KANSAS CITY, MISSOURI
EVACUATION AND TRANSPORTATION SERVICES PLAN

Public Version - 2008

KANSAS CITY, MISSOURI

LOCAL EMERGENCY OPERATIONS PLAN - ANNEX J

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FOREWORD

I. RELATIONSHIP TO THE LOCAL EMERGENCY OPERATIONS PLAN (LEOP)

The **Evacuation and Transportation Services Plan** is part of the LEOP (Annex J), and was adopted by the Kansas City, Missouri, City Council in September of 2006. The remainder of the LEOP was written in 2007 and adopted by the City Council in 2008.

The Office of Emergency Management opted to complete the evacuation plan first because national events made it clear that the previous evacuation plan was inadequate. The Annex below is nearly identical to the version approved in 2006, although formatting and pagination have been changed to match the LEOP. Beginning in 2009, both the LEOP and the **Evacuation and Transportation Services Plan** will be updated simultaneously, in accordance with the **LEOP Base Plan** (page 19).

II. EVACUATION AFTER HURRICANES KATRINA AND RITA

This Annex has been revised, in part, due to the evacuation problems that arose in New Orleans, Louisiana in response to Hurricane Katrina (August, 2005), and in Houston, Texas prior to Hurricane Rita (September, 2005). Each of these events led to mass evacuations, and each had unique problems. While the problems encountered in Louisiana and Texas cannot be directly equated to conditions expected in Kansas City, it is prudent to apply the 'lessons learned' from these events to the Kansas City evacuation plan.

The most disturbing lesson of Hurricane Katrina is that all levels of government – as well as the citizens themselves – failed to take necessary and prudent actions which might have reduced the impact to life and health. Local and state officials failed to implement their evacuation plan in a timely manner, and once an evacuation was ordered, failed to provide adequate transportation for citizens without their own vehicular transportation. The federal government failed to recognize the scope of the emergency quickly enough, and failed to undertake a coordinated response. The citizens of New Orleans have always known of the danger, but many failed to provision food, water and medical supplies, and failed to make adequate plans for their own safety. In Texas, by contrast, the evacuation was announced early and public compliance was extraordinarily high (probably due to Hurricane Katrina), however the volume of northbound traffic quickly overwhelmed the limited evacuation routes. Then, because of the slow movement of vehicular traffic, some evacuating vehicles ran out of gasoline and others were forced to 'turn back' before reaching a safe location.

In researching this Annex, the authors were impressed by three major points:

1. There is a lack of competent guidance on *how to prepare* a mass evacuation plan. Consequently we were unable to find a single large metropolitan area that had a plan which they considered good enough to model. The federal government's planning guide, entitled **Guide for All-Hazard Emergency Operations Planning** (SLG-101) provides virtually no information on how to prepare a mass evacuation plan. Similarly, state documents provide only checklists of what should appear in a mass evacuation plan. The most useful source of information was a 1984 FEMA document entitled **Transportation Planning Guidelines for the Evacuation of Large Populations** (CPG 2-15). Originally written as part of the federal

Crisis Relocation Program[1], it provided instructions on how to prepare a mass evacuation plan.

2. While the federal government is now encouraging (post Katrina) all metropolitan areas to prepare a plan that covers the evacuation of the entire jurisdiction, we were unable to identify a single *reasonable* scenario that would cause such an evacuation. A complete evacuation of the city requires two elements: First, the threat must be of sufficient magnitude to uniformly impact the entire city. Second, the threat must provide sufficient *advance notice* to allow the City to implement a controlled evacuation. Based on historical experience, this combination of circumstances is not likely to occur in Kansas City. Nevertheless, this plan addresses the full range of potential evacuation operations.
3. At this time there is no regional evacuation plan or strategy. The Metropolitan Emergency Manager's Committee (MEMC) is considering developing a regional mass evacuation plan. The City of Kansas City therefore decided to proceed independently with this revision, with the expectation that it will later be revised to conform to any regional plan that may be developed.

One final comment: In developing this mass evacuation plan, the authors had to balance urgency with mathematical validation. We reasoned that we could quickly produce a plan based on the best estimate of experienced local officials and traffic engineers, or take considerably longer to produce a plan validated by mathematical models which better predict traffic flow rates and other conditions. Given the scope of problems encountered by local officials in Louisiana and Texas, and given the fact that any statistical modeling would be limited by the absence of a regional plan, we opted to take the former approach.

[1] The Crisis Relocation Program was a federal initiative asking major urban areas to plan to move their population to rural areas in the event of a war with the Soviet Union.

KANSAS CITY, MISSOURI
EVACUATION AND TRANSPORTATION SERVICES PLAN

I. PURPOSE STATEMENT

The purpose of this Annex is to assure that the City can preserve life, health and safety through the implementation of quick and efficient evacuation operations. This Annex establishes broad policies to guide local emergency personnel when making the decision to conduct an evacuation, and general procedures to guide the evacuation operations.

II. LEGAL AUTHORITIES

A. Revised Statutes of Missouri, Chapter 44.

B. City of Kansas City, Missouri, Code of Ordinances, Article III, Section 2-85.

III. PLANNING ASSUMPTIONS

This plan is based on the following assumptions:

A. This Annex addresses foreseeable evacuations. It is assumed that the plan will be adapted, as necessary and appropriate, to address unforeseen evacuation scenarios.

B. Evacuations may occur due to one of the following three scenarios:

1. Natural hazards such as river flooding and dam failure
2. Technological hazards such as rail, highway, pipeline and industrial accidents involving hazard
3. Criminal/terrorist events involving a Weapon of Mass Destruction[2] .

C. Kansas City has no *mandatory* evacuation law. Therefore, while the City may issue an evacuation "order", citizens must comply voluntarily. Those citizens who choose to ignore an evacuation order take the risk of being without police, fire, medical and other life sustaining services for a prolonged period of time.

D. Most citizens will evacuate using their own vehicles. People without private transportation will rely on a variety of alternatives including: riding with friends, neighbors or family; riding a Kansas City Area Transit Authority (ATA) bus; and as a last resort, walking. [NOTE: Passenger rail and river watercraft have very small capacities in Kansas City, and generally set up to handle cargo traffic. For that reason neither rail nor river watercraft are considered in this Annex. Also, the Charles Wheeler and Kansas City International airports may be used to support medical evacuation (Medevac) operations, but these facilities are not suitable for general evacuation operations, and are therefore not discussed in this Annex.]

E. Since pets are generally not allowed in public shelters or hotels[3], the City is working on a method to accommodate people with pets during a mass evacuation. The LEOP will be updated when those plans are complete.

[2] A Weapon of Mass Destruction is a chemical, biological, radiological, nuclear or explosive device.
[3] Service animals are generally accepted at public shelters and hotels, but the evacuee will be required to care for the animal.

F. Primary evacuation routes will be congested and the flow of traffic will be slow. Guidance documents caution planners against an overly optimistic projection of traffic flow under evacuation conditions. Even if weather conditions are otherwise perfect, traffic accidents, queuing at ingress/egress points, drivers who are unfamiliar with evacuation routes and other conditions will significantly reduce traffic flow below optimal levels. This will increase the time required to conduct an evacuation.

G. Schools, medical institutions, and congregate care facilities will undertake evacuations utilizing their own (i.e. non-City) resources. The City believes that such facilities have a duty to maintain a basic level of protection to people in their care. This duty extends to evacuations when other reasonable protective means are not available at their facility. While the City will endeavor to assist these facilities with its limited resources, they must not rely *exclusively* on the City. Following the completion of this Annex, the Kansas City Office of Emergency Management will begin meeting with schools, medical institutions and congregate care facilities to assess their evacuation plan, to assure that they have a means to evacuate people in their care, and to integrate their plans with this Annex.

H. The City will not use the Tornado Outdoor Warning Siren System to warn the public of an evacuation. These sirens are intended to direct people to move to a basement or other shelter *immediately upon hearing the tornado warning sirens*. Thus, under certain conditions (e.g. a heavier-than-air toxic chemical release) moving to a basement could prove fatal.

I. All available resources will be made available to those ordering and conducting the evacuation, and that outside mutual aid resources will be minimal during the initial evacuation period.

J. All evacuations will be conducted in accordance with this plan, and will be managed in a manner that conforms to the National Incident Management System (NIMS)[4].

IV. HAZARD ASSESSMENT

The following hazard assessment relates only to the potential for a major evacuation. The threat potential is based on an unscientific assessment of probability (high, medium and low) and consequence (high, medium and low).

A. Technological Hazards

1. Railroad Accident/Incident (Hazmat)

a. Threat Potential:

High (Medium probability, High consequence)

b. Background:

Due to our central location, the Kansas City metropolitan area is one of the largest[5] railroad hubs in the United States. The City of Kansas City, Missouri, has over 225 miles of track crossing its jurisdiction. The most heavily traveled lines cross through or near downtown Kansas City and other densely populated areas. The largest local railroad operators are Union Pacific (UP) with 165 trains/day, and Burlington Northern Santa Fe (BNSF), with 125 trains/day.

[4] NIMS is the federal version of the Incident Command System.

[5] According to BNSF, Kansas City ranks #1nationally by tonnage and #2 nationally by the number of cars. In addition, the Armourdale Humpyard in Kansas City, Kansas, is the third largest nationally.

c. Potential Railroad Hazards:

- Hazardous Materials[6] Spill:

  Railroad officials estimate that more than 600 rail cars pass through Kansas City each day carrying reportable quantities[7] of hazardous materials. In addition to the hazard presented by a single hazardous material, train accidents can often involve a mixture of chemicals which react to each other, and are therefore unpredictable and difficult to handle. Information regarding hazardous material is provided by the US DOT **Emergency Response Guidebook**. The Guidebook recommends the minimum area to be evacuated based on the characteristics of the hazardous material involved. Other factors such as weather, geography and population of the area will need to be analyzed by emergency officials during the initial phase of an incident to determine the size of an evacuation zone.

- Explosion:

  An explosion can occur due to an accident involving explosive materials, or due to a BLEVE[8] (Boiling Liquid Expanding Vapor Explosion).

d. Railroad Evacuation Planning Zone:

In conjunction with the KCFD, UP and BNSF railroads, the Office of Emergency Management has established a one mile radius evacuation planning zone from any point where an active rail line intersects the City. This zone is believed to be sufficient to initially protect the public from a rail incident involving hazardous materials or potential explosion. The scope (size and direction) of the evacuation may be expanded or contracted based on the nature of the material involved (see US DOT **Emergency Response Guidebook**), meteorological data, or as otherwise determined by the Field Incident Commander, EMD, or UCT.

2. Interstate and Major Highway Accident/Incident (Hazmat)

a. Threat Potential:

High (High probability, High consequence)

b. Background

As with railroads, geographic location makes the Kansas City metropolitan area a hub for local, regional and national cargo shipments by semi-tractor trailers and smaller trucks. The local highway system[9] includes more than 197 miles of highways, including seven Interstate Highways, five US Highways and six Missouri State highways. People within one mile of the local highway system are judged most likely to be affected by a transportation accident involving hazardous materials, and a related evacuation.

c. Potential Highway Hazards

[6] According to the US Department of Transportation, a hazardous material is "any substance or material that could adversely affect the safety of the public, handlers or carriers during transportation." Hazardous materials include explosives; compressed gases; flammable liquids and solids; oxidizers and organic peroxides; and toxic, radioactive and corrosive materials.

[7] A reportable quantity is a quantity of hazardous materials that fall under federal regulations. Amounts under this level do not require signage, reporting, etc.

[8] A BLEVE occurs when a tank car with compressed gas is exposed to fire. BLEVEs have hurled multi-ton parts of the rail car as far as three quarters of a mile.

[9] For the purposes of this plan, the highway systems includes the Kansas City segments of the following highways: I-29, I-35, I-70, I-435, I-470, I-635, and I-670; US 24, US 40, US 69, US 71 and US 169; MO-9, MO-150, MO-152, MO-210, MO-291and MO-350.

- Hazardous Materials Spill (see footnote 9 for a definition):
  While the exact number is unquantifiable, it is known that a certain number of local highway accidents involve one or more hazardous materials. Such materials may present a danger based on their individual characteristics, or may react when mixed with other chemicals and become unpredictable and difficult to handle.
- Explosion:

  An explosion can occur due to an accident involving explosive materials, or due to a BLEVE (Boiling Liquid Expanding Vapor Explosion).

d. Highway Evacuation Planning Zone

In conjunction with the KCFD and MoDOT officials, the Office of Emergency Management has established a one mile radius evacuation zone from any point where a segment of the local highway system intersects the City. This zone is believed to be sufficient to initially protect the public from a vehicle accident involving hazardous materials or potential explosion. The scope (size and direction) of the evacuation may be expanded or contracted based on the nature of the material involved, meteorological data, or as otherwise determined by the Field Incident Commander, EMD, or UCT.

3. Pipeline Accident/Incident (Hazmat)

a. Threat Potential:

Medium (Low probability, Medium consequence)

b. Background

Pipelines contain chemicals in gas or liquid form that present a myriad of hazards and risks that vary depending on topography, weather, and properties of the material involved. Several pipelines, owned by ten different companies, traverse approximately 195 miles within the City of Kansas City.[10]

c. Potential Pipeline Hazards

Leaks, spills or structural failure may result in fire, explosion, and harmful/toxic vapor or smoke.

d. Pipeline Evacuation Planning Zone

- In conjunction with the KCFD, the Office of Emergency Management has established a one mile radius evacuation planning zone from any point where a pipeline transects the City. The one mile evacuation zone is the standard guideline for evacuations involving hazardous material. The scope (size and direction) of the evacuation may be expanded or contracted based on the nature of the material involved, meteorological data, or as otherwise determined by the Field Incident Commander.
- To aid evacuations along pipelines, officials in the EOC may use the Pipeline Integrity Management Mapping Application (PIMMA). PIMMA is part of the National Pipeline Mapping System (NPMS). NPMS is a GIS created by the Department of Transportation, PHMSA, and the Office of Pipeline Safety in cooperation with several federal and state agencies and the pipeline industry.

[10] Pipeline and Hazardous Materials Safety Administration (PHMSA)

The NPMS consists of geospatial data, attribute data, public contact information, and metadata pertaining to the interstate and intrastate gas and hazardous liquid transmission pipelines, liquefied natural gas (LNG) facilities, and hazardous liquid breakout tanks jurisdictional to PHMSA.[11]

- The Office of Emergency Management has received access to PIMMA for use in emergency operations only. Due to the sensitive nature of the information provided by PIMMA, maps and related information regarding pipelines are kept on file in the Office of Emergency Management and not released to the public in accordance with NPMS/ PIMMA policy.
- The **Emergency Responder Pipeline Safety Guidelines**, published by the Pipeline Association for Public Awareness also contains information to help emergency responders effectively deal with pipeline incidents, including evacuations. A copy of the manual is kept on file in the Office of Emergency Management.

4. Fixed Facility Accident/Incident (Hazmat)

a. Threat Potential:

Medium (Low probability, High consequence)

b. Background

There are literally hundreds of fixed facilities that contain a sufficient quantity of hazardous materials that, if released, pose a potential threat to the public. These "Tier II facilities" are regulated by federal law[12], and must register with the Local Emergency Planning Commission (LEPC) and the Missouri Emergency Response Commission. The Mid-America LEPC (covering Kansas City) is responsible for maintaining Tier II site plans and chemical inventories. This information is kept in the Mid-America LEPC **Regional Hazardous Materials Emergency Preparedness Plan**. In addition, the U.S. Environmental Protection Agency has also compiled Tier II information specific to the Kansas City area in a document titled, **Risk Management Facilities Worst Case Scenarios**. Both documents are kept on file in the Office of Emergency Management.

c. Fixed Facility Evacuation Planning Zone

The area to be evacuated will be determined by the KCFD based on the characteristics of the hazardous material, current weather conditions, location, and other factors.

B. Natural Hazards[13]

1. Flood Hazards (Riverine and Flash Flood)

a. Threat Potential:

Medium (Medium probability, Medium consequence)

b. Background:

Located at the confluence of the Missouri and Kansas (also called Kaw) Rivers, Kansas City has experienced several major floods, resulting in both loss of life

[11] NPMS website.
[12] Emergency Planning and Community Right to Know Act (EPCRA).
[13] See the MARC Regional Natural Hazards Plan for a complete list of the most likely and most dangerous natural hazards in Kansas City.

and damaged/destroyed property. Two flood events alone, the September 12, 1977 and the October 4, 1998 floods resulted in a total of 37 fatalities and combined damage in excess of $100 million. Kansas City also has an earthen levee system along the Missouri River and flood control wall along the Kansas River. As with any engineered system, it is subject to fail due to a variety or reasons. The failure (or over-topping) of either system during flood conditions could cause significant damage within the City and may result in a major evacuation.

c. Potential Flood Hazards

According to the Kansas City Flood Hazard Profile,[14] 25% to 50% of Kansas City is at risk from both riverine and flash flooding.[15] Riverine flooding occurs when rivers, streams, lakes, reservoirs, or drainage systems overflow due to excessive rainfall, rapid snowmelt or ice jams.[16] Riverine flooding can be either slow or fast rising, but generally occur over a period of days and are usually more damaging than the other types of floods. Kansas City has significant geographic areas within the 100 year[17] and 500[18] year floodplains and which might require a major evacuation. Flash floods are considered the most dangerous type of flooding nationwide[19] due to their potential of causing death and injury to people who are unaware of or ignore the dangerous conditions. Flash floods are generally caused by intense rainfall which occurs over a relatively short period of time. These conditions can occur well upstream from an area, resulting in a sudden and catastrophic rise in water downstream. Given the nature of flash flooding, any evacuations will tend to be small, short lived, and undertaken under extremely exigent circumstances.

d. Flood Evacuation Planning Zones

In conjunction with the Water Services Department, the Office of Emergency Management has established an evacuation zone around rivers and creeks in the jurisdiction. The evacuation zones follow the 100 and 500 year floodplain projections established by FEMA. The scope (size and direction) of the evacuation may be expanded or contracted based on the nature of the flood, meteorological data, or as otherwise determined by the Field Incident Commander.

2. Dam Failure (Flooding)

a. Threat Potential:

Medium (Low probability, Medium consequence)

b. Background

- While very rare, catastrophic dam failures do occur and are known to cause significant impact on life and property. Depending on where and when the dam failure occurs in Kansas City, a major evacuation might be required to minimize the loss of life. According to the **National Dam Safety Act**, a dam is defined as an artificial barrier which impounds or diverts water, and is

[14] MARC Regional Natural Hazards Mitigation Plan, V-B-2-1
[15] MARC Regional Natural Hazards Mitigation Plan, V-B-1
[16] SEMA State Hazard Analysis, B-1
[17] 100 year flood means a level of flooding which has one chance in 100 of happening in any year.
[18] 500 year flood means a level of flooding which has one chance in 500 of happening in any year.
[19] FEMA Flood Fact Sheet

either: (1) more than six feet high and stores 50 acre feet or more of water; or (2) 25 feet or higher and stores more than 15 acre feet of water.[20]

- There are 29 dams within the City of Kansas City. Most are unregulated, private earthen dams. Longview Lake Dam is the only local dam operated and maintained by the U.S. Army Corps of Engineers (USACE), and consequently is the only dam with a flood inundation map. A flood inundation map is necessary to predict where water will likely flow in the event of a controlled release of water or catastrophic failure.
- The USACE also operates the Wilson, Milford and Tuttle Creek dams located west of Manhattan, Kansas. According to the USACE[21], a failure of any of these dams would cause significant flooding (possibly exceeding a 500 year flood) in Kansas City within 28 hours. It is notable that these dams are located in a seismically active zone.
- The USACE also operates several dams on the Upper Missouri River. A failure or major water release within this system could also cause serious flooding in Kansas City.[22]

c. Potential Dam Failure Hazards

- Death, injury and extraordinary property damage can occur through the hydraulic effect of fast-moving water, rapid rise of water, movement of water outside of established channels, and other effects.
- The mechanism of dam failure includes:
  - Overtopping: Can be caused by an inadequate spillway design, debris blockage of the spillway, or settlement at the dam crest.
  - Foundation Defects: Can be caused by differential settlement, sliding and sloping instability, high uplift pressures, and uncontrolled foundation seepage.
  - Piping and Seepage: Piping[23] is underground or internal erosion in a dam that can create and open path for water (seepage) which can lead to imminent dam failure.
  - Conduits and Valves: Piping of embankment material into conduits through joints or cracks can lead to structural failure.
  - Flooding and Earthquakes: Flooding can lead to the intentional release of water or dam failure if the spillway cannot handle access water. Earthquakes can cause structural failure leading to flooding downstream.

d. Dam Failure Planning Zones

The Office of Emergency Management has adopted the USACE Longview Lake flood inundation map as the basis for the Longview Lake evacuation zone. This USACE map was supplement by City GIS data to reflect recent development in the area. USACE has also created the **Longview Lake Emergency Action Plan** that directs USACE personnel in deciding and implementing protective actions in the event of dam failure. A copy of the plan is on file with the Office of Emergency Management for Kansas City. The scope (size and location) of the

[20] Missouri Department of Natural Resources Dam and Reservoir Safety Home Page
[21] Interview with USACE, January 11, 2006
[22] Regional Natural Hazards Mitigation Plan V-G-15
[23] Piping is caused when there are cavities, cracks in rock, or other openings large enough so that soil particles can be washed into them and transported away by seeping water.

evacuation in the event of a dam failure will be made by emergency management officials in consultations with the appropriate regulating office (USACE, DNR), Water Services and private dam owners (if available).

C. Criminal/Terrorist Act

1. Threat Potential:

   Medium (Low probability, High consequence)

2. Background

   Due to its population, and because it is a regional hub of government, industry and transportation, the City of Kansas City (and in particular the Downtown Business District) are judged to be a potential target of criminal or terrorist action.

3. Potential Hazards

   The City could be exposed to any of the "CBRNE" hazards – chemical, biological, radiological, nuclear and explosive.

4. Downtown Evacuation Planning Zone

   The Office of Emergency Management established the area inside the "downtown loop" as the Evacuation Planning Zone for this hazard.

V. EVACUATION LEVELS

This plan addresses the following evacuation levels:

A. Shelter in Place – *An Evacuation Alternative*

The term "shelter in place" means the act of sealing off a room or building in order to isolate the occupants from an external threat, and staying inside until the threat has abated. Shelter in place operations are usually ordered by police or fire personnel in response to an airborne chemical or hazardous material spill. It usually affects a limited geographic area for a short period of time, and may not necessarily require the implementation of this Annex.

B. Minor/Routine Evacuation Operations

The term "minor/routine" evacuation means an evacuation involving less than 1,000 persons for less than eight (8) hours. Such evacuations are usually ordered by police or fire personnel in response to a fire, hazardous materials incident, a flash flood, or police operation. A minor/routine evacuation affects a limited geographic area and a small to moderate number of people. The operations are concluded quickly, so sheltering becomes an issue only during periods of severe or inclement weather. Such operations do not require the activation of this Annex.

C. Major Evacuation Operations

The term "major evacuation" means an evacuation of more than 1,000 persons for more than eight (8) hours. Major evacuation operations are ordered in response to a major disaster (or threat of disaster). The cause of the evacuation may be emergent, as with a major hazardous material spill, or develop more slowly, as with a flood. It is presumed that any major evacuation will include significant emergency sheltering operations, and may include a Declaration of a State of Emergency. This Annex will be activated for major evacuation operations.

D. Catastrophic Evacuation Operations

The term "catastrophic" means an evacuation of most or the entire city to points of safety outside the metropolitan area. It is important to note that the Kansas City Office of Emergency Management has been unable to identify *any* scenario that is likely to include a precautionary evacuation of the entire jurisdiction. Nevertheless, in an abundance of caution, this plan includes a framework for a catastrophic evacuation in the unlikely event it may occur. This Annex will be used for catastrophic evacuation operations.

