYEM/UK-HMGP's project grant manager (who becomes the "applicant').

A primary function of the "applicant" (i.e. the KYEM/UK-HMGP project grant manager) is to educate and assist the "sub-applicant" in timely reimbursement of the funds the "sub-applicant" has provided upfront in pursuing a mitigation project. Such assistance includes: educating constantly about and providing the necessary internal documentation that a "sub-applicant" would use in order to request reimbursement for a project, ensuring that all documentation necessary to justify reimbursement is collected, organizing and enhancing requests for reimbursement, setting up accounts into which reimbursed funds will be placed, and ensuring that all accounting is correct and that the "sub-applicant" receives the proper amount of reimbursement. A related and arguably more important function for the KYEM/UK-HMGP "applicant" regarding communities with intense development pressures is the identification of "cost-matches" or "cost-shares" within communities. The "cost-match"/"cost-share" not only generally identifies assets necessary for the pursuance of a mitigation project, but also provides a means by which a community experiencing intense development pressure can place upfront valuable assets that act as capital toward which reimbursement can be justified. Kentucky's Department of Local Government (DLG) also plays an important role in the identification of these "cost-match"/"cost-shares."

Beyond the abovementioned general customer service provided by KYEM and UK-HMGP – which generally aids communities experiencing the most intense development pressures, there are three practices that specifically consider these communities:

The first was mentioned above when discussing the Commonwealth's prioritization system: Beyond classifying mitigation projects into whether or not they address critical facilities followed by sub-categorizing potential projects by which hazards from which the project is intended to protect, the Commonwealth also relies upon Benefit-Cost Analysis (BCA) and the qualitative judgment of the Kentucky Hazard Mitigation Council (KYMC). The KYMC will take into consideration the whether or not a community applying for mitigation projects suffers from intense development pressure.

The second practice involves KYEM and UK-HMGP's outreach to local community banks. KYEM and UK-HMGP have been successful in many instances in securing lines of credit from local banks so that communities with intense development pressures can implement much-needed mitigation projects with upfront capital.

The final practice results from the Commonwealth's (and KYEM's) system for reimbursing the cost of mitigation projects. Earlier, this section acknowledged that the difficulty for Kentucky communities experiencing intense development pressures mainly revolves around the need for capital upfront in order to pay for mitigation projects that will later be (partially) reimbursed by FEMA (through the Commonwealth) and (partially) by the Commonwealth itself. FEMA partially reimburses 75% of the cost of an approved mitigation project. Kentucky contributes a further 12% toward the reimbursement of that approved project. A community, thusly, will receive 87% of its costs reimbursed for an approved mitigation project. (The community contributes 13% to the costs of an approved mitigation project.)

The system of reimbursement implemented by the Commonwealth and KYEM, however, can be used to address the needs of communities in need of upfront capital (due to intense development pressures): The Commonwealth of Kentucky and KYEM simply reimburse 87% of any approved invoice. This straightforward, proportional reimbursement system allows communities with intense development pressures to invoice for their 13% contribution to an approved project upfront. This is especially helpful if a significant portion of a community's 13% contribution to the costs of a project derives from "in-kind" payment or from "local matches[11]." Essentially, using a proportional reimbursement system allows a community with intense development pressure invoice for the identified "in-kind"/"local match" upfront and receives 87% of that invoice reimbursed. This acts as capital upfront that can be used to begin work on a mitigation project. So, for example, say that City Z uses city labor to implement a project. That labor is "in-kind" contribution: The city already is paying its labor out of (likely) operating budgets. The labor counts as the 13% required that the city pays for its approved mitigation project. Thus, City Z can invoice for the budgeted (in the project application) labor upfront and receive 87% of that invoice reimbursed. This 87% is capital to be used to purchase the materials, equipment, etc. necessary to implement a mitigation project.

[11] Again, remember that KYEM, UK-HMGP, DLG, etc. aid communities in identifying "local matches" and "in-kind" contributions that can be used toward the communities' 13% contribution to an approved mitigation project.