VI. EVACUATION RESPONSIBILITES BY DEPARTMENT OR AGENCY

Departments within the City of Kansas City and external agencies will fulfill the following responsibilities with regard to evacuation operations (in alphabetical order):

A. American Red Cross (ARC)

The Greater Kansas City Chapter of the American Red Cross will provide a representative in the EOC, and is responsible for the establishment and operation of shelters in support of evacuation operations.

B. Area Transit Authority (ATA)

The Kansas City Area Transit Authority will provide a representative in the EOC, and is responsible for providing bus services (at the request of the EOC) to transport people to designated Evacuation Assembly Points and/or Red Cross shelters.

C. City Communications

The City Communications office will provide a representative in the EOC, and provides emergency public information concerning evacuation operations.

D. City Manager

During an emergency, the City Manager (or his designee) retains all authority and responsibilities normally associated with his position; may serve as the chair of the Unified Command Team; may approve evacuation operations; approves recommendations for a Declaration of a State of Emergency.

E. Emergency Management Director (EMD)

The director of the Office of Emergency Management activates the EOC and coordinates EOC operations; implements the Local Emergency Operations Plan (LEOP); provides emergency public information; and may serve as the chairman of the Unified Command Team and Incident Commander. The EMD may approve evacuation operations.

F. EMS Medical Director

The EMS Medical Director is the primary source of day-to-day medical direction and clinical oversight of all aspects of the pre-hospital emergency medical services system. The EMS Medical Director coordinates pre-hospital emergency medical services for evacuees, in conjunction with the KCHD and MAST.

G. Finance Department

The Finance Department monitors and facilitates the expenditure of funds during evacuation operations.

H. Fire Department (KCFD)

The Fire Department provides representatives to the EOC to coordinate fire/rescue services and public warning in the field during evacuation operations. The FD may serve as the Incident Commander. A FD representative serves as a member of the UCT.

I. Health Department (KCHD)

The Health Department provides representatives to the EOC to coordinate health and medical services in the field during evacuation operations. The HD may serve as the Incident Commander. A HD representative serves as a member of the UCT.

J. Information Technology Department (ITD)

The IT Department will provide a representative to the EOC to assist with GIS mapping. IT also assists with the provision of voice and data systems to support EOC operations.

K. Kansas City Transportation Group (KCTG)

The KCTG provides paratransit services to the public under contract to the ATA. KCTG is the primary provider of transportation for physically challenged people during major and catastrophic evacuation operations.

L. Law Department

The Law Department consults with the Mayor, City Manager, Emergency Management Director and UCT concerning the legal basis of proposed actions; approves a Declaration of a State of Emergency as to form and legal sufficiency.

M. Mayor/Mayor pro-tem

The mayor (or in the absence of the mayor the mayor pro-tem) is the principal political and legal authority of the City; may approve evacuation operations; approves a Declaration of a State of Emergency.

N. MAST

MAST is the sole entity established to oversee and manage the City's ambulance transport service system. MAST provides emergency medical services (ALS), and transports sick and injured persons to hospitals. MAST will provide emergency medical services for evacuees and other related duties.

O. Missouri Department of Transportation (MoDOT)

MoDOT assists with the movement of traffic and the provision of emergency public information through the KCSCOUT system.

P. Metropolitan Ambulance Services Trust (MAST)

MAST provides a representative to the EOC to coordinate ambulances services to the public. MAST may also serve as the secondary provider (after KCTG) of transportation for physically challenged people during major and catastrophic evacuation operations. MAST may serve as a member of the UCT.

Q. Neighborhood and Community Services (NCS)

The Department of Neighborhood and Community Services provides personnel to assist with the operation of shelters.

R. Parks and Recreation

The Parks and Recreation Department will provide a representative to the EOC to serve as part of the "infrastructure team". Provides barricades to assist with the movement of traffic; may provide vehicles/drivers to assist with stranded motorists.

Fig. 1

Primary (P) and Support (S) Responsibilities by Department

	Order Evacuation	Activate EOC	Manage EOC	Staff EOC	Recommend State of Emergency	Approve State of Emergency	Request Mutual Aid	Issue Public Warnings	Manage Traffic	Open Shelters	Staff Shelters	Transportation
American Red Cross				✓						P*	P	
Area Transit Authority				✓								P
City Communications				✓			P*	P*				
City Manager	P*		P*	✓	S							
Emergency Mgmt.	P*	P	P*	✓	P*		P*	P*		P*		
Finance Department				✓								
Fire Department	P*			✓			P*	P*				
Health Department				✓			P*				S	
IT Department				✓								
Law Department				✓		S						
Mayor/ Mayor pro tem	P*			✓		P						
MoDOT									S			
Neighborhoods				✓							S	
Parks Department				✓			P*		S	S	S	S
Police Department	P*			✓			P*	P*	P			
Public Works Dept.				✓			P*		S			
School District(s)												S
Unified Command Team	P*		P*	✓	P*		P*			P*		
Water Services Dept.				✓			P*		S			

*Authority or responsibility is shared, or may be done individually at different times.

S. Public Works Department (PW)

The Public Works Department will provide a representative to the EOC to serve as part of the "infrastructure team". Provides barricades to assist with the movement of traffic; may provide vehicles/drivers to assist with stranded motorists.

T. Schools (and contracted transportation companies)

The schools may, at the request of the EOC, provide school buses and drivers to assist with the transportation of evacuees.

U. Water Services (WS)

The Water Services Department will provide a representative to the EOC to serve as part of the "infrastructure team". Provides barricades to assist with the movement of traffic; may provide vehicles/drivers to assist with stranded motorists.

V. Other City Departments

Any other City department may be directed to provide personnel or other resources to assist with evacuation and shelter operations at the direction of the City Manger and/or EOC.

W. Police Department (KCPD)

The Police Department provides representatives to the EOC to coordinate law enforcement services and public warning in the field during evacuation operations. The KCPD may serve as the Incident Commander. A KCPD representative serves as a member of the UCT.

VII. OPERATIONS AND MANAGEMENT

Information in this section is organized by evacuation level, from lowest to highest.

A. Shelter in Place (An Evacuation Alternative)

The term "shelter in place" means the act of sealing off a room or building in order to isolate the occupants from an external threat, and staying inside until the threat has abated. Typically this action is taken under exigent circumstances, affects a limited area for a short period of time, and is ordered in response to a chemical or hazardous material spill. It can occur anywhere in the City.

1. Decision Making and Command

The decision to conduct shelter in place operations and operational command are the responsibility of the field IC (typically the senior KCFD or KCPD officer). Activation of the EOC is at the discretion of the field IC, but is generally not done because the operation is small or of short duration. Shelter in place operations should be conducted when the following conditions exist:

a. The outside environment is (or is likely to be) significantly more toxic than the environment inside a building.

b. The threat is temporary, such that the environment inside a sealed building is sufficient to sustain life until the outside threat has abated.

2. Scope (Size and Duration)

The field IC will determine the scope of the shelter in place area based on the nature of the threat, but of such size and duration to prevent public injury under a "worst probable[24]" scenario.

[24] The term "worst probable" means the worst possible condition that is *likely to happen*, in the judgment of an experienced public safety official. It may exclude the worst possible condition, if that is judged unlikely to occur.

3. Public Warning and Information

   a. The most expedient means to warn the public will be used (see **Attachment A – Comparison of Public Warning Methods**).

   b. Core Information

      For shelter in place operations, it is recommended that, at a minimum, the following information be included in any public warning statements, regardless of the method used to disseminate the information:

      - The reason for the shelter in place order.
      - The geographic area(s) affected.
      - The degree of urgency required (i.e. immediate!).
      - Stay inside until they receive the "all clear" message.
      - Specific protective measures:
        - Immediately move people and pets indoors.
        - Close and lock all exterior doors and windows.
        - Turn off heat or air conditioning systems, and close chimney flumes.
        - Obtain disaster supply kit (if available), radio, telephone, etc.
        - Move to the interior most room or basement.
        - Carefully monitor emergency broadcasts for additional instructions.

4. Public Transportation

   Not utilized for shelter in place operations.

5. Evacuation Assembly Points and Staging Areas

   Not utilized for shelter in place operations.

6. Traffic Movement and Control

   The field IC will direct the KCPD to prevent pedestrians and vehicles from entering the designated danger area in accordance with established KCPD procedures.

7. Security and Re-entry

   The field IC will direct the KCPD to provide perimeter security. The KCPD will allow pedestrian and vehicular traffic to re-enter the area once the incident is terminated, and in a manner that promotes the orderly movement of traffic.

8. Incident Termination

   The field IC will determine when shelter in place operations may be terminated based on the advice of KCFD Hazmat Division personnel or other technical experts.

B. Minor/Routine Evacuation Operations [Less than 1,000 people]

1. Decision Making and Command

   The decision to conduct minor/routine evacuations and operational command are the responsibility of the field IC (typically the senior KCFD or KCPD officer). Minor/routine evacuations are common, and generally conducted in support of fire or police operations, such as structure fires, minor hazardous materials incidents, and minor threats from explosion, minor flooding, or police tactical operations. The EOC should not be activated.

2. Scope (Size and Duration)

   The field IC will determine the scope of minor/routine evacuation operations based on the nature of the threat, but of sufficient size and duration to prevent public injury under a "worst probable" scenario.

3. Public Warning and Information

   a. The most expedient means to warn the public will be used (see **Attachment A – Comparison of Warning Methods**).

   b. Core Information

      For minor/routine evacuation operations, it is recommended that at a minimum, the following information be included in any public warning statements, regardless of the method used to disseminate the information:

      - The reason for the evacuation.
      - The geographic area(s) to be evacuated.
      - When they must leave. Specifically, the level of urgency required, and whether they have time to take action to protect their property before leaving.
      - Routes to be used for the evacuation, and the general direction of travel recommended (if known – typically for a threat due to a point source).
      - Where to obtain transportation (if applicable).
      - Where to go for shelter (if applicable).
      - Specific protective measures:
        - Turn off all appliances.
        - Close and lock all exterior doors and windows before leaving.
        - Bring your personal identification and your disaster supply kit (if available), radio, cell phone, etc.
        - Leave as quickly as possible to a point of safety (to be specifically identified).
        - Carefully monitor emergency broadcasts for additional instructions.
        - Other information as appropriate.

4. Public Transportation

   The field IC will determine whether public transportation is required. Under most circumstances, the limited scope of the operation will dictate that only a small number of buses are required. Under such circumstances the field IC may request these resources directly from the ATA in accordance with normal field procedures. If those resources are insufficient, the field IC should utilize the Major Evacuation procedure, below.

5. Evacuation Assembly Points

   Not utilized for minor/routine evacuations.

6. Traffic Movement and Control

   The field IC will direct the KCPD to prevent pedestrians and vehicles from entering the designated danger area in accordance with established KCPD procedures.

7. Security and Re-entry

The field IC will direct the KCPD to provide perimeter security. The KCPD will allow pedestrian and vehicular traffic to re-enter the area once the incident is terminated, and in a manner that promotes the orderly movement of traffic.

8. Incident Termination

The field IC will determine when minor evacuation operations may be terminated based on operational circumstances.

C. Major Evacuation Operations [Greater than 1,000 people for at least 8 hours]

1. Decision Making and Command

The decision to conduct a major evacuation may be made by the field IC (under exigent conditions), or the Emergency Management Director/Unified Command Team (EMD/UCT) when threatening conditions develop more slowly (such as an impending flood).

a. The EMD will activate the Emergency Operations Center (EOC) as soon as practical, including representatives from KCFD, KCPD, City Communications, ATA, and the American Red Cross (at a minimum).

b. The EMD will activate the UCT as soon as practical. Once the UCT is functioning, the City Manager or EMD will serve as the chair of the UCT, and the UCT will assume overall (joint) incident command of the evacuation.

c. The incident will be organized and managed in accordance with the National Incident Management System. Accordingly, the EMD/UCT will appoint a Logistics Section Chief to assume responsibility for the direct coordination of evacuation transportation operations.

d. The EMD/UCT will authorize the utilization of ATA busses and drivers, and will make contact with the ATA to request those resources.

e. The EMD/UCT will authorize (or concur with) mutual aid requests made by City departments.

f. The EMD/UCT will recommend to the City Manager whether a State of Emergency should be declared by the Mayor. If yes, the Emergency Management Director will draft a declaration before sending it to the City Law Department for approval. Following approval by the Law Department, the declaration will be signed by the Mayor or Mayor pro tem, and then submitted to the City Clerk.

g. The State Emergency Operations Center and other local emergency management agencies will be notified of the major evacuation (and declaration) as soon as practical.

2. Scope (Size and Duration)

The scope of a major evacuation may initially be determined by the field IC. Once the EOC is activated, however, the EMD/UCT may choose to expand or reduce the evacuation area based on reports from the field IC and other technical experts. In any event, the scope of the major evacuation will be of sufficient size and duration to prevent public injury under a “worst probable” scenario.

a. For hazardous materials accidents from rail, highway, fixed facility or pipeline, an initial one (1) mile radius evacuation is recommended. The KCFD will

recommend an expanded evacuation area, if appropriate, based on the nature of the material involved.

b. For floods, evacuate to a point beyond the high water mark forecasted by the National Weather Service, and in consultation with the Stormwater Division representative of the Water Services Department.

c. For a Criminal/Terrorist threat downtown, evacuate inside the Downtown Business District (see **Attachment B – Evacuation of the Downtown Business District**). For incidents at other locations, evacuate based on advice from the KCPD and KCFD.

3. Public Warning and Information

The most expedient means will be used to notify the public (see **Attachment A – Comparison of Warning Methods**). Typically this will include local broadcast media (radio and television), NOAA Weather Radio, and all other appropriate means (including police and fire vehicle public address systems, if appropriate).

At the direction of the EMD/UCT, the City Communications Director, EMD or other authorized City official will announce the evacuation order and will disseminate instructions, including at a minimum:

a. Core Information

For major evacuation operations, it is recommended that, at a minimum, the following information be included in any public warning statements, regardless of the method used to disseminate the information:

- The geographic area(s) to be evacuated.
- When they must leave. Specifically, the level of urgency and whether they have time to take action to protect their property before leaving.
- Routes to be used for the evacuation, and the general direction of travel recommended (if known – typically for a threat due to a point source).
- Where to obtain transportation (for people without their own transportation).
- Where to go for shelter (if applicable).
- Specific protective measures:
  - Turn off all appliances.
  - Close and lock all exterior doors and windows before leaving.
  - Bring your personal identification and your disaster supply kit (if available), radio, cell phone, etc.
  - Leave as quickly as possible to a point of safety (to be specifically identified).
  - Carefully monitor emergency broadcasts for additional instructions.
  - Other information as appropriate.

4. Public Transportation

The City is committed to providing public transportation (free of charge) to people who lack their own means to evacuate, whenever a major or catastrophic evacuation is ordered. Such services, however, are highly dependent on the availability of resources, including both buses and drivers. **Note that the decision maker will have to adapt those resources based on the nature of the**

emergency to move the appropriate number of people to a place of safety. Also note that the decision to activate this plan commits the City to reimburse the resource provider for the cost of those services.

This section describes the primary and secondary resources available for the transportation of the general public and physically challenged, and how to access those resources. For specific actions and contact information, see the **Evacuation Standard Operating Procedure (ESOP) Manual** on file in the EOC.

a. Area Transit Authority (Primary – General Transportation)

The ATA is a quasi-governmental agency that provides public transportation services (i.e. buses) in the Greater Kansas City area. It operates a large number of buses and has an extensive route structure. Accordingly, the ATA has agreed to assist the City with transportation services during a major or catastrophic evacuation.

- Activating ATA Resources

  Only the EMD, the UCT, or the Logistics Section Chief may activate ATA resources in accordance with this plan. To activate, call the ATA Shift Supervisor in the Dispatch Office **(see ESOP for contact information)**, identify yourself by both name and position, and inform them that you are "Activating the City Evacuation Plan." Also remind them, that from this point forward, the EOC must approve the use of any ATA assets for the evacuation (regardless of the source of the request for assistance).

- Resources Available

  Most ATA buses run between the hours of 8 a.m. and 8 p.m. Evacuation Operations conducted during those hours are more likely to begin quickly[25]. Evacuation Operations during off hours will be delayed as the ATA assembles buses and drivers. ATA resources include:

  – Fleet: 317 buses and 550 operators
  – Large buses (40 person capacity, 7,920 total) – 198 buses
  – Medium buses (22 person capacity, 1,672 total) – 76 buses
  – Small buses (12 person capacity, 540 total) – 45 buses

- Bus Emergency Evacuation Routes

  The decision maker will have to determine which routes should be used based on the nature of the emergency, including the time available to conduct evacuation operations, the location of the danger area, and the size of the area to be evacuated. By agreement with the ATA, certain routes have been designated Bus Emergency Evacuation Routes (see **Fig. 2**). Maps of these routes are provided in **Attachments C and D**.

b. Durham School Services Buses (Secondary – General Population)

- Background

  The KCMO School District, as well as other school districts in the metropolitan area contract with Durham School Services to transport school children. The City acknowledges that Durham's primary responsibility is the

[25] Regular peak vehicle deployment is 142 large, 56 medium, and 28 small buses.

welfare of the school children. Thus, Durham buses may be unavailable or delayed during normal school days. In any event, the City has affirmed that no evacuation operation will detract from the service provided to the students.

- Activating Durham Buses

  Only the EMD, the UCT, or the Logistics Section Chief may activate Durham resources in accordance with this plan. To activate, call the General Manager **(see ESOP for contact information)**, identify yourself by both name and position, and inform them that you are "Activating the City Evacuation Plan." Request the quantity of resources needed. Also remind the contact that from this point forward, the EOC must approve the use of any Durham assets for the evacuation (regardless of the source of the request for assistance).

Fig. 2

Bus Evacuation Routes

Route #	Route Name	General Area Served
12	12th Street	East of Downtown
24	Independence	East side to Independence
25	Troost	South side
27	27th Street	East of Downtown
28	Blue Ridge	Southeast side
30	Northeast	Northeast of Downtown
38	Meadowbrook/Antioch	North side
51	Ward Parkway	South side
54	Armour/Paseo	South side
57	South Oak	South side
58	Max Route	Downtown/Midtown
71	Prospect	South side
101	Minnesota	West of Downtown to KCK
108	Indiana	East/Southeast Side
129	I-29 Express	North side
142	North Oak	North side

NOTE: These routes are subject to change. Current as of July, 2006.

- Resources Available

  Most of Durham's local buses run at two different times during the school day. The times are between 6 a.m. and 9:30 a.m. and between 2 p.m. and 5:30 p.m. During summer school buses operate on a half day schedule and only utilize half of the normal fleet deployment[26]. Evacuations operations utilizing Durham resources during off hours will be delayed as buses and drivers are mobilized. Durham resources include:

[26] Regular peak deployment during the school year is 160 large, 5 medium, and 8 small buses.

- Fleet: 400 buses and 440 operators
- Large buses (65 person capacity, 20,345 total) – 313 buses
- Medium buses (35 person capacity, 350 total) – 10 buses
- Small buses (10 person capacity, 600 total) – 60 buses
- Various other large capacity buses (975 total capacity) – 17 buses

c. First Student Inc. Buses (Tertiary – General Population)

- Background

  The KCMO School District, as well as other school districts in the metropolitan area contract with First Student Inc to transport school children. The City acknowledges that First Student's primary responsibility is the welfare of the school children. Thus, First Student's buses may be unavailable or delayed during normal school days. In any event, the City has affirmed that no evacuation operation will detract from the service provided to the students.

- Activating First Student Buses

  Only the EMD, the UCT, or the Logistics Section Chief may activate First Student resources in accordance with this plan. To activate, call the main office **(see ESOP for contact information)**, identify yourself by both name and position, and inform them that you are "Activating the City Evacuation Plan." Request the quantity of resources needed. Also remind them, that from this point forward, the EOC must approve the use of any First Student assets for the evacuation (regardless of the source of the request for assistance).

- Resources Available

  Most of First Student local buses run at two different times during the school day. The times are between 6 a.m. and 9:30 a.m. and between 2 p.m. and 5:30 p.m. During summer school buses operate on a half day schedule and only utilize half of the normal fleet deployment[27]. Evacuations operations utilizing First Student resources during off hours will be delayed as buses and drivers are mobilized. Durham resources include:

  - Fleet – 112 buses and 101 operators
  - Large buses (71 person capacity, 1,491 total) – 21 buses
  - Medium buses (65 person capacity, 5,915 total) – 91 buses
  - Small buses (0 person capacity, 0 total) – 0 buses

d. Kansas City Transportation Group (KCTG) – Paratransit (Primary Physically Challenged People)

- Background

  Under an agreement with ATA, the KCTG provides transportation to people who need door-to-door transportation because a physical condition prevents them from driving or using a bus. The KCTG utilizes small buses and vans with raised roofs, wheelchair lifts and restraint systems, and seating for companions.

- Activating KCTG Paratransit Resources

[27] Regular peak deployment during the school year is 60 large buses.

Only the EMD, the UCT, or the Logistics Section Chief may activate KCTG resources in accordance with this plan. To activate KCTG resources, call the KCTG manager voice system **(see ESOP for contact information)**. Leave a message identifying yourself by both name and position, call back number, and inform them that you are "Activating the City Evacuation Plan". The KCTG manager will return the call within 5 minutes. Also remind them, that from this point forward, the EOC must approve the use of any KCTG assets for the evacuation (regardless of the source of the request for assistance).

- Resource Description

  KCTG paratransist services are available 24 hours a day, with peak demand occurring from 5 a.m. to 9 p.m. Evacuation Operations conducted during those hours are more likely to begin quickly[28]. Evacuation Operations during off hours will be delayed as the KCTG assembles vehicles and drivers. Typically, KCTG can mobilize 10 Wheelchair vans within an hour's notice. Resources include:

  – Fleet – 50 Wheelchair vans/buses and 250 Ambulatory vehicles
  – Wheelchair vehicles (Average 2 chair tie downs per vehicle, 100 seats total)
  – Ambulatory vehicles (Average 4 seats per vehicle, 1000 seats total)
  – Paratransit drivers – 60 and total company drivers – 300

e. MAST (Secondary – Physically Challenged People)

- Background

  As the City's ambulance service, MAST is unlikely to have sufficient resources to fulfill both its emergency medical role, and provide paratransit services. Nevertheless, MAST units are equipped to provide such transportation, and may be able to dedicate some resources (or request mutual aid) in support of an evacuation.

- Activating MAST Resources

  MAST resources (for an evacuation) will be activated by the Executive Director of MAST, or his designee, upon request by the EMD/UCT.

5. Evacuation Assembly Points

   Evacuation Assembly Points are pre-designated locations where the public can assemble to be transported to a shelter. Each EAP is located on or near an existing ATA bus route. They are intended to provide temporary and minimal protection from the elements while additional transportation resources are activated to take them to a shelter (see **Attachment E – Evacuation Assembly Points**).

   The Logistics Section Chief will utilize existing Evacuation Assembly Points or will designate others as necessary.

6. Traffic Movement and Control

[28] Regular peak vehicle deployment during this time consists of 15-17 vans conducting a total of 500 to 600 trips daily. Half of the trips use para-ift services for individuals with wheelchairs.

a. The KCPD is responsible for the safe and efficient movement of vehicular traffic during an evacuation. The KCPD will establish traffic control points, an incident perimeter, and ingress/egress control points as appropriate.

b. The KCPD will activate mutual aid agreements with the Missouri Highway Patrol or other local police agencies as necessary to maintain effective traffic movement and control.

c. The K.C. Scout **Traffic Incident Management Program Manual** may be used during an evacuation to guide the movement of traffic, and to select alternate routes if a primary evacuation route is blocked. The Manual includes procedures for incident response; contact lists and resource lists for MoDOT and KDOT; and approved detour routes for the Kansas City metro area interstates. A copy of the Manual is kept on file in the EOC.

d. The K.C. Scout Camera and Message Board System may be used to:

- Direct traffic to primary and alternate evacuation routes.
- Inform drivers of accidents.
- Route non-evacuation traffic away from areas of congestion.
- Provide shelter and other information as appropriate.

e. Inoperable vehicles blocking the evacuation route will be towed or pushed from the lane of traffic. **NO MOTORISTS SHOULD BE LEFT STRANDED WITH THEIR INOPERABLE VEHICLE.** MoDOT Motorist Assist will have primary responsibility for rendering assistance to stranded motorists. If additional resources are needed, KCFD and other City vehicles will be dispatched to pick up and transport stranded motorists to a place of safety.

f. City infrastructure departments will assist KCPD by placing road barricades to control traffic movement.

7. Security and Re-entry

a. The KCPD will maintain security within an evacuated area and along the evacuation perimeter as appropriate based on safety and other circumstances. If necessary to preserve public safety and order, the KCPD may recommend that the Mayor establish a curfew in the evacuated area in accordance with local law.

b. The KCPD will establish ingress and egress controls to restrict unauthorized people and vehicular traffic from entering the evacuated area.

c. The duration of the evacuation will be determined by the field Incident Commander or the EMD/UCT based on the elimination or abatement of the hazard; the restoration of basic services (e.g. electricity, water, police, fire, medical services); and safe access to the area (e.g. safe roads and bridges).

d. Prior to public re-entry, the City will conduct rescue operations, and may conduct a preliminary damage assessment to establish the need for state and federal disaster assistance.

e. The EMD/UCT, in conjunction with the KCPD, will establish and announce return procedures for the public. Residents will be admitted to the evacuation area as quickly as possible. Others will be admitted when practical.

8. Incident Termination

The EMD/UCT will determine when major evacuation operations may be terminated based on the elimination of the hazard. The actual termination date/time may be phased in order to allow for the orderly movement of traffic.

D. Catastrophic Evacuation Operations [Citywide]

As noted in the Foreword the authors of this plan were unable to identify a single credible scenario that is a) of sufficient magnitude to uniformly impact the entire city; and b) will provide sufficient *advance notice* to allow the City to implement a controlled evacuation. The Office of Emergency Management believes a *minimum* of 48 hours advance notice would be required to notify the public, organize and assemble resources, and to conduct an orderly evacuation. Nevertheless, if such circumstances occur, the City will implement the following plan:

1. Decision Making and Command

The decision to conduct a catastrophic evacuation will be made by the mayor or mayor pro-tem through a Declaration of a State of Emergency. The Emergency Management Director/Unified Command Team (EMD/UCT) will serve as the Incident Commander for catastrophic evacuation operations.

a. The EMD will activate the EOC at Level III as soon as practical.

b. The EMD will activate the UCT as soon as practical. Once the UCT is functioning, the City Manager or EMD will serve as the chair of the UCT, and the UCT will assume overall (joint) incident command of the evacuation.

c. The incident will be organized and managed in accordance with the National Incident Management System. Accordingly, the EMD/UCT will appoint a Logistics Section Chief to assume responsibility for the direct coordination of evacuation transportation operations.

d. The EMD/UCT will authorize the utilization of ATA busses and drivers, and will make contact with the ATA to request those resources.

e. The EMD/UCT will activate school bus resources to supplement ATA buses.

f. The EMD/UCT will activate mutual aid agreements to establish temporary reception centers for evacuees outside of the danger area (see **Attachment F – Intergovernmental Agreements and Memorandums of Understanding**).

g. The EMD will draft a declaration before sending it to the City Law Department for approval. Following approval by the Law Department, the declaration will be signed by the Mayor or Mayor pro tempore, and then submitted to the City Clerk.

h. The State Emergency Operations Center (SEOC) and other local emergency management agencies will be notified of the catastrophic evacuation (and declaration) as soon as practical. The SEOC will be asked for such resources as are necessary to conduct the evacuation and shelter operations.

2. Scope (Size and Duration)

The scope of a catastrophic evacuation includes, by definition, the entire City. The duration will be determined by the mayor or mayor pro-tem in the Declaration of a State of Emergency.

3. Public Warning and Information

The most expedient means will be used to notify the public (see **Attachment A – Comparison of Warning Methods**). Typically this will include local broadcast media (radio and television), NOAA Weather Radio, and all other appropriate means (including police and fire vehicle public address systems, if appropriate).

At the direction of the EMD/UCT, the City Communications Director, EMD or other authorized City official will announce the evacuation order and will disseminate instructions, including at a minimum:

a. Core Information (for Catastrophic Operations)

For catastrophic evacuation operations, the following information will be included in any public warning statements:

- The geographic area(s) to be evacuated.
- When people must leave. Specifically, the level of urgency and whether they have time to take action to protect their property before leaving.
- Routes to be used for the evacuation, and the general direction of travel recommended (if known – typically for a threat due to a point source).
- Where to obtain transportation (for people without their own transportation).
- Where to go for shelter (if applicable).
- Specific protective measures:
  - Turn off all appliances.
  - Close and lock all exterior doors and windows before leaving.
  - Bring your personal identification and your disaster supply kit (if available), radio, telephone, etc.
  - Leave as quickly as possible to a point of safety (to be specifically identified).
  - Carefully monitor emergency broadcasts for additional instructions.
  - Other information as appropriate.

4. Public Transportation

In the event of a catastrophic evacuation, all available resources will be used to move people who lack their own transportation.

5. Evacuation Assembly Points

Evacuation Assembly Points are pre-designated locations where the public can assemble to be transported to a shelter. Each EAP is located on or near an existing ATA bus route. They are intended to provide temporary and minimal protection from the elements while additional transportation resources are activated to take them to a shelter (see **Attachment E – Evacuation Assembly Points**).

The Logistics Section Chief will utilize existing Evacuation Assembly Points or will designate others as necessary.

6. Traffic Movement and Control

a. The Kansas City Police Department is responsible to for the safe and efficient movement of vehicular traffic during an evacuation. To accomplish this KCPD will establish traffic control points, an incident perimeter, and ingress/egress control points as appropriate.

b. The KCPD will activate mutual aid agreements with the Missouri Highway Patrol or other local police agencies as necessary to maintain effective traffic movement and control.

c. The K.C. Scout **Traffic Incident Management Program Manual** may be used during an evacuation to guide the movement of traffic, and to select alternate routes if a primary evacuation route is blocked. The Manual includes procedures for incident response; contact lists and resource lists for MoDOT and KDOT; and approved detour routes for the Kansas City metro area interstates. A copy of the Manual is kept on file in the Office of Emergency Management.

d. The K.C. Scout Camera and Message Board System will be used to:

- Direct traffic to primary and alternate evacuation routes.
- Inform drivers of accidents.
- Route non-evacuation traffic away from areas of congestion.
- Provide shelter and other information as appropriate.

e. Inoperable vehicles blocking the evacuation route will be towed or pushed from the lane of traffic. **NO MOTORISTS SHOULD BE LEFT STRANDED WITH THEIR INOPERABLE VEHICLE.** MoDOT Motorist Assist will have primary responsibility for rendering assistance to stranded motorists. If additional resources are needed, KCFD and other City vehicles will be dispatched to pick up and transport stranded motorists to a place of safety.

f. City infrastructure departments will assist KCPD by placing road barricades to control traffic movement.

7. Security and Re-entry

a. The KCPD will maintain security within an evacuated area and along the evacuation perimeter as appropriate based on safety and other circumstances. If necessary to preserve public safety and order, the KCPD may recommend that the Mayor establish a curfew in the evacuated area in accordance with local law.

b. The KCPD will establish ingress and egress controls to restrict unauthorized people and vehicular traffic from entering the evacuated area.

c. The duration of the evacuation will be determined by the Field Incident Commander or the EMD/UCT based on the elimination or abatement of the hazard; the restoration of basic services (e.g. electricity, water, police, fire, medical services); and safe access to the area (e.g. safe roads and bridges).

d. Prior to public re-entry, the City will conduct rescue operations, and may conduct a preliminary damage assessment to establish the need for state and federal disaster assistance.

e. The EMD/UCT, in conjunction with the KCPD, will establish and announce return procedures for the public. Residents will be admitted to the evacuation area as quickly as possible. Others will be admitted when practical.

8. Incident Termination

The Mayor/Mayor pro-tem will determine when catastrophic operations may be terminated based on the elimination of the hazard. The actual termination date/time may be phased in order to allow for the orderly movement of traffic.

ATTACHMENT A

Comparison of Public Warning Methods

The field IC, EMD, UCT or other authorized official will determine which of the following public warning methods will be used, based on operational circumstances such as the size of the area to be reached and the time available to issue warning information.

I. Public Warning Methods

The City utilizes a variety of public warning techniques (see below) during an evacuation. The IC should utilize the most appropriate method (or methods) to warn the public and to provide appropriate public information:

A. Door-to-Door

This method utilizes police and/or fire personnel to notify people by going door-to-door.

1. Strengths: Effectively reaches every household; commands attention and response.
2. Weaknesses: Time consuming, so it is effective only in very small operations; may expose police/fire personnel to source of danger. May not be effective with the hearing impaired or people who cannot answer the front door quickly.
3. Recommended for use only when evacuating a single large building or a few small buildings or residences when speed is of the essence, and when there is little or no threat to personnel.
4. Approved and directed by the field Incident Commander.

B. Lights/Siren and Public Address System

This method utilizes police and/or fire personnel to drive through a neighborhood using their lights/siren to get the public's attention, and then alternatively delivering instructions via the vehicle's public address system.

1. Strengths: Effectively alerts people that are not monitoring radio or television broadcasts; commands attention. May provide some level of alert to the hearing impaired.
2. Weaknesses: Dependent on limited personnel/vehicle resources, so it is effective only in small-to-medium operations. Can't penetrate multi-story buildings. Due to limits of vehicle PA systems, the public may hear the alert but not understand the message or instructions.
3. Recommended for use in residential areas not exceeding ten blocks in size. At least three (3) passes are recommended.
4. Approved and directed by the field Incident Commander or EMD/UCT.

C. Radio/Television Broadcasts

This method relies on the broadcast media to alert the public.

1. Strengths: Informs the greatest number of people. Provides detailed (and repeated) information and instructions. Does not rely on City public safety vehicle and personnel.

2. Weaknesses: Reaches only those who are monitoring local media.
3. Recommended for use in large scale disasters, during daytime and evening hours, and when there is sufficient lead time for the public to receive and act upon the warning.
4. Approved and directed by the EMD/UCT with the assistance of the Communications Department.

D. NOAA Weather Radio Broadcast

This method relies on the National Weather Service (NWS) to issue an alert via NOAA Weather Radio.

1. Strengths: Sends out an alert tone which may reach people who are sleeping or involved in other activities.
2. Weaknesses: Requires the public to have a Weather Alert Radio that is correctly programmed and turned on. Requires the approval of and action by the NWS.
3. Recommended for use only in conjunction of other methods, particularly with the Radio/Television Broadcast option, above.
4. Approved by the EMD/UCT who will relay the request to the NWS.

ATTACHMENT B

Evacuation of the Downtown Business District

In the unlikely event of a criminal/terrorist act or other potential disaster, the Office of Emergency Management has created a plan to address the evacuation of the Downtown Business District (DBD). For the purpose of this plan, the DBD means the area *inside* the Downtown Freeway Loop. The Loop refers to the part of downtown encircled by I-70 on the north, I-670 on the south, I-35 on the west, and I-35/Highway 71 on the east (see Fig. 3).

Fig. 3

Downtown Business District

The City used the following methodology to develop this section:

1. Determine the area to be evacuated: The evacuation area is been defined as the Downtown Business District (DBD). If an evacuation of the downtown area extends beyond the DBD, this plan will be expanded by emergency officials to accommodate the additional area and population.
2. Determine the population affected: The total daytime and nighttime population of the evacuation area was estimated (see Fig. 4), as was the number of people without transportation and other special needs population. The population was estimated using data from the 2000 U.S. Census, MARC Employment Data, information provided by the City Planning and Development Department, and data provided by the Kansas City Convention and Visitors Association.

Fig. 4

Estimated Downtown Business District Population

Estimated Daytime Population:

Daytime Workers …..……..	74,100
Unemployed Residents ……	4,000
Children Younger than School Age…….	100
Tourists……	1,400
Visitors Conducting Daily Business ……	8,600
Transit Riders……	200
**TOTAL DAYTIME POPULATION…….. **	**88,400**

Estimated Nighttime Population:

Nighttime Worker……	700
Residents……	8,600
Tourists……	1,400
**TOTAL NIGHTTIME POPULATION……. **	**10,700**

3. Determine primary evacuation routes: For the purpose of this plan a primary evacuation route is an interstate or U.S. highway with access to the DBD (see Fig. 3).

4. Determine the capacity of primary evacuation routes: The capacity (in cars per lane, per hour) was calculated using the **Highway Capacity Manual** (HCM)[29] which establishes levels of service (LOS) ranging from Level A (highest) to Level F (lowest), based on a set of variables reflecting traffic speed, density and flow rate.[30] This document utilizes Level E as the basis of planning because it represents a conservative but reasonable rate of traffic flow. According to the HCM, Level E traffic is characterized as:

> "…volatile, because there are virtually no gaps in the traffic stream. Vehicles are closely spaced with little room to maneuver within the traffic stream at speeds that still exceed 49 (mph). Any disruption of the traffic stream, such as vehicles entering from a ramp or a vehicle changing lanes, can establish a disruption wave that propagates throughout the upstream traffic flow. At capacity, the traffic stream has no ability to dissipate even the most minor disruption, and any incident can be expected to produce a serious breakdown with extensive queuing." [31]

By using Level E, the plan assumes that all primary evacuation routes will be severely taxed. To simulate Level E, the assumed rate of speed for cars was set at 45 mph regardless of the posted speed limit. Also, because the number of lanes on the evacuation routes varies at different points, the plan uses the most restrictive point along each route *at the point that the route leaves the downtown loop*. For example, while I-70 eastbound may

[29] The HCM is a manual for presenting methods for analyzing capacity and level of service for a broad range of transportation facilities.
[30] HCM 2000 Page 13-8
[31] HCM 2000 Page 13-10

be 3 lanes in many areas, it is only 2 lanes wide at the point that a driver leaving the downtown loop would join I-70. Because there is a reduction in lanes, even if only for a short distance, the capacity for I-70 eastbound is measured using only two lanes.

Fig. 5

Total # of Lanes on Primary Evacuation Routes

Route	# Lanes
I-70 Westbound	2
I-35 Southbound	2
Highway 71 Southbound	2
I-35/Hwy. 71 Northbound	2
Highway 169 Northbound	2
I-70 Eastbound	2
I-670 Westbound	2
TOTAL NUMBER OF LANES	14

5. Determine the time necessary to conduct an evacuation: Evacuation time was calculated using the following formula:

   (V / L) / (LOS E) = T

   Where:

   V = number of vehicles
   L = number of lanes available
   LOS E = Level of Service E, or the number of vehicles per lane, per hour, that can pass a point
   T = time needed to conduct a DBD evacuation

   Calculation:

   62,519 vehicles[32] / 14 lanes[33] = 4466 vehicles per lane[34]

   4466 / 2280[35] cars per lane an hour at LOS E = 1.96 hours[36]

   There are several very important qualifiers to consider before relying on this figure:

   - It does not include the time needed to issue public warnings, and for the public to receive, understand and comply with the evacuation order.
   - It does not include the time needed to mobilize buses to assist people who lack their own transportation.
   - It does not include secondary routes[37], though it is expected that these routes will be heavily used. Secondary routes were not considered in order to arrive at a *conservative* estimate of the time necessary to evacuate the DBD. However, the

[32] Estimated maximum # of vehicles inside the Downtown Loop during an average work day provided by City Planning and Development
[33] Total # of lanes being used for all highway and interstate evacuation routes based on the most restrictive point for each route
[34] Total # of evacuating vehicles per lane assuming equal distribution
[35] The maximum rate of vehicles per lane per hour based on LOS E
[36] Estimated amount of time to execute evacuation
[37] Secondary Evacuation routes include Missouri Highway 9, Highway 24 (independence Ave), Truman Road, and all other major arterials heading away from downtown such as Broadway, Main, Grand, Oak and Troost.

secondary routes may relieve primary route congestion, thus aiding overall traffic flow.
- It does not include traffic disruption due to construction.
- It assumes that evacuating traffic will uniformly distribute itself over the primary evacuation routes.

Based on discussions with police and fire officials, it estimated that an evacuation of the DBD, including warning and notification of the public, mobilization of transportation resources, and the actual movement of people out of the evacuation zone using private or public transportation would take 4 hours[38] to complete. However, the actual time it would take to evacuate the DBD could vary depending on the scope of the incident itself.

[38] This time has been established assuming 90% of the population will comply with an evacuation order as based on an evacuation study listed in the U.S. Nuclear Regulatory Commission's 2005 report, Identification and Analysis of Factors Affecting Emergency Evacuations.

ATTACHMENT C

Citywide Evacuation Maps

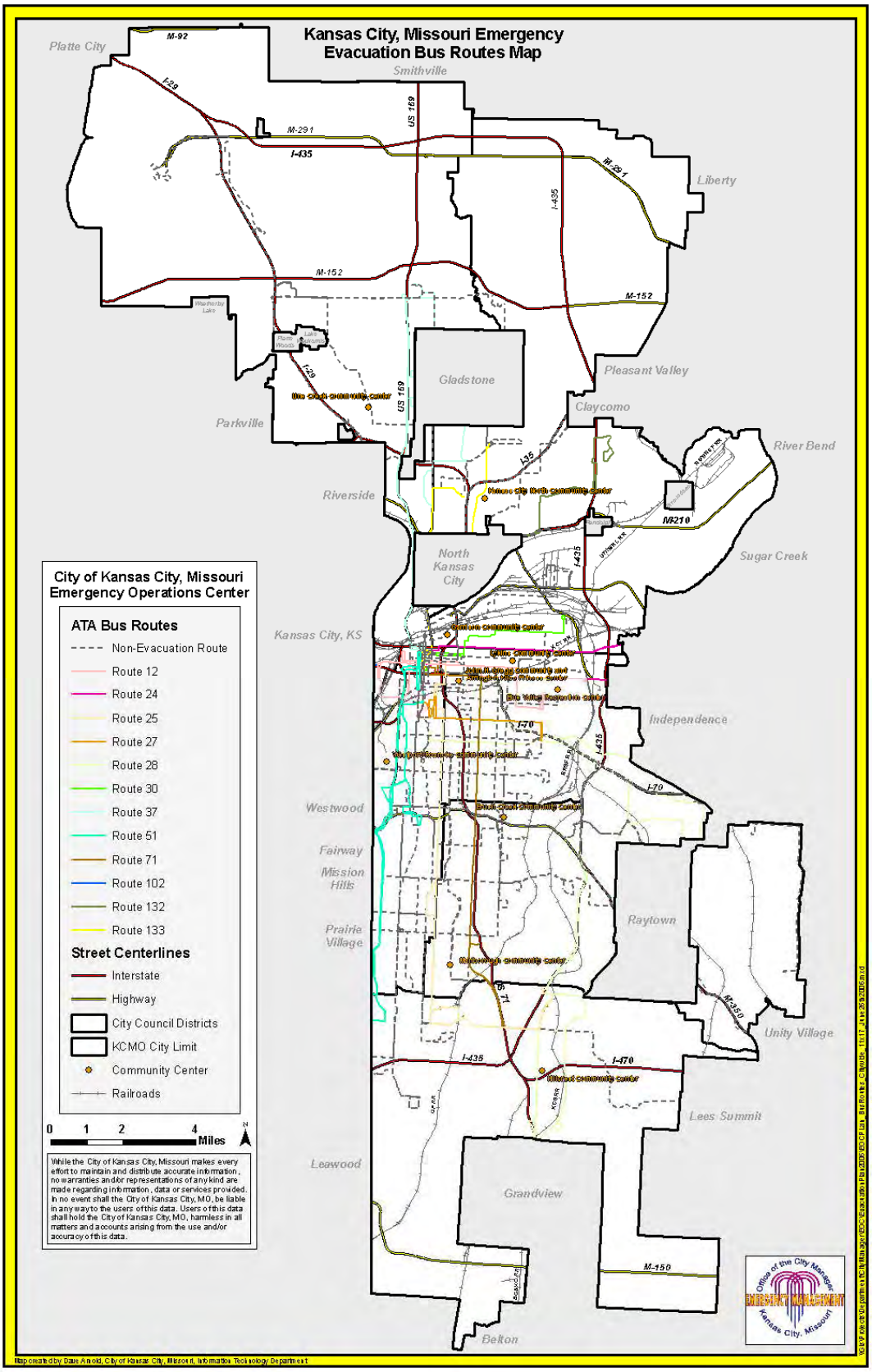
The following Citywide maps are included in the Public Version of this plan:

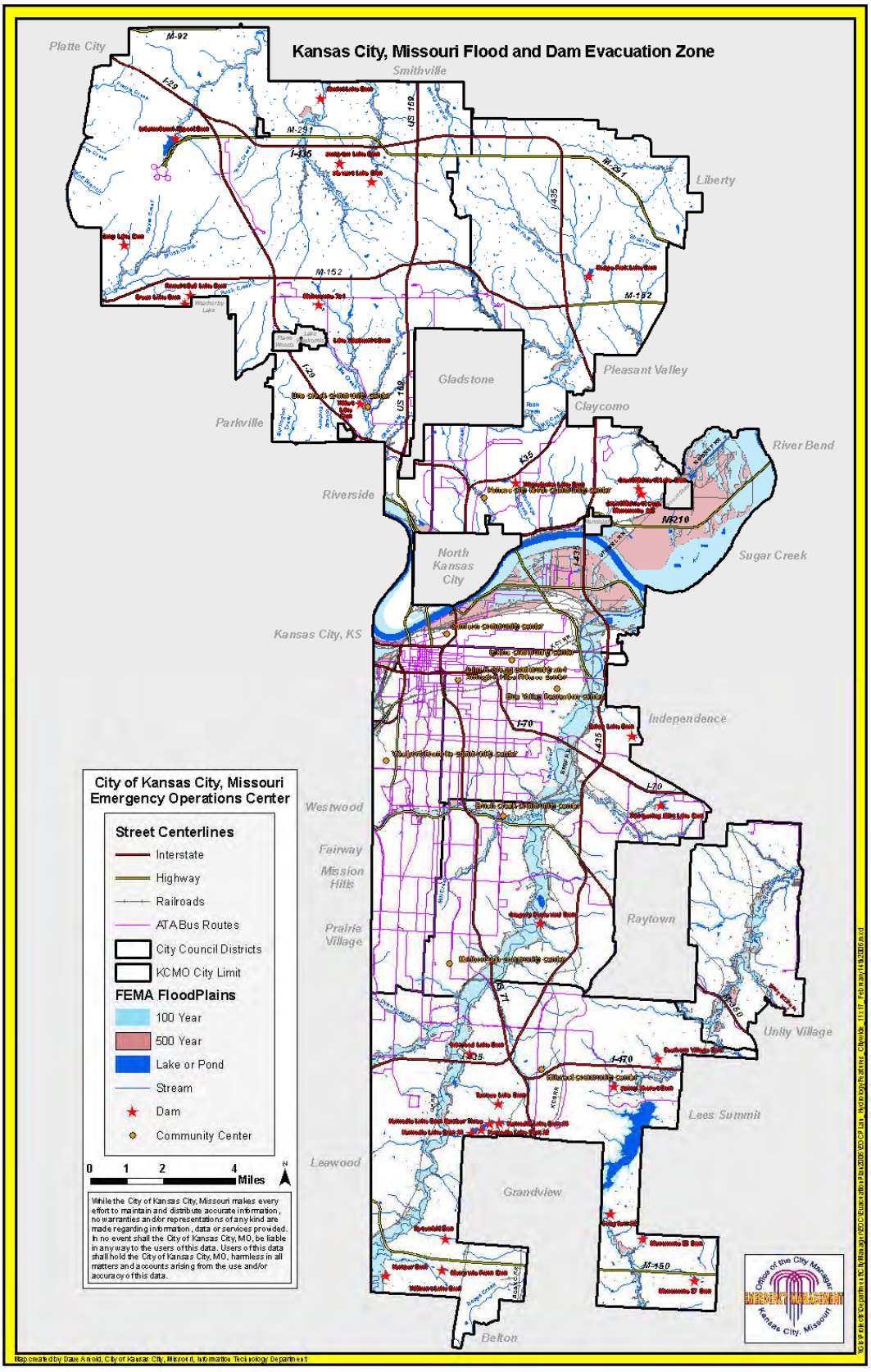
1. Evacuation Bus Routes
2. Flood and Dam Hazards
3. Longview Lake Inundation Map
4. Highway and Interstate Hazards
5. Railroad Hazards
6. Hazardous Materials Facilities

The following Citywide maps are not included in the Public Version of this plan:

1. Pipelines

[MAPS FOLLOW IN CONSECUTIVE ORDER]


Kansas City, Missouri Emergency Evacuation Bus Routes Map
Platte City
Smithville
Liberty
Gladstone
Pleasant Valley
Claycomo
Parkville
River Bend
Riverside
North Kansas City
Sugar Creek
Kansas City, KS
Independence
Westwood
Fairway
Mission Hills
Prairie Village
Raytown
Unity Village
Lees Summit
Leawood
Grandview
Belton
M-92
I-29
M-291
US 169
I-435
M-152
I-35
M-210
I-70
I-470
M-150
City of Kansas City, Missouri Emergency Operations Center
ATA Bus Routes
Non-Evacuation Route
Route 12
Route 24
Route 25
Route 27
Route 28
Route 30
Route 37
Route 51
Route 71
Route 102
Route 132
Route 133
Street Centerlines
Interstate
Highway
City Council Districts
KCMO City Limit
Community Center
Railroads
0 1 2 4 Miles
N
While the City of Kansas City, Missouri makes every effort to maintain and distribute accurate information, no warranties and/or representations of any kind are made regarding information, data or services provided. In no event shall the City of Kansas City, MO, be liable in any way to the users of this data. Users of this data shall hold the City of Kansas City, MO, harmless in all matters and accounts arising from the use and/or accuracy of this data.
Office of the City Manager
Emergency Management
Kansas City, Missouri
Map created by Dale Arnold, City of Kansas City, Missouri, Information Technology Department


Kansas City, Missouri Flood and Dam Evacuation Zone
Platte City
Smithville
Liberty
Gladstone
Pleasant Valley
Claycomo
Parkville
River Bend
Riverside
North Kansas City
Sugar Creek
Kansas City, KS
Independence
Westwood
Fairway
Mission Hills
Prairie Village
Raytown
Unity Village
Lees Summit
Leawood
Grandview
Belton
City of Kansas City, Missouri Emergency Operations Center
Street Centerlines
Interstate
Highway
Railroads
ATA Bus Routes
City Council Districts
KCMO City Limit
FEMA FloodPlains
100 Year
500 Year
Lake or Pond
Stream
Dam
Community Center
0 1 2 4 Miles
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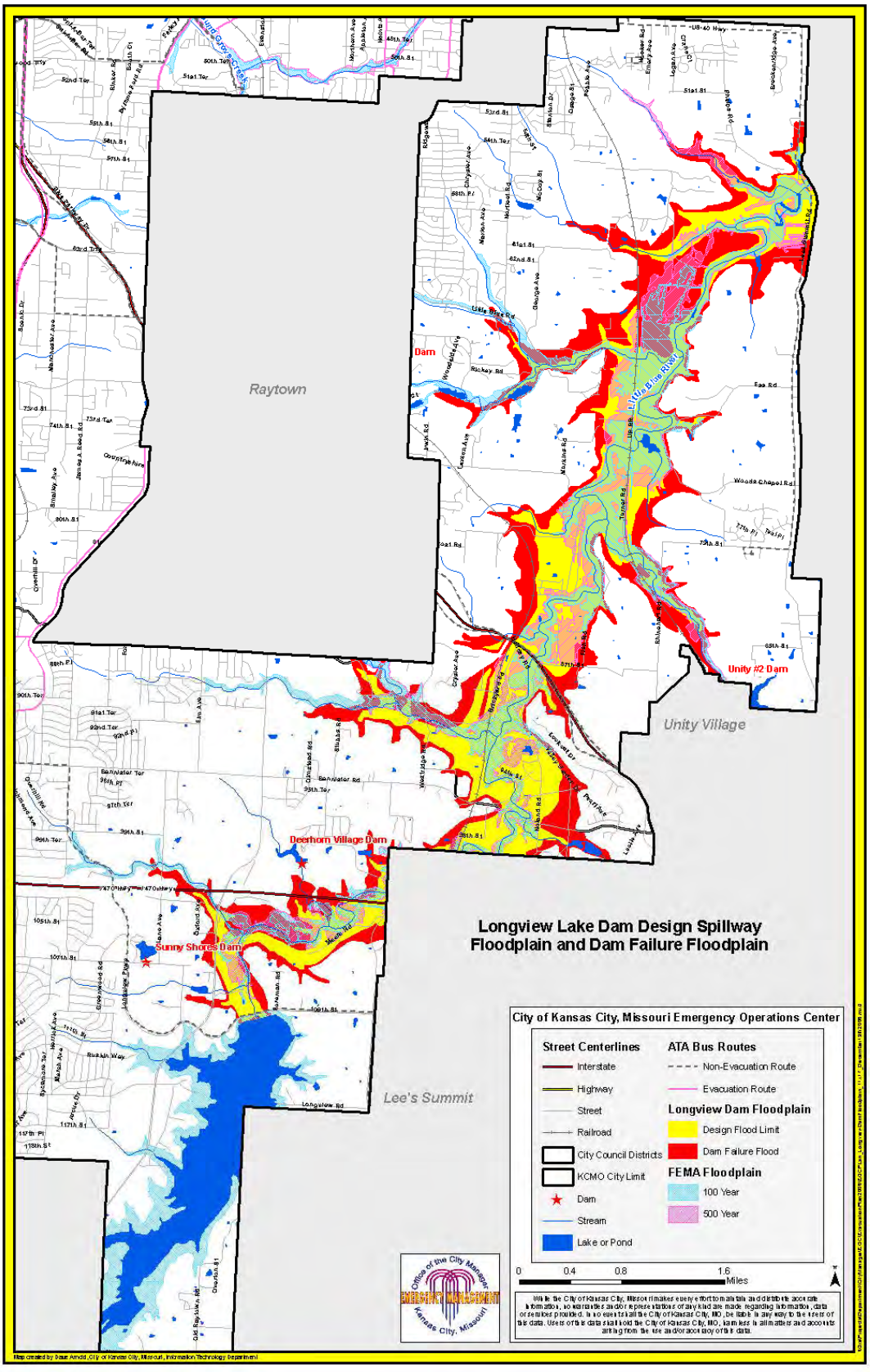
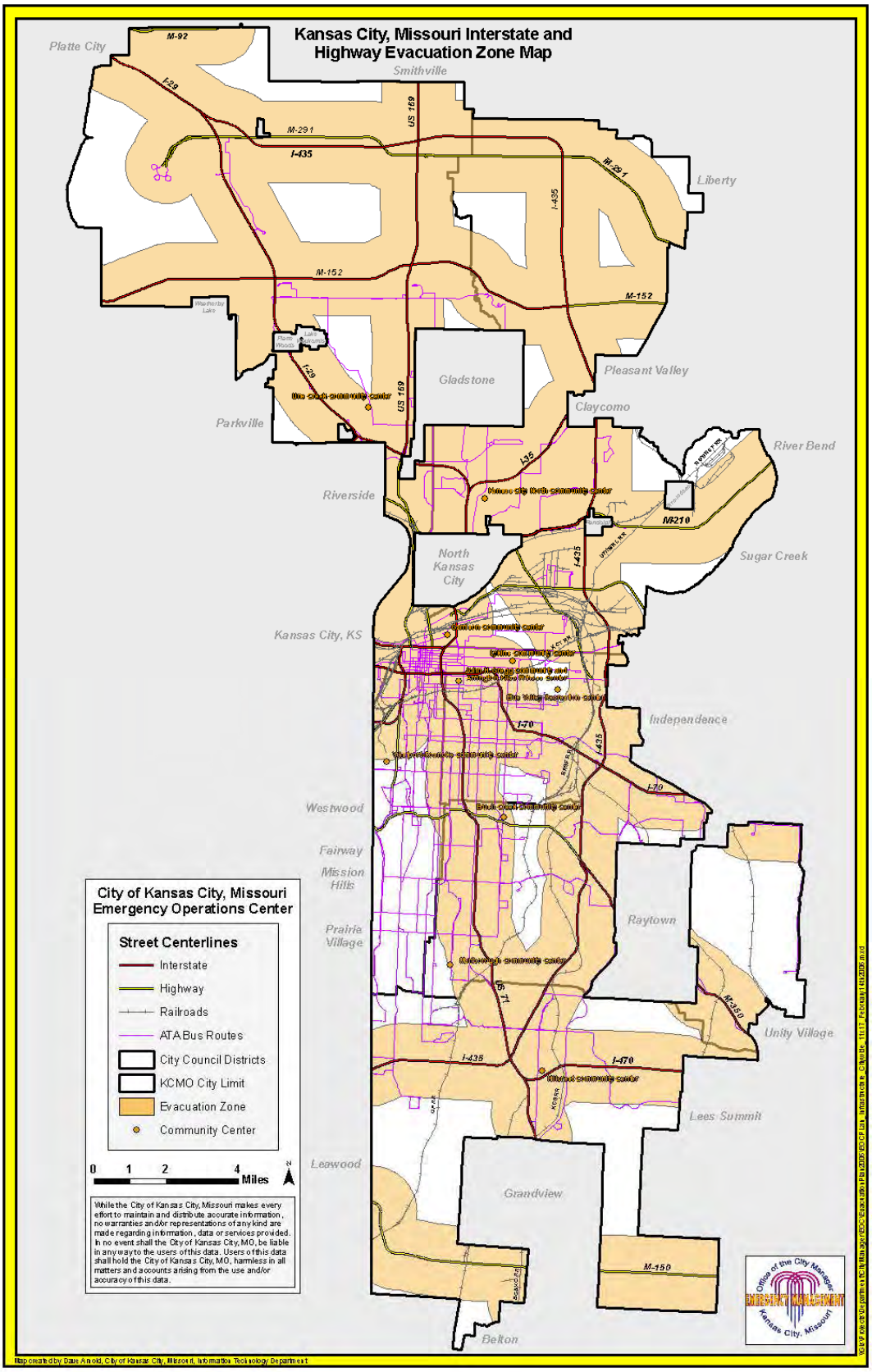
Kansas City, Missouri


Raytown
Unity Village
Lee's Summit
Dam
Little Blue River
Unity #2 Dam
Deerhorn Village Dam
Sunny Shores Dam
Longview Lake Dam Design Spillway
Floodplain and Dam Failure Floodplain
City of Kansas City, Missouri Emergency Operations Center
Street Centerlines
Interstate
Highway
Street
Railroad
City Council Districts
KCMO City Limit
Dam
Stream
Lake or Pond
ATA Bus Routes
Non-Evacuation Route
Evacuation Route
Longview Dam Floodplain
Design Flood Limit
Dam Failure Flood
FEMA Floodplain
100 Year
500 Year
0 0.4 0.8 1.6
Miles
Office of the City Manager
EMERGENCY MANAGEMENT
Kansas City, Missouri


Kansas City, Missouri Interstate and
Highway Evacuation Zone Map
Platte City
Smithville
Liberty
Gladstone
Pleasant Valley
Claycomo
Parkville
River Bend
Riverside
North Kansas City
Sugar Creek
Kansas City, KS
Independence
Westwood
Fairway
Mission Hills
Prairie Village
Raytown
Unity Village
Lees Summit
Leawood
Grandview
Belton
M-92
I-29
M-291
I-435
US 169
M-152
I-35
M-210
I-70
M-350
I-470
M-150
City of Kansas City, Missouri
Emergency Operations Center
Street Centerlines
Interstate
Highway
Railroads
ATA Bus Routes
City Council Districts
KCMO City Limit
Evacuation Zone
Community Center
0 1 2 4 Miles
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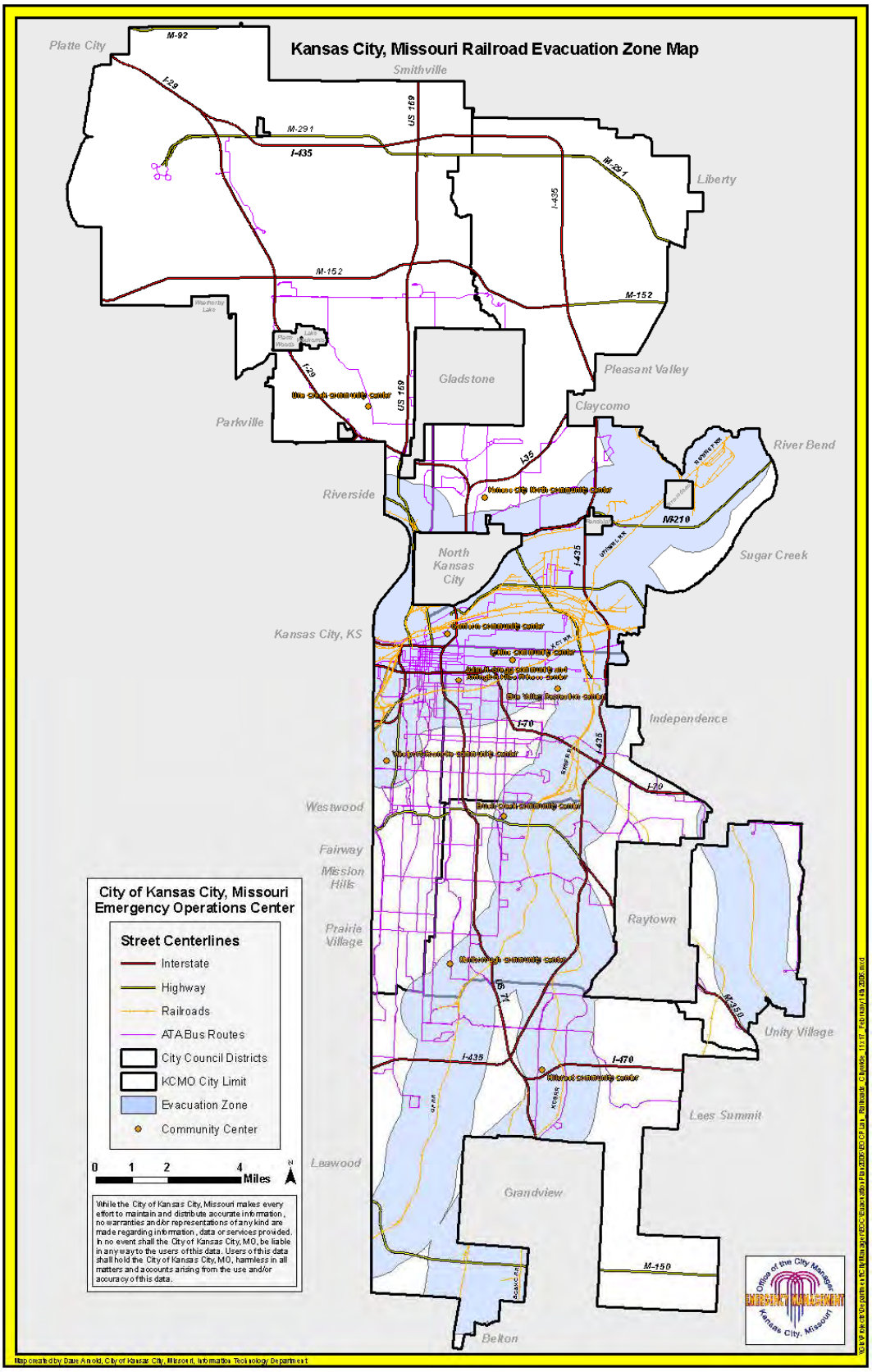
Office of the City Manager
EMERGENCY MANAGEMENT
Kansas City, Missouri
Map created by Dale Arnold, City of Kansas City, Missouri, Information Technology Department


Kansas City, Missouri Railroad Evacuation Zone Map
Platte City
Smithville
Liberty
Gladstone
Pleasant Valley
Claycomo
Parkville
River Bend
Riverside
North Kansas City
Sugar Creek
Kansas City, KS
Independence
Westwood
Fairway
Mission Hills
Prairie Village
Raytown
Unity Village
Lees Summit
Leawood
Grandview
Belton
M-92
I-29
M-291
US 169
I-435
M-152
I-35
M210
I-70
M-150
City of Kansas City, Missouri
Emergency Operations Center
Street Centerlines
Interstate
Highway
Railroads
ATA Bus Routes
City Council Districts
KCMO City Limit
Evacuation Zone
Community Center
0 1 2 4 Miles
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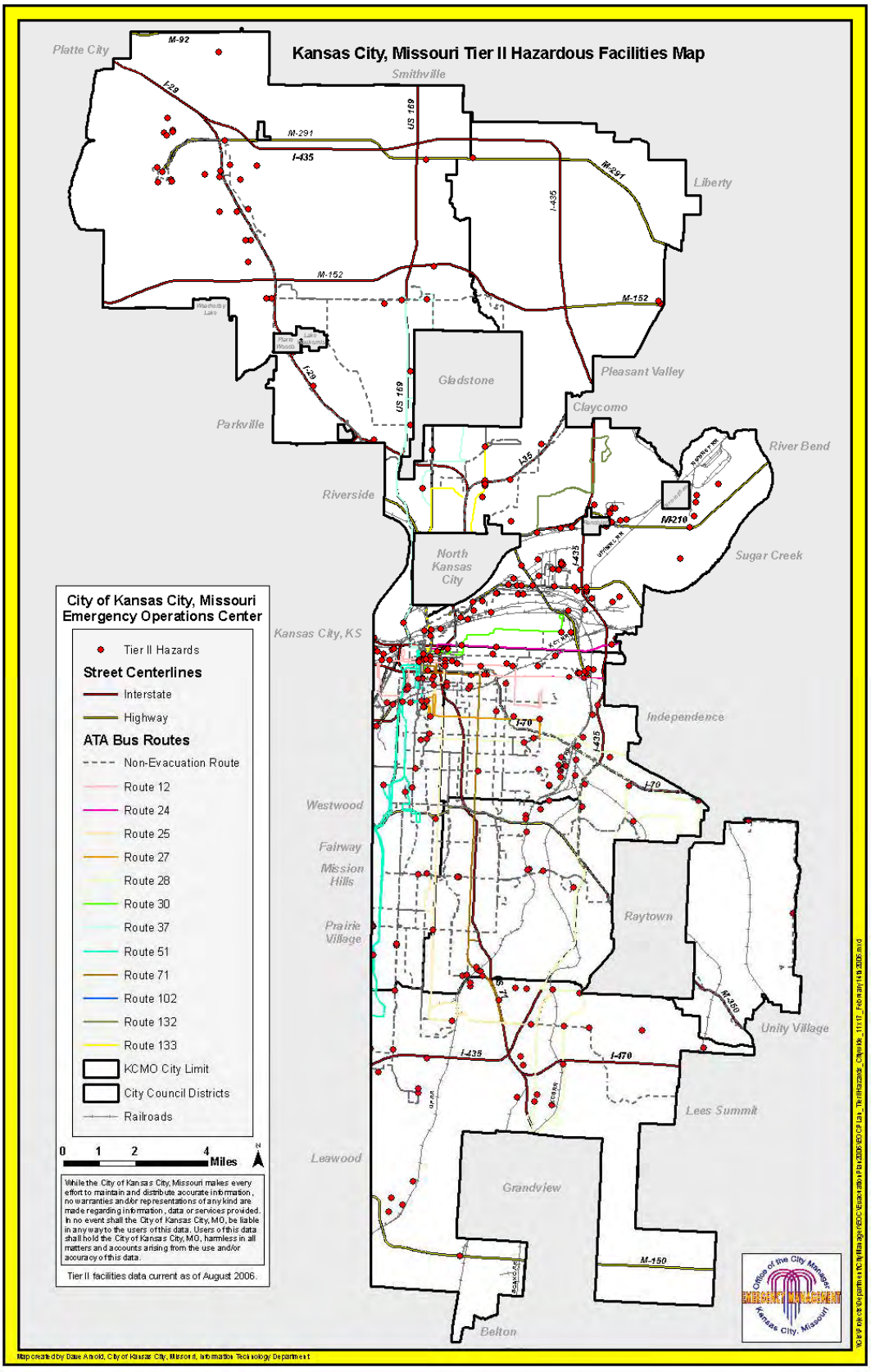
Office of the City Manager
EMERGENCY MANAGEMENT
Kansas City, Missouri
Map created by Dale Arnold, City of Kansas City, Missouri, Information Technology Department


Kansas City, Missouri Tier II Hazardous Facilities Map
Platte City
Smithville
Liberty
Parkville
Gladstone
Pleasant Valley
Claycomo
River Bend
Riverside
North Kansas City
Sugar Creek
Kansas City, KS
Independence
Westwood
Fairway
Mission Hills
Prairie Village
Raytown
Unity Village
Lees Summit
Leawood
Grandview
Belton
M-92
I-29
M-291
US 169
I-435
M-152
I-35
M-210
I-70
I-470
M-350
M-150
City of Kansas City, Missouri
Emergency Operations Center
Tier II Hazards
Street Centerlines
Interstate
Highway
ATA Bus Routes
Non-Evacuation Route
Route 12
Route 24
Route 25
Route 27
Route 28
Route 30
Route 37
Route 51
Route 71
Route 102
Route 132
Route 133
KCMO City Limit
City Council Districts
Railroads
0 1 2 4 Miles
N
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Tier II facilities data current as of August 2006.
Office of the City Manager
EMERGENCY MANAGEMENT
Kansas City, Missouri
Map created by Dale Arnold, City of Kansas City, Missouri, Information Technology Department

ATTACHMENT D

District Evacuation Maps

The following maps are provided by the six City Council Districts. All Districts have the following maps:

1. Evacuation Bus Routes
2. Estimated Population without Transportation (Census Track Data)
2. Flood and Dam Hazards
3. Highway and Interstate Hazards
4. Railroad Hazards
5. Hazardous Materials Facilities

Districts 5 and 6 also have the following maps:

1. Longview Lake

The following maps are not included in the Public Version of this plan:

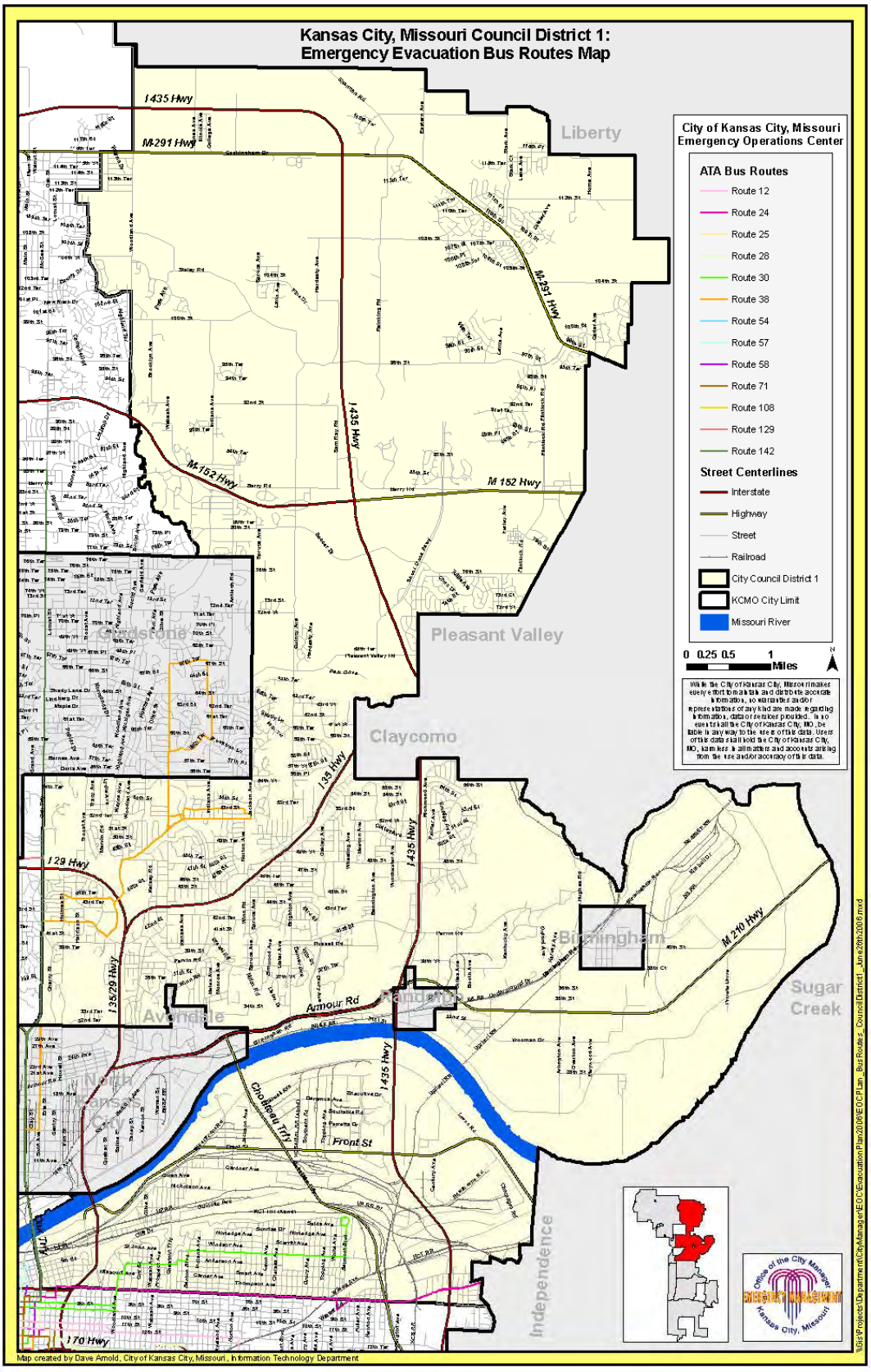
1. Pipelines

[MAPS FOLLOW IN CONSECUTIVE ORDER]

City Council District 1

Council District 1 is a large district geographically and generally consists of the eastern half of the City, north of the Missouri River. In addition to a significant possibility of flooding from the Missouri River, the district includes several dams and creeks (including Shoal Creek and Mill Creek) that are subject to periodic flooding. Virtually the entire district is within the 1 mile evacuation planning zone for highways, rail lines, or both.

(MAPS FOLLOW)


Kansas City, Missouri Council District 1:
Emergency Evacuation Bus Routes Map
I 435 Hwy
M-291 Hwy
Liberty
M 152 Hwy
Pleasant Valley
Claycomo
Gladstone
Avondale
North Kansas City
Independence
Sugar Creek
Birmingham
Randolph
I 29 Hwy
I 35/29 Hwy
I 35 Hwy
M 210 Hwy
Armour Rd
Front St
Chouteau Trfy
170 Hwy
City of Kansas City, Missouri
Emergency Operations Center
ATA Bus Routes
Route 12
Route 24
Route 25
Route 28
Route 30
Route 38
Route 54
Route 57
Route 58
Route 71
Route 108
Route 129
Route 142
Street Centerlines
Interstate
Highway
Street
Railroad
City Council District 1
KCMO City Limit
Missouri River
0 0.25 0.5 1
Miles
Office of the City Manager
EMERGENCY MANAGEMENT
Kansas City, Missouri
Map created by Dave Arnold, City of Kansas City, Missouri, Information Technology Department
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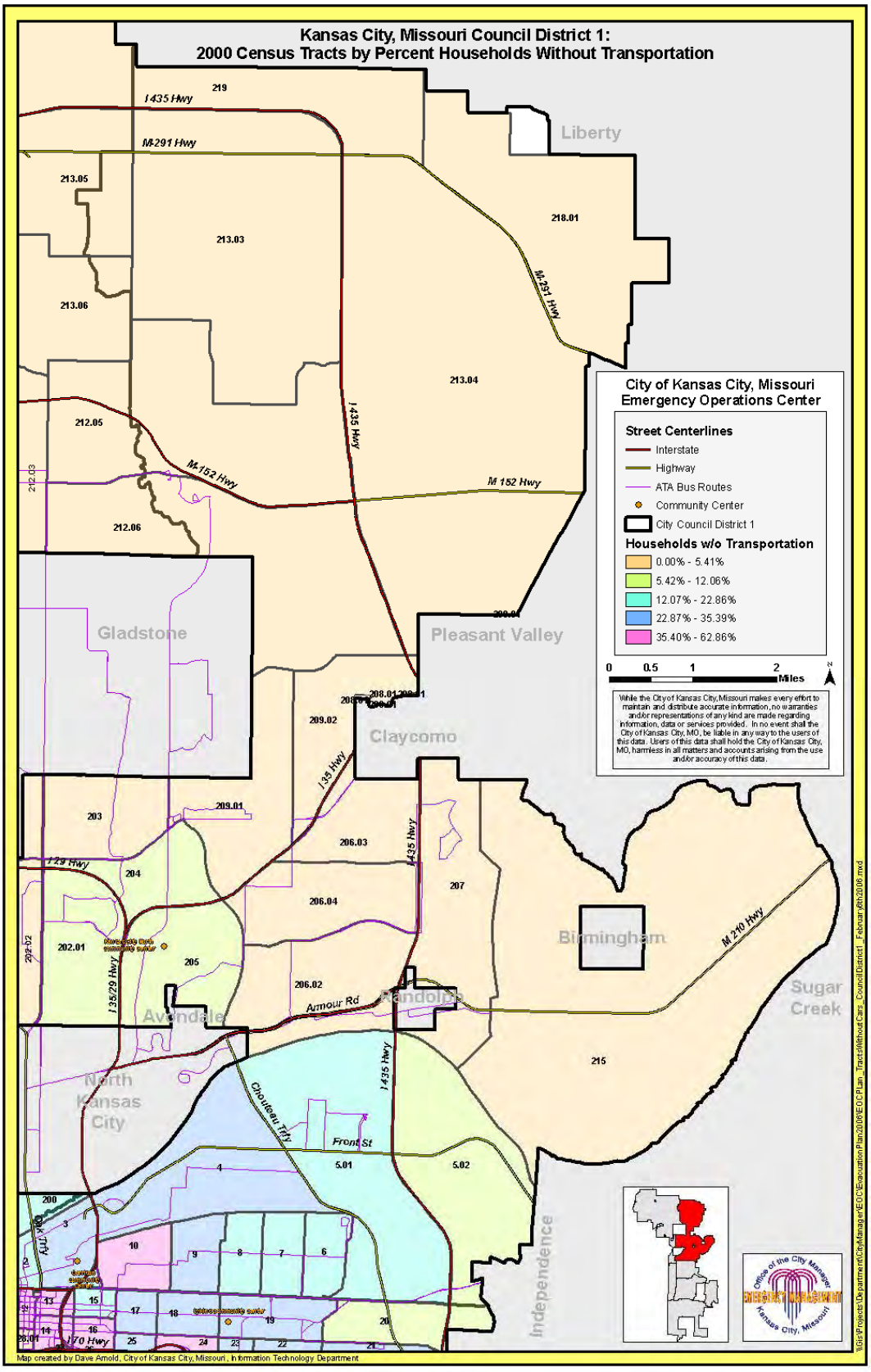
Kansas City, Missouri Council District 1:
2000 Census Tracts by Percent Households Without Transportation
I 435 Hwy
M-291 Hwy
Liberty
213.05
213.03
218.01
213.06
213.04
212.05
M 152 Hwy
212.06
Gladstone
Pleasant Valley
209.02
Claycomo
I 35 Hwy
209.01
203
206.03
I 29 Hwy
204
207
206.04
Birmingham
M 210 Hwy
202.01
205
206.02
Armour Rd
Randolph
Avondale
Sugar Creek
215
North Kansas City
Chouteau Trfy
Front St
5.01
5.02
200
Oak Trfy
Independence
I 70 Hwy
City of Kansas City, Missouri
Emergency Operations Center
Street Centerlines
Interstate
Highway
ATA Bus Routes
Community Center
City Council District 1
Households w/o Transportation
0.00% - 5.41%
5.42% - 12.06%
12.07% - 22.86%
22.87% - 35.39%
35.40% - 62.86%
0 0.5 1 2
Miles
While the City of Kansas City, Missouri makes every effort to maintain and distribute accurate information, no warranties and/or representations of any kind are made regarding information, data or services provided. In no event shall the City of Kansas City, MO, be liable in any way to the users of this data. Users of this data shall hold the City of Kansas City, MO, harmless in all matters and accounts arising from the use and/or accuracy of this data.
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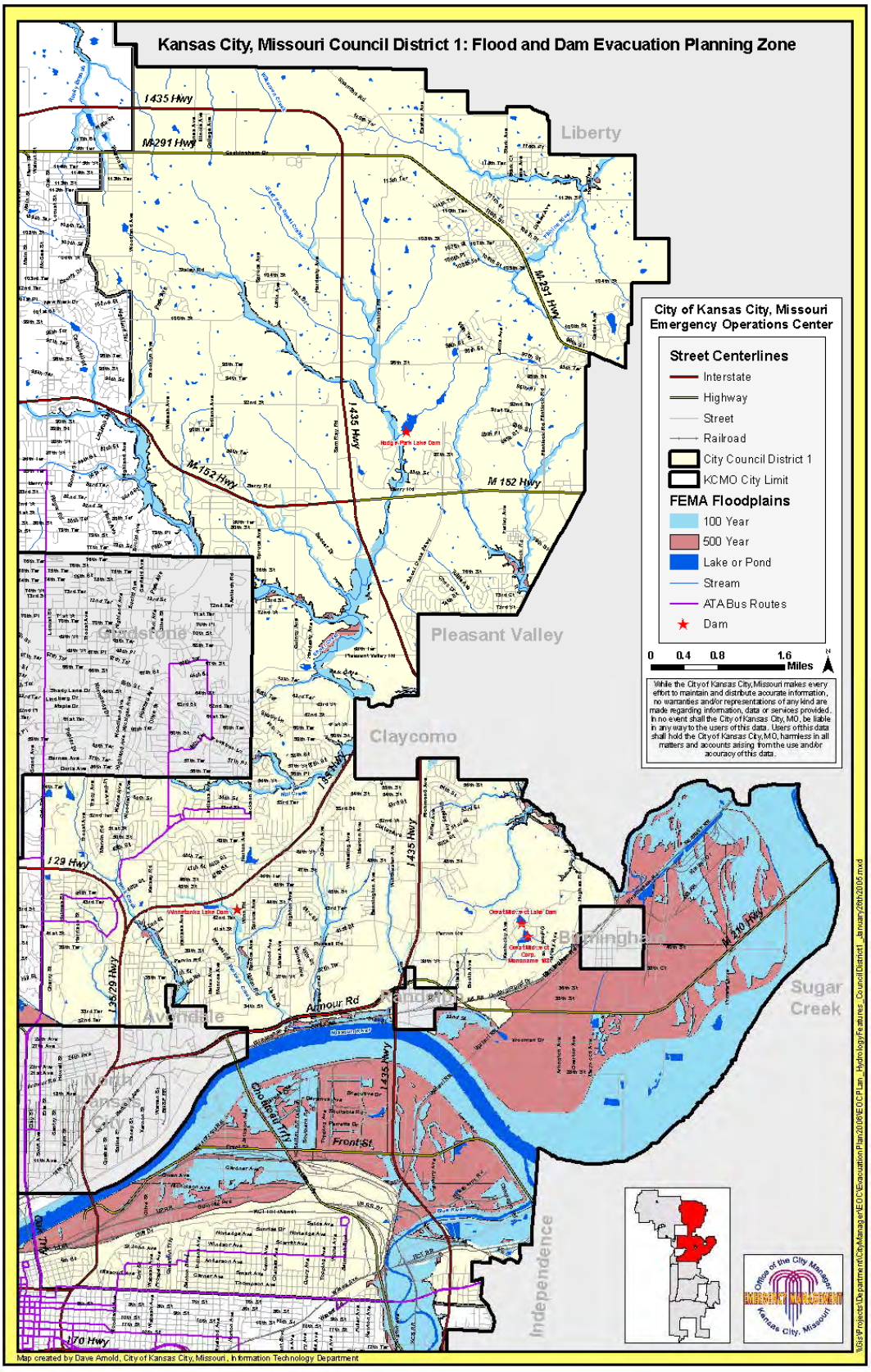
EMERGENCY MANAGEMENT
Kansas City, Missouri
Map created by Dave Arnold, City of Kansas City, Missouri, Information Technology Department
\\Gis\Projects\Departments\CityManager\EOC\Evacuation Plan2008\EOC Plan_Tracts Without Cars_CouncilDistrict1_February6th2006.mxd


Kansas City, Missouri Council District 1: Flood and Dam Evacuation Planning Zone
I 435 Hwy
M 291 Hwy
Liberty
M 152 Hwy
Pleasant Valley
Claycomo
Gladstone
I 29 Hwy
Armour Rd
Front St
Sugar Creek
Independence
I 70 Hwy
City of Kansas City, Missouri
Emergency Operations Center
Street Centerlines
Interstate
Highway
Street
Railroad
City Council District 1
KCMO City Limit
FEMA Floodplains
100 Year
500 Year
Lake or Pond
Stream
ATA Bus Routes
Dam
0 0.4 0.8 1.6 Miles
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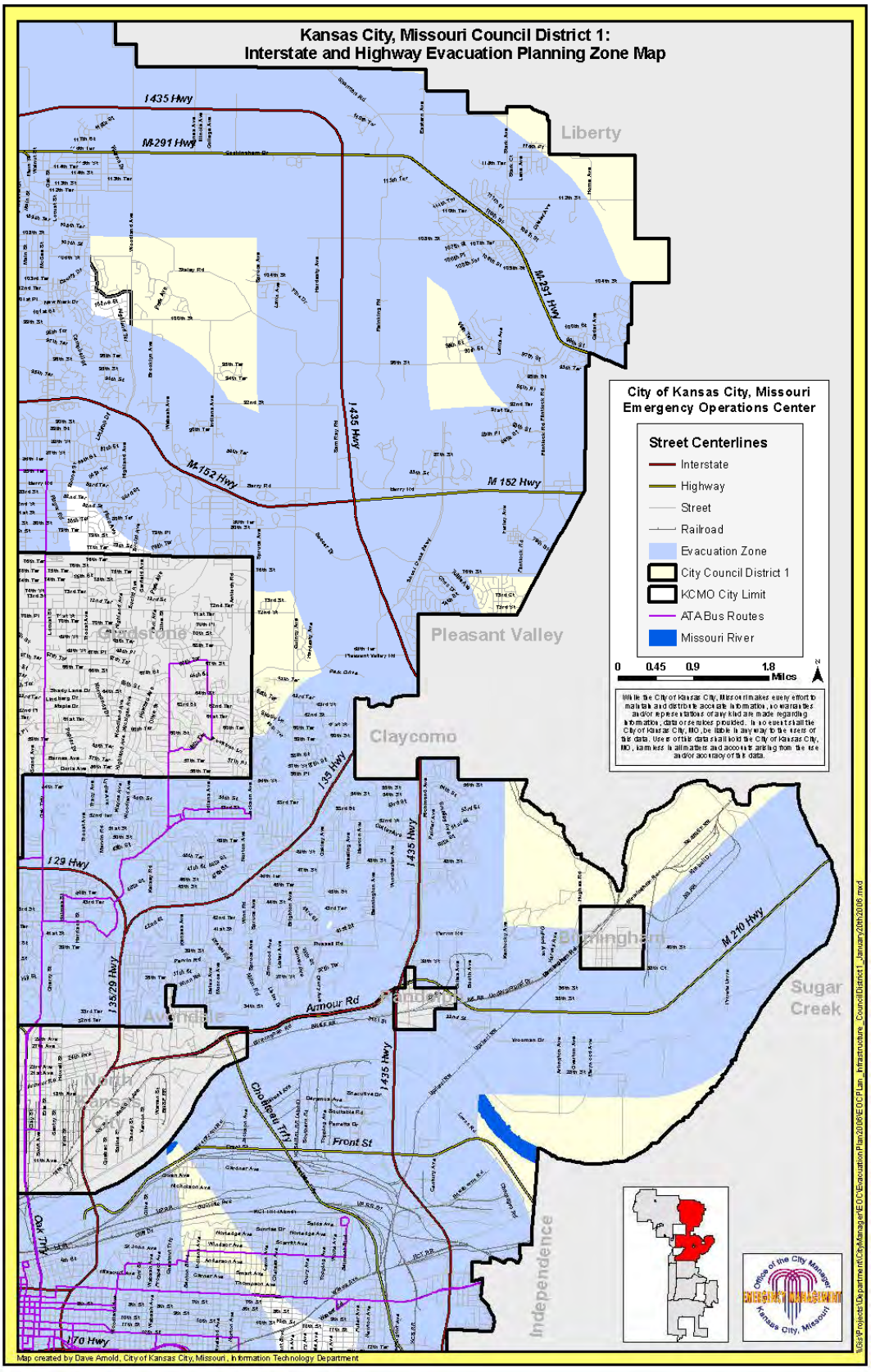
Office of the City Manager
Emergency Management
Kansas City, Missouri
Map created by Dave Arnold, City of Kansas City, Missouri, Information Technology Department
\GisProjects\Department\CityManager\EOC\Evacuation Plan2008\EOCPlan_HydrologyFeatures_CouncilDistrict1_January29th2008.mxd


Kansas City, Missouri Council District 1:
Interstate and Highway Evacuation Planning Zone Map
I 435 Hwy
M-291 Hwy
Liberty
M 291 Hwy
I 435 Hwy
M 152 Hwy
M 152 Hwy
Pleasant Valley
Claycomo
I 435 Hwy
I 29 Hwy
I 35/29 Hwy
I 435 Hwy
Armour Rd
Birmingham
M 210 Hwy
Sugar Creek
I 435 Hwy
Front St
Oak Trfy
Independence
I 70 Hwy
City of Kansas City, Missouri
Emergency Operations Center
Street Centerlines
Interstate
Highway
Street
Railroad
Evacuation Zone
City Council District 1
KCMO City Limit
ATA Bus Routes
Missouri River
0 0.45 0.9 1.8 Miles
N
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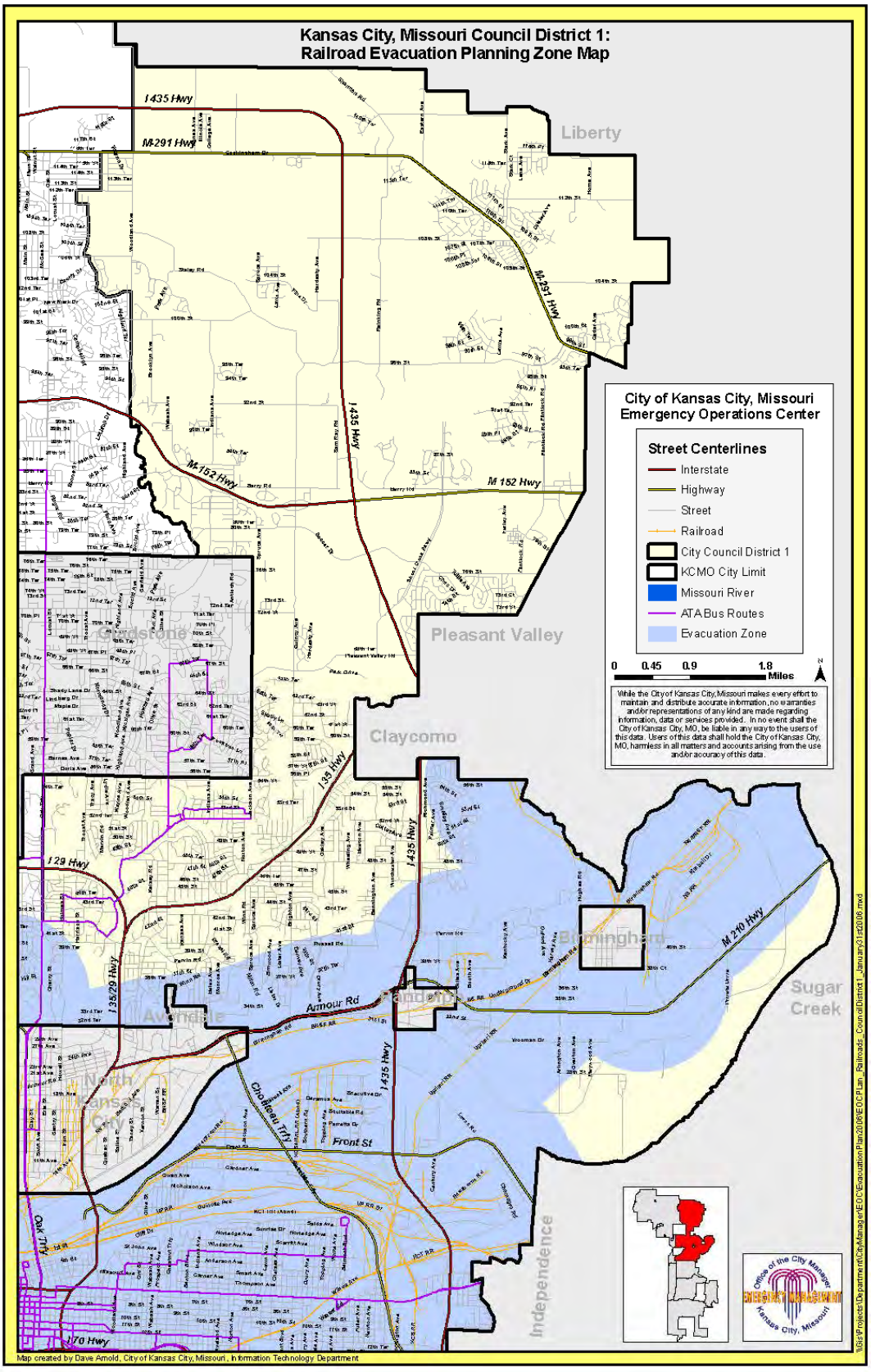
EMERGENCY MANAGEMENT
Kansas City, Missouri
Map created by Dave Arnold, City of Kansas City, Missouri, Information Technology Department
\GIS\Projects\Department\CityManager\EOC\Evacuation Plan\2006\EOCPLan_Infrastructure_CouncilDistrict1_January20th2006.mxd


Kansas City, Missouri Council District 1:
Railroad Evacuation Planning Zone Map
I 435 Hwy
M-291 Hwy
Liberty
M 152 Hwy
Pleasant Valley
Claycomo
Gladstone
I 29 Hwy
I 35/29 Hwy
Armour Rd
Avondale
North Kansas City
Front St
Independence
Sugar Creek
M 210 Hwy
I 70 Hwy
City of Kansas City, Missouri
Emergency Operations Center
Street Centerlines
Interstate
Highway
Street
Railroad
City Council District 1
KCMO City Limit
Missouri River
ATA Bus Routes
Evacuation Zone
0 0.45 0.9 1.8 Miles
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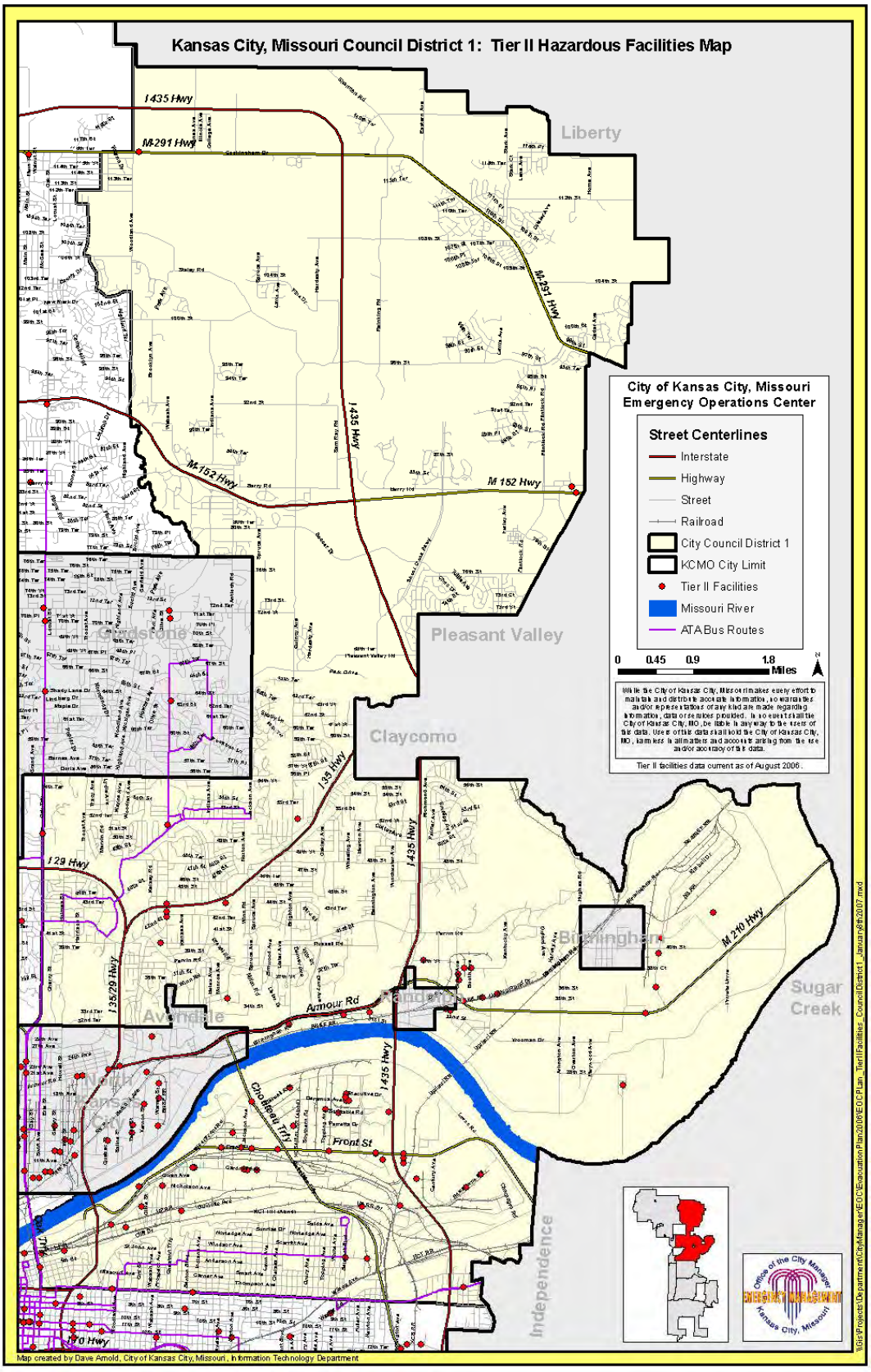
Office of the City Manager
Emergency Management
Kansas City, Missouri
Map created by Dave Arnold, City of Kansas City, Missouri, Information Technology Department
\GisProjects\Department\CityManager\EOC\Evacuation Plan2008\EOC Plan_Railroads_CouncilDistrict1_January31st2008.mxd


Kansas City, Missouri Council District 1: Tier II Hazardous Facilities Map
I 435 Hwy
M-291 Hwy
Liberty
M 291 Hwy
I 435 Hwy
M 152 Hwy
M 152 Hwy
Pleasant Valley
Claycomo
Gladstone
I 35 Hwy
I 435 Hwy
I 29 Hwy
I 35/29 Hwy
Avondale
Armour Rd
Randolph
Birmingham
M 210 Hwy
Sugar Creek
Chouteau Trfy
I 435 Hwy
Front St
Independence
I 70 Hwy
City of Kansas City, Missouri
Emergency Operations Center
Street Centerlines
Interstate
Highway
Street
Railroad
City Council District 1
KCMO City Limit
Tier II Facilities
Missouri River
ATA Bus Routes
0 0.45 0.9 1.8 Miles
N
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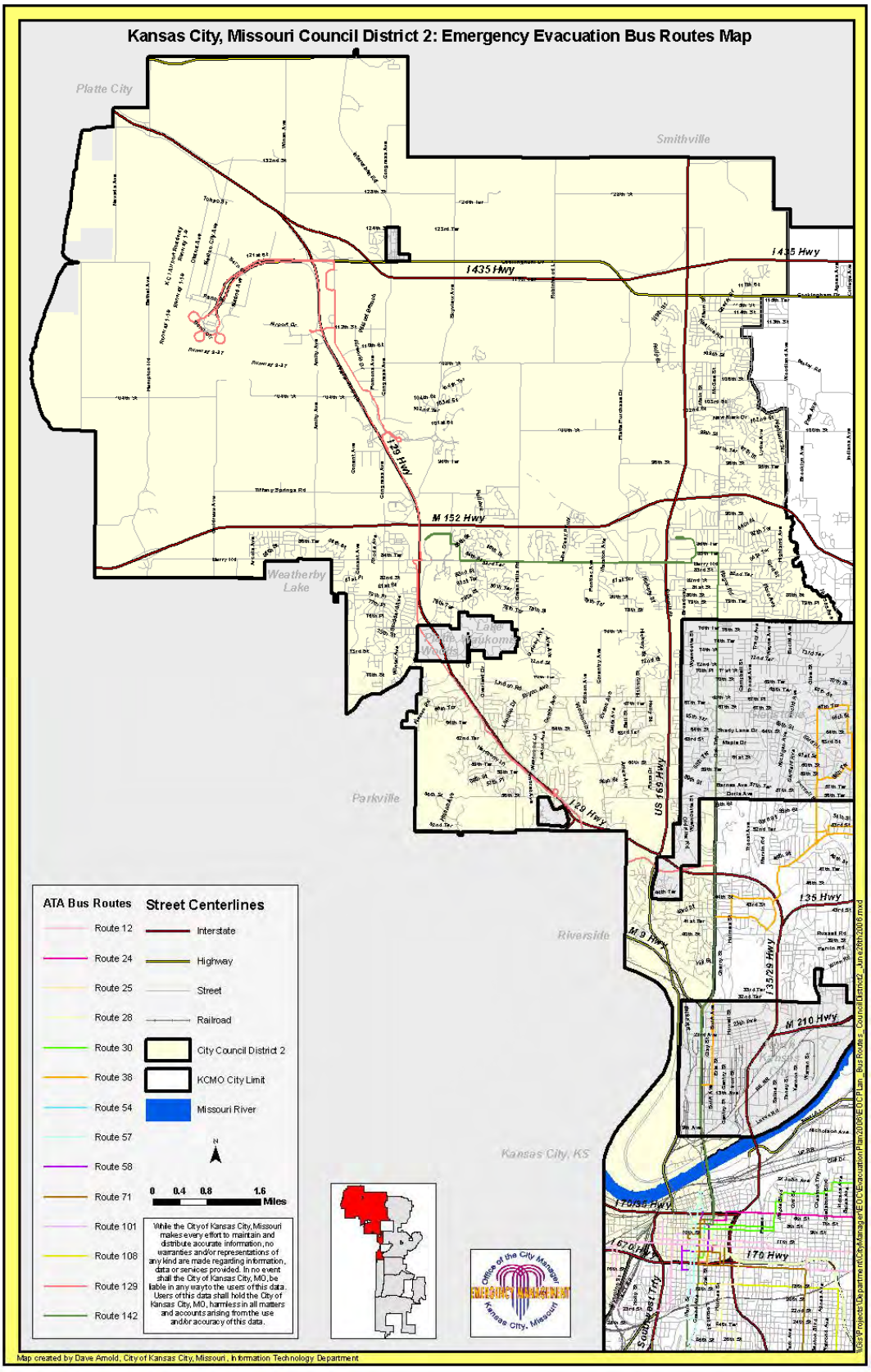
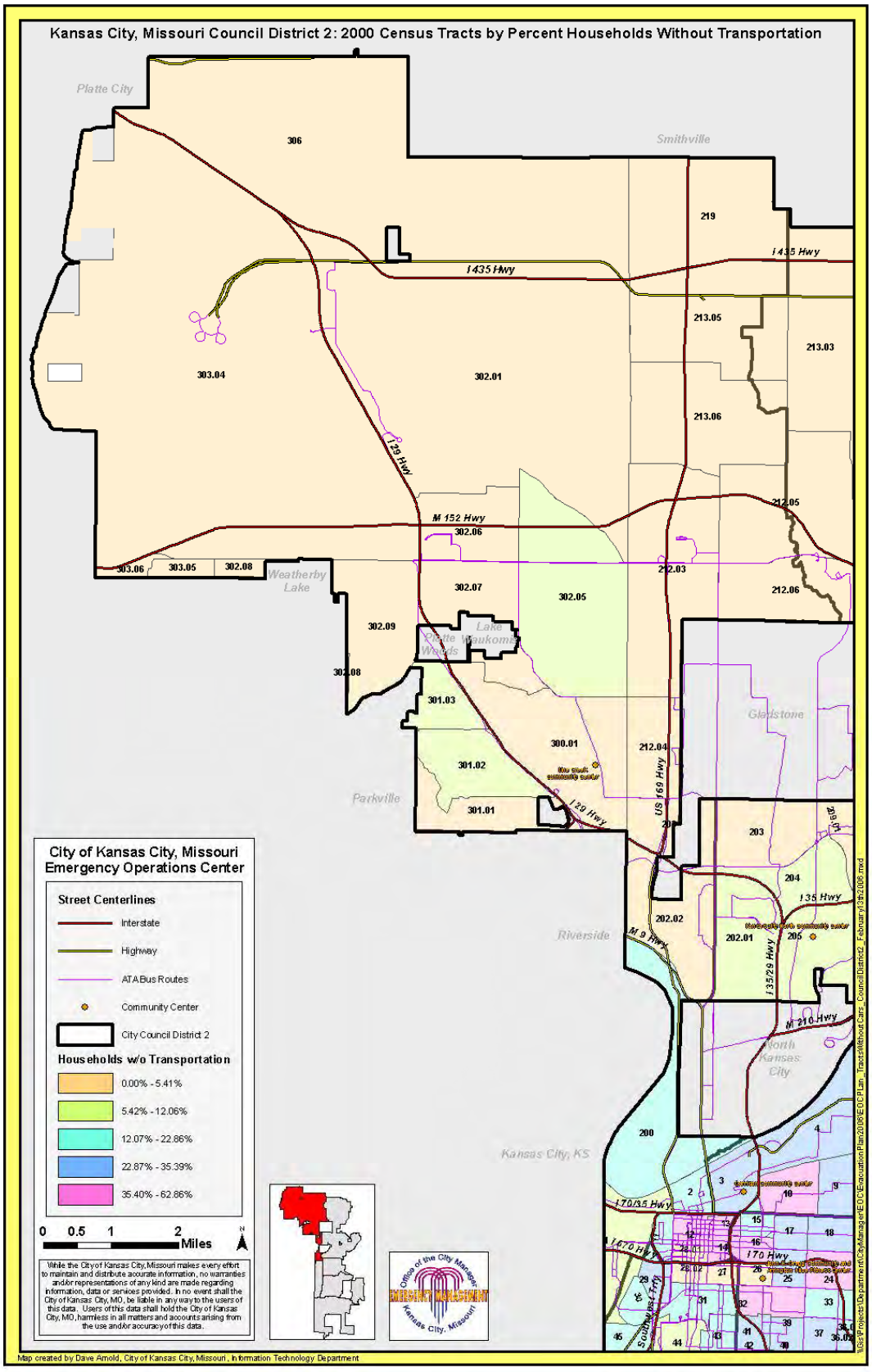
Tier II facilities data current as of August 2006.
Office of the City Manager
EMERGENCY MANAGEMENT
Kansas City, Missouri
Map created by Dave Arnold, City of Kansas City, Missouri, Information Technology Department
\Gis\Projects\Department\OfficeManager\EOC\Evacuation Plan2008\EOC Plan_TierIIFacilities_CouncilDistrict 1_January-8th-2007.mxd

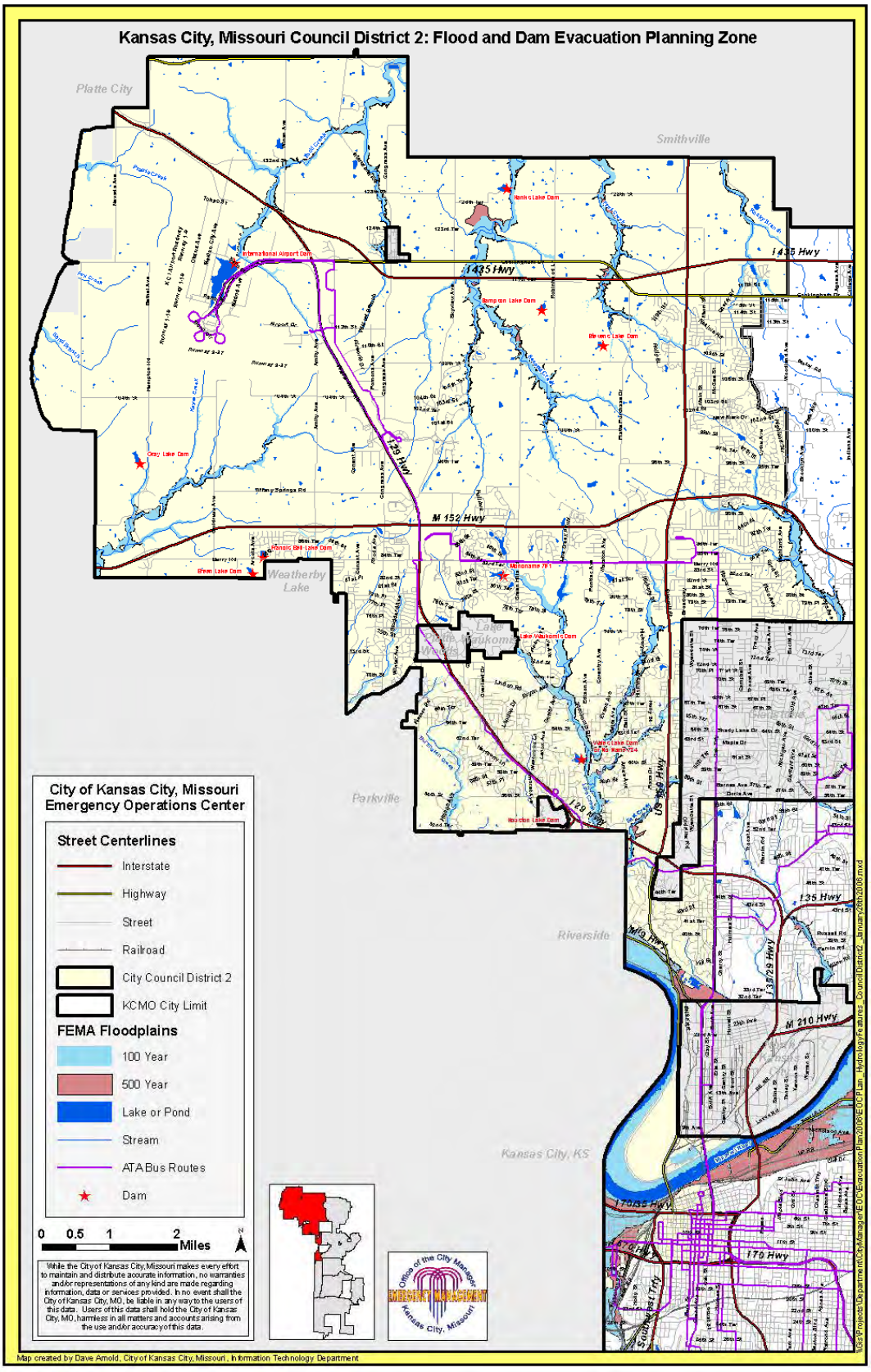
Council District 2

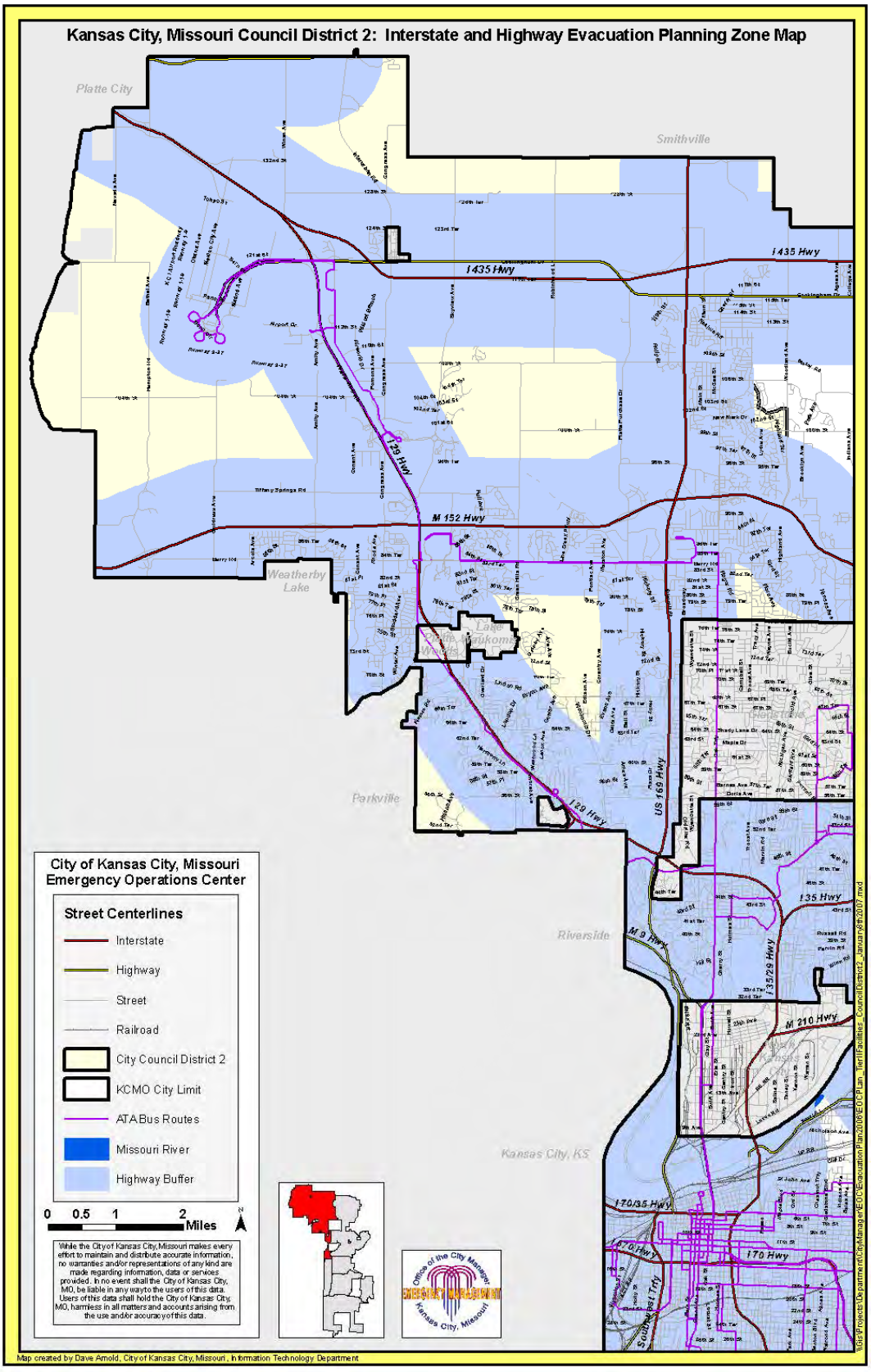
Council District 2 is a large district geographically and generally consists of the western half of the City, north of the Missouri River, plus the Downtown Business District. While the Missouri River runs through it, the area is protected by levees and the Downtown Business District is relatively high in elevation. Historically, riverine flooding has occurred in the area of the Charles B. Wheeler (Downtown) Airport, and along the River Market area. The district includes several dams and creeks (including Line Creek) that are subject to periodic flooding. Virtually the entire district is within the 1 mile evacuation planning zone for highways.

(MAPS FOLLOW)


Kansas City, Missouri Council District 2: Emergency Evacuation Bus Routes Map
Platte City
Smithville
I 435 Hwy
M 152 Hwy
Weatherby Lake
Parkville
US 169 Hwy
I 29 Hwy
I 35 Hwy
M 9 Hwy
M 210 Hwy
Riverside
Kansas City, KS
I 70 Hwy
I 670 Hwy
Scuttle Bell Trfy
ATA Bus Routes
Route 12
Route 24
Route 25
Route 28
Route 30
Route 38
Route 54
Route 57
Route 58
Route 71
Route 101
Route 108
Route 129
Route 142
Street Centerlines
Interstate
Highway
Street
Railroad
City Council District 2
KCMO City Limit
Missouri River
0 0.4 0.8 1.6 Miles
While the City of Kansas City, Missouri makes every effort to maintain and distribute accurate information, no warranties and/or representations of any kind are made regarding information, data or services provided. In no event shall the City of Kansas City, MO, be liable in any way to the users of this data. Users of this data shall hold the City of Kansas City, MO, harmless in all matters and accounts arising from the use and/or accuracy of this data.
Office of the City Manager
Kansas City, Missouri
Map created by Dave Arnold, City of Kansas City, Missouri, Information Technology Department
\GIS\Projects\Department\CityManager\EDC\Evacuation Plan\2008\EDC Plan_Bus Routes_Council District2_Jun-26th-2008.mxd


Kansas City, Missouri Council District 2: 2000 Census Tracts by Percent Households Without Transportation
Platte City
Smithville
Weatherby Lake
Parkville
Riverside
Glenstone
North Kansas City
Kansas City, KS
1435 Hwy
M 152 Hwy
129 Hwy
US 169 Hwy
I 35/29 Hwy
M 210 Hwy
I 70/35 Hwy
I 70 Hwy
M 9 Hwy
135 Hwy
306
303.04
302.01
219
213.05
213.03
213.06
212.05
212.03
212.06
303.06
303.05
302.08
302.06
302.07
302.05
302.09
302.08
301.03
300.01
301.02
301.01
212.04
203
204
202.02
202.01
205
200
City of Kansas City, Missouri
Emergency Operations Center
Street Centerlines
Interstate
Highway
ATA Bus Routes
Community Center
City Council District 2
Households w/o Transportation
0.00% - 5.41%
5.42% - 12.06%
12.07% - 22.86%
22.87% - 35.39%
35.40% - 62.86%
0 0.5 1 2 Miles
While the City of Kansas City, Missouri makes every effort to maintain and distribute accurate information, no warranties and/or representations of any kind are made regarding information, data or services provided. In no event shall the City of Kansas City, MO, be liable in any way to the users of this data. Users of this data shall hold the City of Kansas City, MO, harmless in all matters and accounts arising from the use and/or accuracy of this data.
Office of the City Manager
EMERGENCY MANAGEMENT
Kansas City, Missouri
Map created by Dave Arnold, City of Kansas City, Missouri, Information Technology Department
\GIS\Projects\Department\CityManager\EOC\EvacuationPlan2008\EOCPlan_TractsWithoutCars_CouncilDistrict2_February13th2008.mxd


Kansas City, Missouri Council District 2: Flood and Dam Evacuation Planning Zone
Platte City
Smithville
I 435 Hwy
M 152 Hwy
I 29 Hwy
Weatherby Lake
Parkville
Riverside
Kansas City, KS
I 35 Hwy
M 210 Hwy
I 70 Hwy
US 169 Hwy
MO Hwy
City of Kansas City, Missouri
Emergency Operations Center
Street Centerlines
Interstate
Highway
Street
Railroad
City Council District 2
KCMO City Limit
FEMA Floodplains
100 Year
500 Year
Lake or Pond
Stream
ATA Bus Routes
Dam
0 0.5 1 2 Miles
While the City of Kansas City, Missouri makes every effort to maintain and distribute accurate information, no warranties and/or representations of any kind are made regarding information, data or services provided. In no event shall the City of Kansas City, MO, be liable in any way to the users of this data. Users of this data shall hold the City of Kansas City, MO, harmless in all matters and accounts arising from the use and/or accuracy of this data.
Office of the City Manager
Emergency Management
Kansas City, Missouri
Map created by Dave Arnold, City of Kansas City, Missouri, Information Technology Department
\GIS Projects\Department\CityManager\EOC\Evacuation Plan\2008\EOCPlan_HydrologyFeatures_CouncilDistrict2_January28th2008.mxd


Kansas City, Missouri Council District 2: Interstate and Highway Evacuation Planning Zone Map
Platte City
Smithville
I 435 Hwy
M 152 Hwy
Weatherby Lake
Parkville
Riverside
Kansas City, KS
I 70/35 Hwy
I 70 Hwy
I 35 Hwy
M 9 Hwy
M 210 Hwy
US 169 Hwy
I 29 Hwy
I 35/29 Hwy
City of Kansas City, Missouri
Emergency Operations Center
Street Centerlines
Interstate
Highway
Street
Railroad
City Council District 2
KCMO City Limit
ATA Bus Routes
Missouri River
Highway Buffer
0 0.5 1 2 Miles
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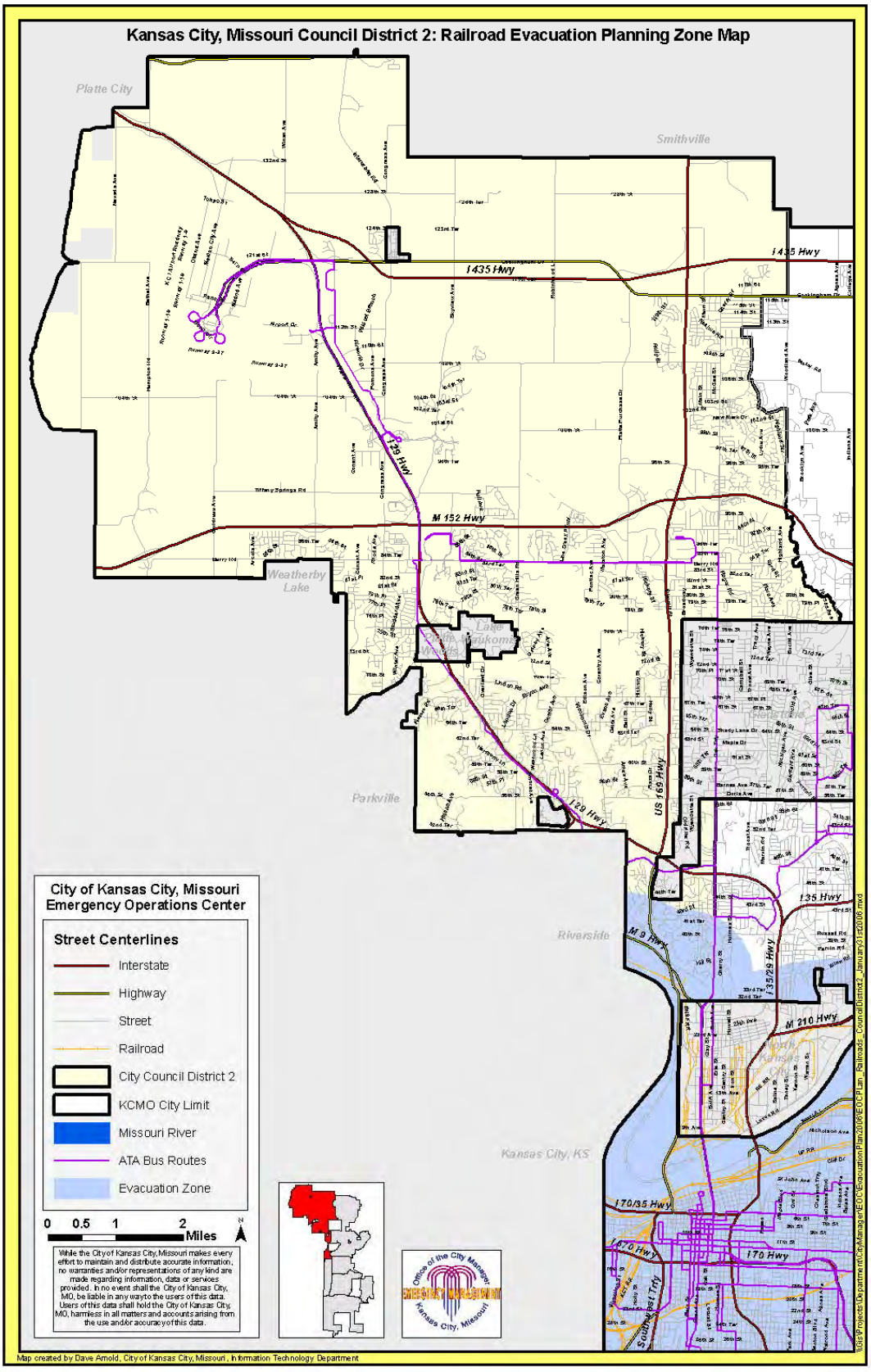
Office of the City Manager
Emergency Management
Kansas City, Missouri
Map created by Dave Arnold, City of Kansas City, Missouri, Information Technology Department
\Gis\Projects\Department\Oth\Manager\EOC\Evacuation Plan\2008\EOC Plan_Tier1Facilities_CouncilDistrict2_January9th2007.mxd


Kansas City, Missouri Council District 2: Railroad Evacuation Planning Zone Map
Platte City
Smithville
I 435 Hwy
M 152 Hwy
Weatherby Lake
Parkville
US 169 Hwy
I 29 Hwy
I 35 Hwy
M 9 Hwy
M 210 Hwy
Riverside
Kansas City, KS
I 70/35 Hwy
I 670 Hwy
I 70 Hwy
City of Kansas City, Missouri
Emergency Operations Center
Street Centerlines
Interstate
Highway
Street
Railroad
City Council District 2
KCMO City Limit
Missouri River
ATA Bus Routes
Evacuation Zone
0 0.5 1 2 Miles
N
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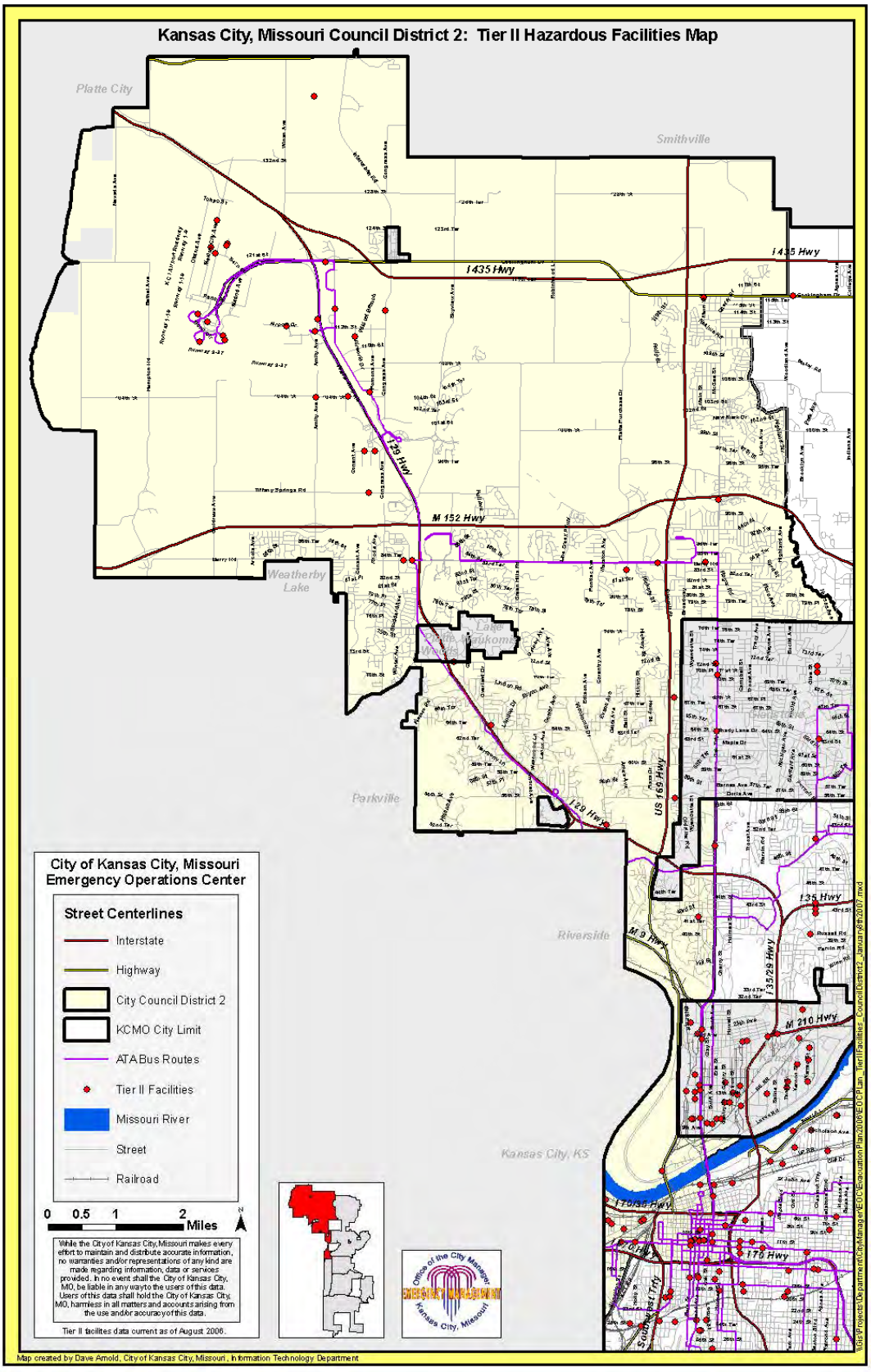
Office of the City Manager
Emergency Management
Kansas City, Missouri
Map created by Dave Arnold, City of Kansas City, Missouri, Information Technology Department
\\Gis\Projects\Department\CityManager\EOC\Evacuation Plan\2008\EOC Plan_Railroads_CouncilDistrict2_January31st2008.mxd


Kansas City, Missouri Council District 2: Tier II Hazardous Facilities Map
Platte City
Smithville
I 435 Hwy
1435 Hwy
129 Hwy
M 152 Hwy
Weatherby Lake
Parkville
US 169 Hwy
I 35 Hwy
M 9 Hwy
Riverside
M 210 Hwy
Kansas City, KS
I 70/35 Hwy
I 70 Hwy
City of Kansas City, Missouri
Emergency Operations Center
Street Centerlines
Interstate
Highway
City Council District 2
KCMO City Limit
ATA Bus Routes
Tier II Facilities
Missouri River
Street
Railroad
0 0.5 1 2 Miles
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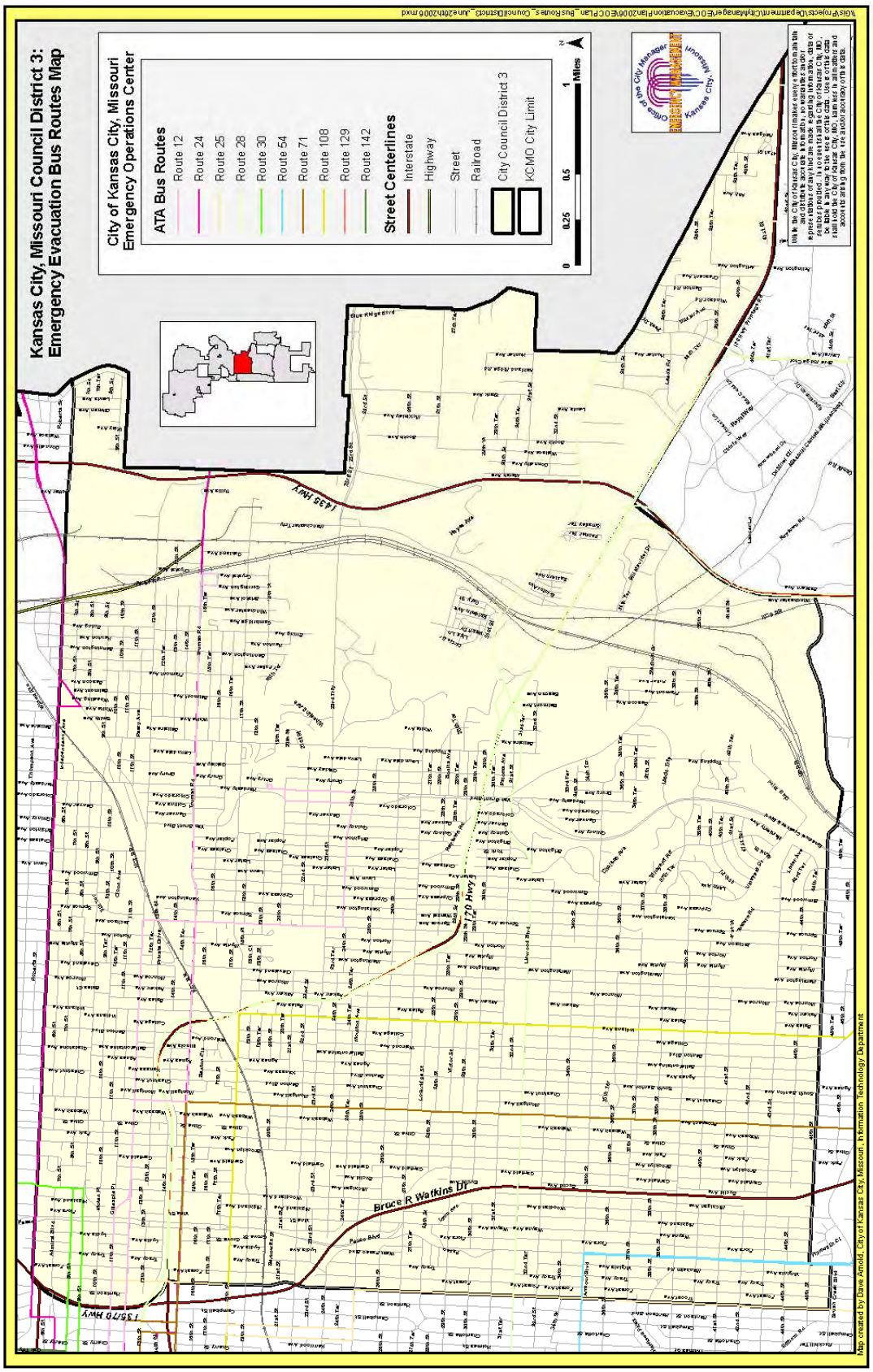
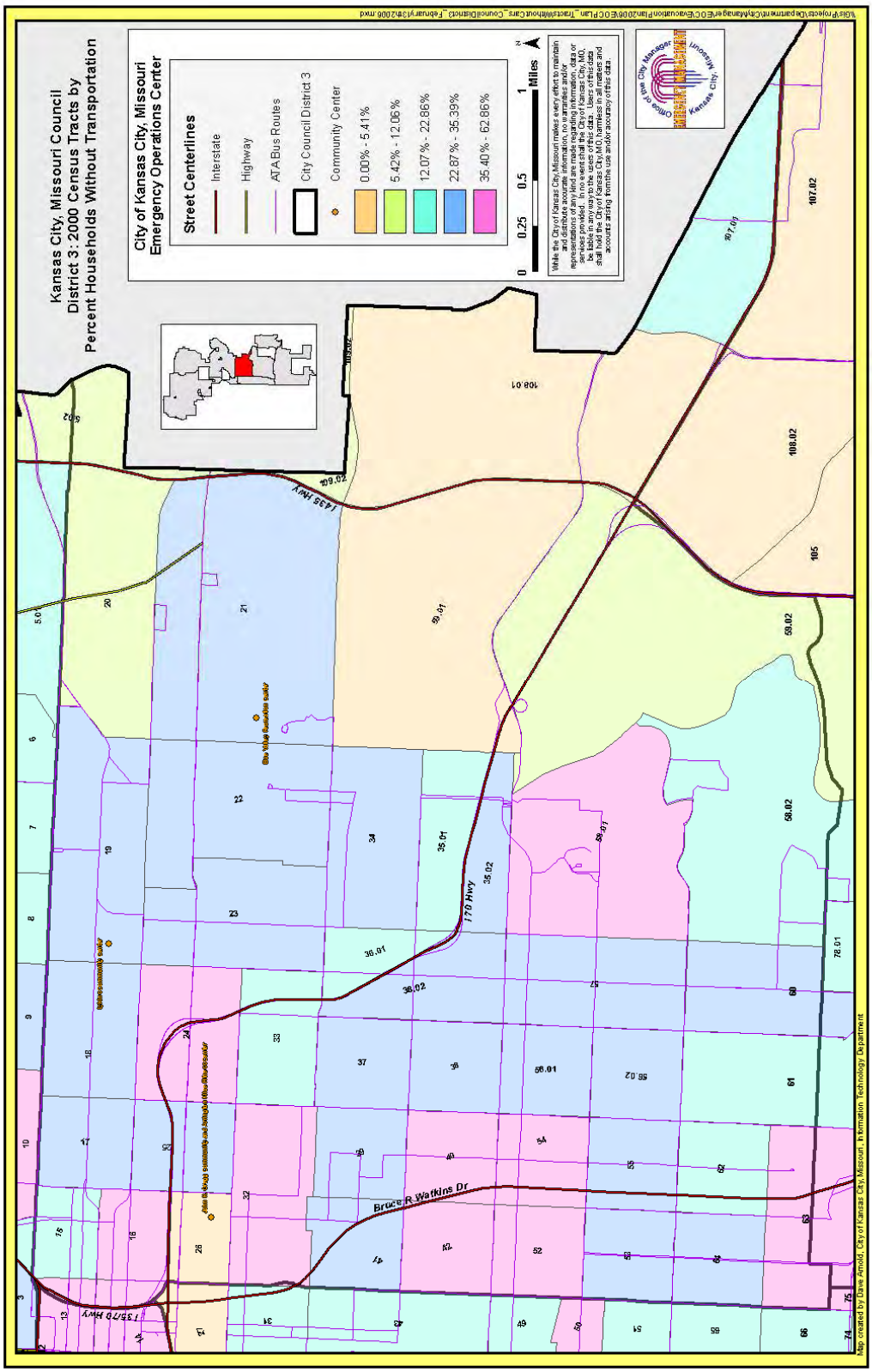
Tier II facilities data current as of August 2006.
Office of the City Manager
EMERGENCY MANAGEMENT
Kansas City, Missouri
Map created by Dave Arnold, City of Kansas City, Missouri, Information Technology Department

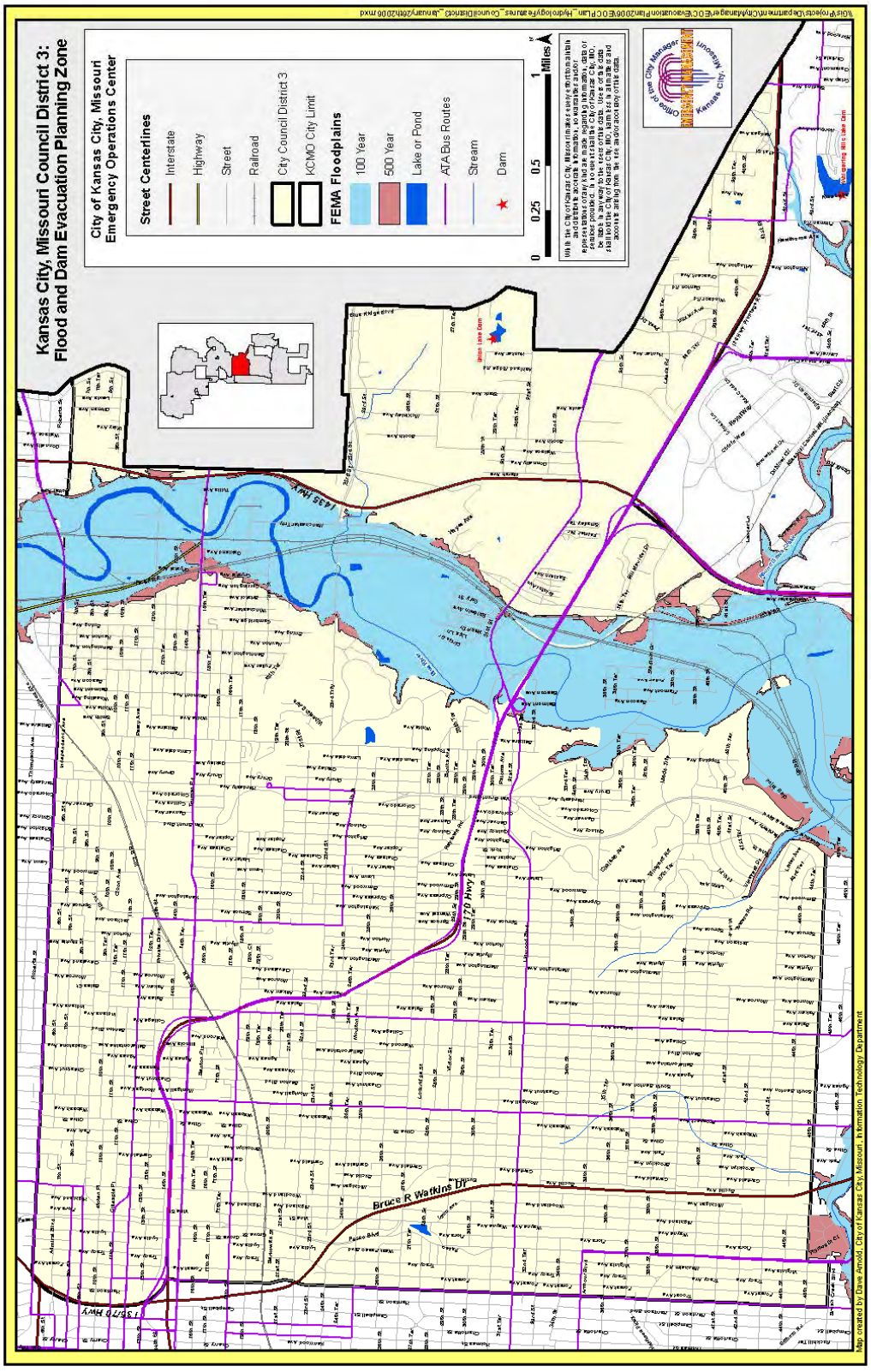
Council District 3

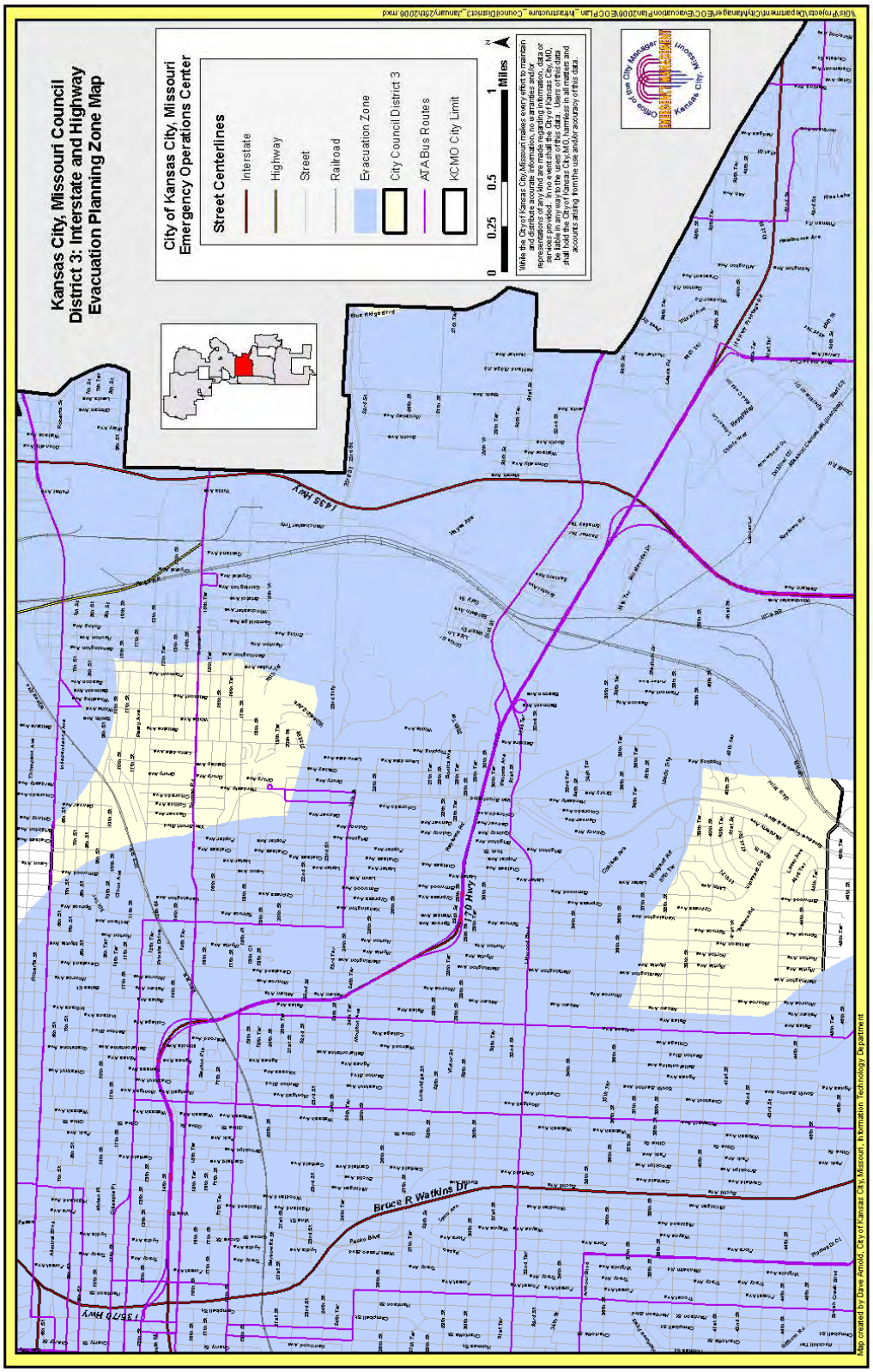
Council District 3 is located east of downtown, and is bordered by Independence Avenue on the north, 45th Street and I-70 on the south, Troost Avenue on the west, and the City limit on the east. The district is subject to flooding within the Blue River flood plain, however recent improvement make the possibility of flooding less likely was experienced prior to 2005. The district is transected by I-70, and includes parts of I-435 and 71 Highway. Major rail lines run north/south paralleling I-435, and another rail line transects the northeast corner of the district. This, virtually the entire district is within the 1 mile evacuation planning zone for rail, highway or both.

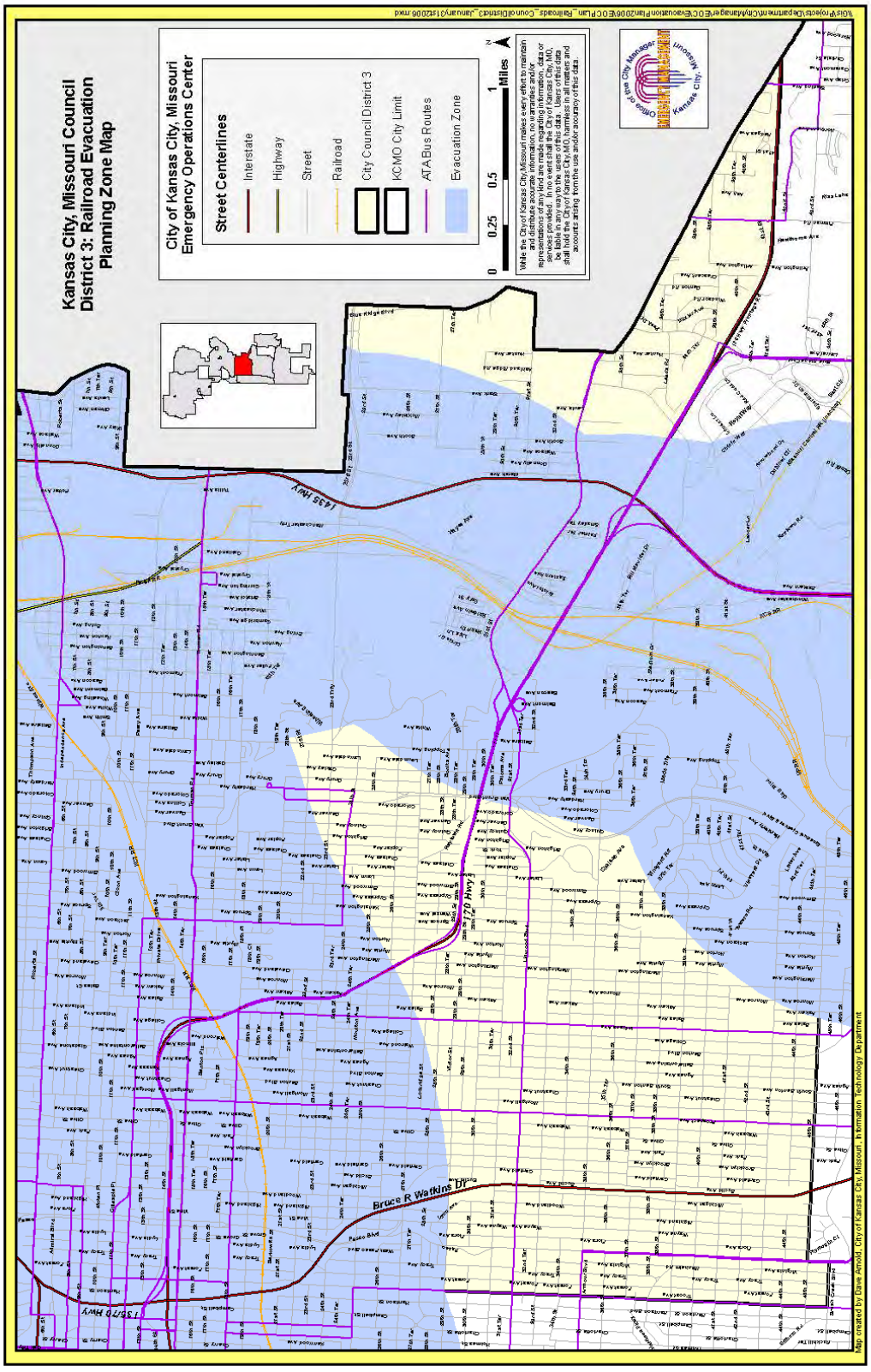
(MAPS FOLLOW)

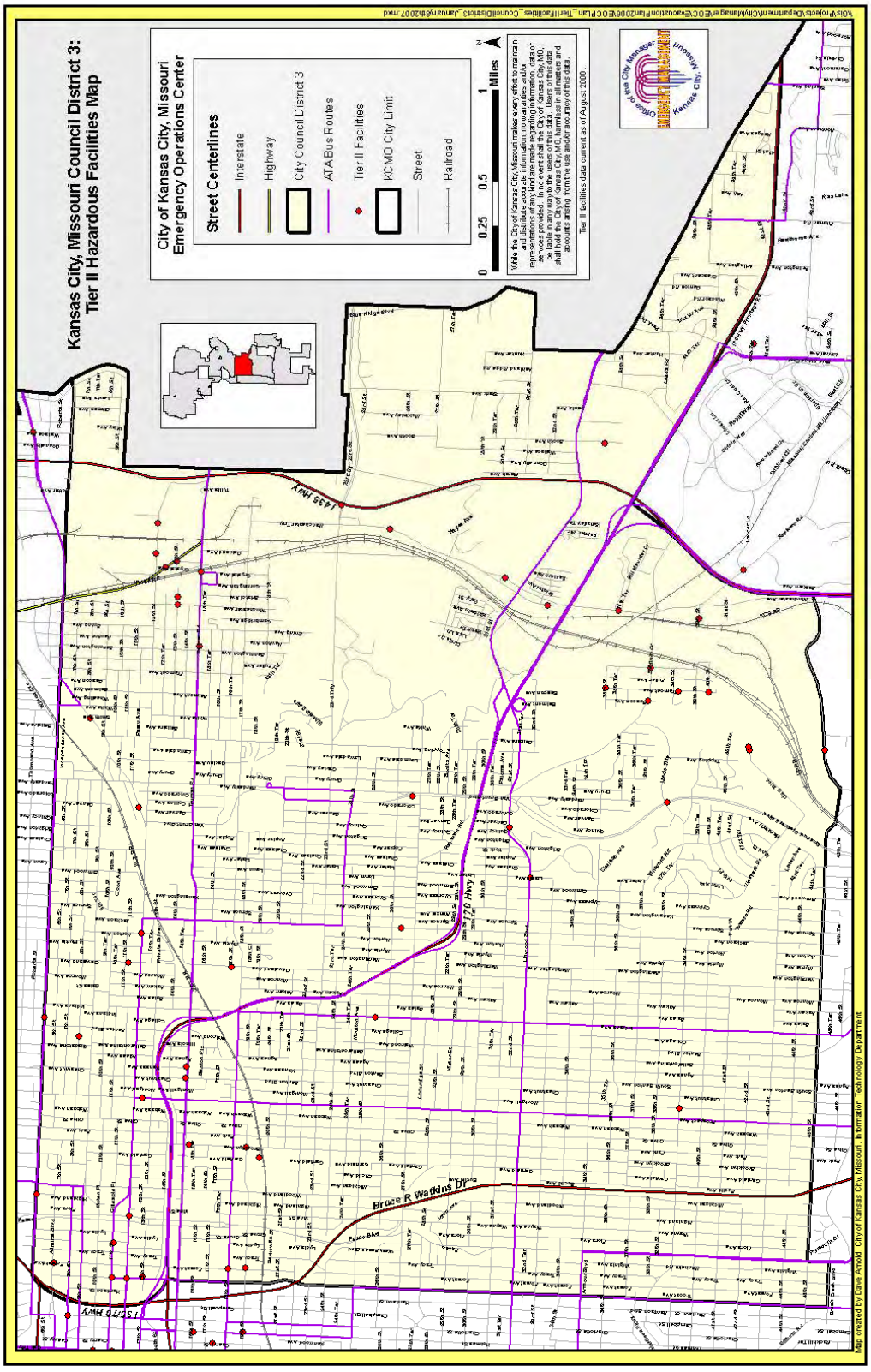

Kansas City, Missouri Council District 3:
Emergency Evacuation Bus Routes Map
City of Kansas City, Missouri
Emergency Operations Center
ATA Bus Routes
Route 12
Route 24
Route 25
Route 28
Route 30
Route 54
Route 71
Route 108
Route 129
Route 142
Street Centerlines
Interstate
Highway
Street
Railroad
City Council District 3
KCMO City Limit
0
0.25
0.5
1 Miles
I-435 HWY
I-70 Hwy
Bruce R Watkins Dr
I-35/70 HWY
Map created by Dave Arnold, City of Kansas City, Missouri, Information Technology Department


Kansas City, Missouri Council
District 3: 2000 Census Tracts by
Percent Households Without Transportation
City of Kansas City, Missouri
Emergency Operations Center
Street Centerlines
Interstate
Highway
ATA Bus Routes
City Council District 3
Community Center
0.00% - 5.41%
5.42% - 12.06%
12.07% - 22.86%
22.87% - 35.39%
35.40% - 62.86%
0
0.25
0.5
1
Miles
N
While the City of Kansas City, Missouri makes every effort to maintain and distribute accurate information, no warranties and/or representations of any kind are made concerning the data or services provided. In no event shall the City of Kansas City, MO, be liable in any way to the users of this data. Users of this data shall hold the City of Kansas City, MO, harmless in all matters and accounts arising from the use and/or accuracy of this data.
Office of the City Manager
Kansas City Missouri
I-435 Hwy
I-70 Hwy
I-35/70 Hwy
Bruce R Watkins Dr
Map created by Dave Arnold, City of Kansas City, Missouri, Information Technology Department


Kansas City, Missouri Council District 3:
Flood and Dam Evacuation Planning Zone
City of Kansas City, Missouri
Emergency Operations Center
Street Centerlines
Interstate
Highway
Street
Railroad
City Council District 3
KCMO City Limit
FEMA Floodplains
100 Year
500 Year
Lake or Pond
ATA Bus Routes
Stream
Dam
0 0.25 0.5 1 Miles
Office of the City Manager
Kansas City, Missouri
I-435 NW
I-70 Hwy
Bruce R Watkins Dr
I-35/70 HWY
Map created by Dave Arnold, City of Kansas City, Missouri, Information Technology Department


Kansas City, Missouri Council
District 3: Interstate and Highway
Evacuation Planning Zone Map
City of Kansas City, Missouri
Emergency Operations Center
Street Centerlines
Interstate
Highway
Street
Railroad
Evacuation Zone
City Council District 3
ATA Bus Routes
KCMO City Limit
0
0.25
0.5
1 Miles
N
I-435 Hwy
I-70 Hwy
Bruce R Watkins Dr
I-35/71 Hwy
Map created by Dave Arnold, City of Kansas City, Missouri, Information Technology Department

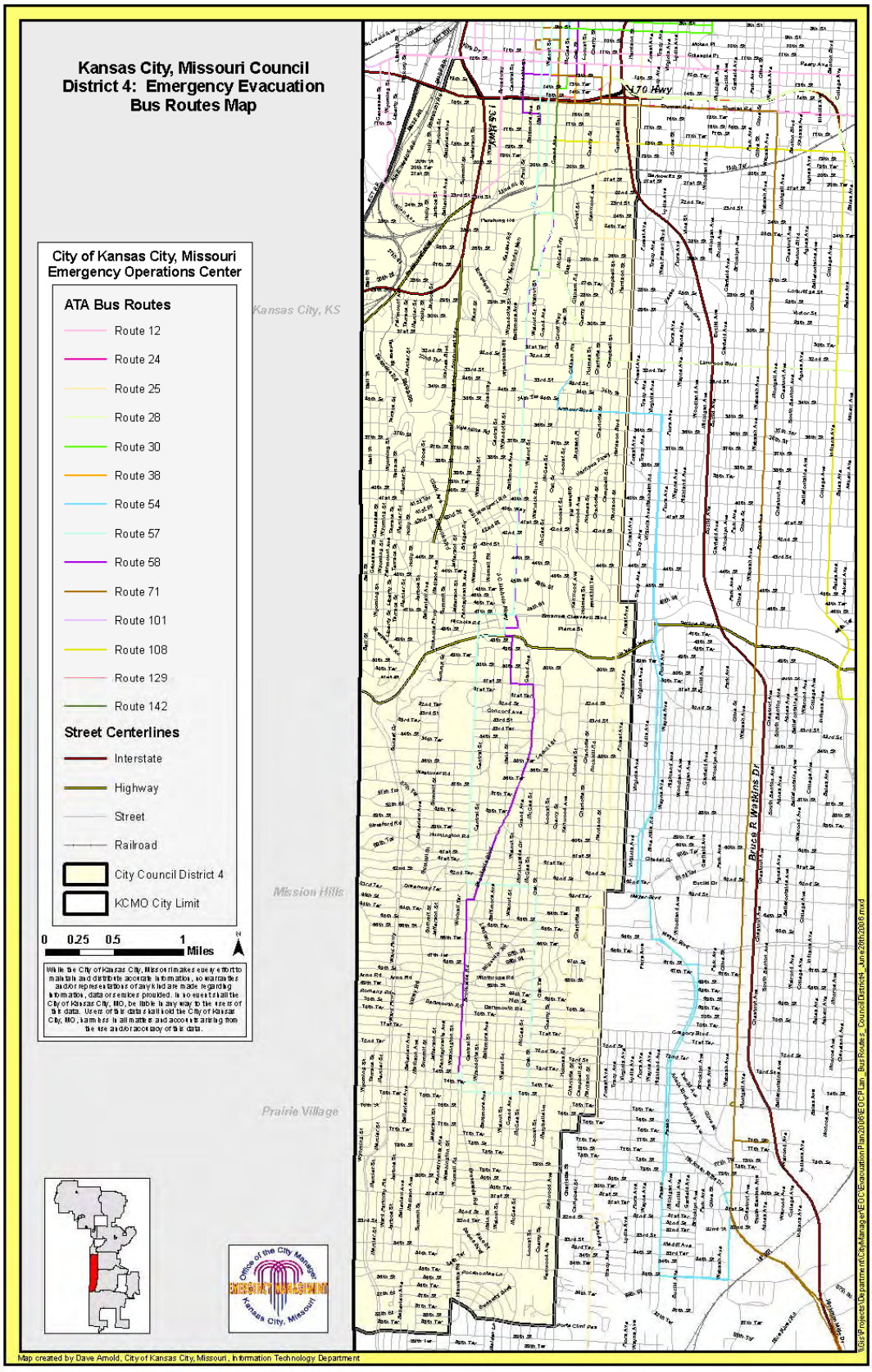

Kansas City, Missouri Council District 3: Railroad Evacuation Planning Zone Map
City of Kansas City, Missouri Emergency Operations Center
Street Centerlines
Interstate
Highway
Street
Railroad
City Council District 3
KCMO City Limit
ATA Bus Routes
Evacuation Zone
0 0.25 0.5 1 Miles
I-435 Hwy
I-70 Hwy
I-35/71 Hwy
Bruce R Watkins Dr

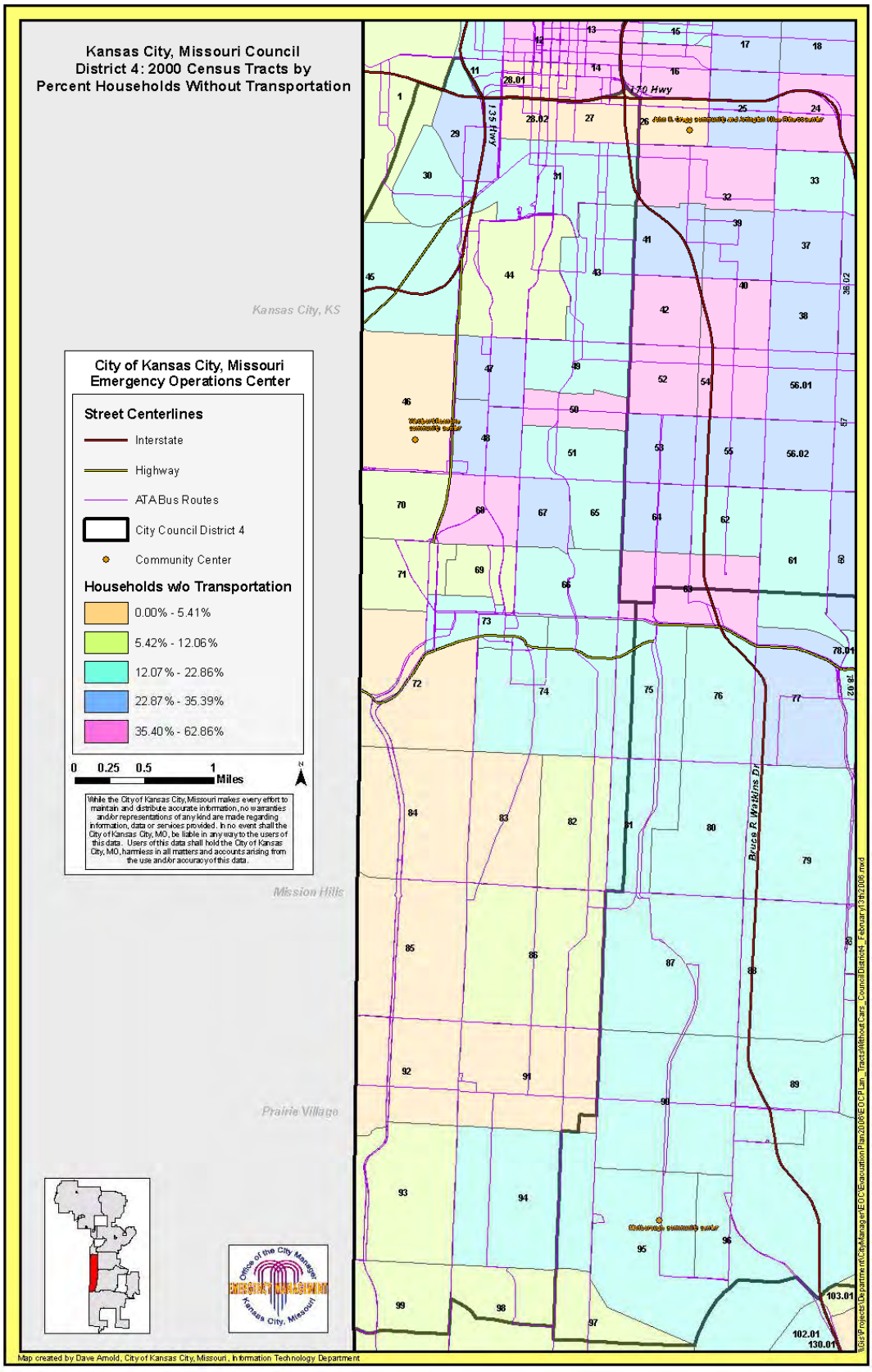

Kansas City, Missouri Council District 3:
Tier II Hazardous Facilities Map
City of Kansas City, Missouri
Emergency Operations Center
Street Centerlines
Interstate
Highway
City Council District 3
ATA Bus Routes
Tier II Facilities
KCMO City Limit
Street
Railroad
0 0.25 0.5 1 Miles
Tier II facilities data current as of August 2008.
Bruce R Watkins Dr
I-70 Hwy
I-35/70 HWY
I-435 HWY
Map created by Dave Arnold, City of Kansas City, Missouri, Information Technology Department

Council District 4

Council District 4 is long and narrow, bordered by the Downtown Business District on the north, 89th Street on the south, the City limit on the west, and Troost Avenue on the East. The district is largely residential, but includes the Country Club Plaza. Rail lines are restricted to the northern portion of the district, but the rail lines are heavily used and transect significant medium rise housing and commercial buildings. There are no dams or rivers in the district; however Brush Creek has a significant history of flooding (including loss of life). A portion of the north, and a thin slice of the eastern side of the district are within the 1 mile evacuation planning zone for highways.

(MAPS FOLLOW)


Kansas City, Missouri Council District 4: Emergency Evacuation Bus Routes Map
City of Kansas City, Missouri Emergency Operations Center
ATA Bus Routes
Route 12
Route 24
Route 25
Route 28
Route 30
Route 38
Route 54
Route 57
Route 58
Route 71
Route 101
Route 108
Route 129
Route 142
Street Centerlines
Interstate
Highway
Street
Railroad
City Council District 4
KCMO City Limit
0 0.25 0.5 1 Miles
N
Kansas City, KS
Mission Hills
Prairie Village
I-70 Hwy
I-35 Hwy
Bruce R. Watkins Dr
Office of the City Manager
Emergency Management
Kansas City, Missouri
Map created by Dave Arnold, City of Kansas City, Missouri, Information Technology Department
\\bis\Projects\Department\CityManager\EOC\Evacuation Plan\2008\EOC Plan_Bus Routes_CouncilDistrict4_June28th2008.mxd


Kansas City, Missouri Council
District 4: 2000 Census Tracts by
Percent Households Without Transportation
Kansas City, KS
Mission Hills
Prairie Village
City of Kansas City, Missouri
Emergency Operations Center
Street Centerlines
Interstate
Highway
ATA Bus Routes
City Council District 4
Community Center
Households w/o Transportation
0.00% - 5.41%
5.42% - 12.06%
12.07% - 22.86%
22.87% - 35.39%
35.40% - 62.86%
0 0.25 0.5 1 Miles
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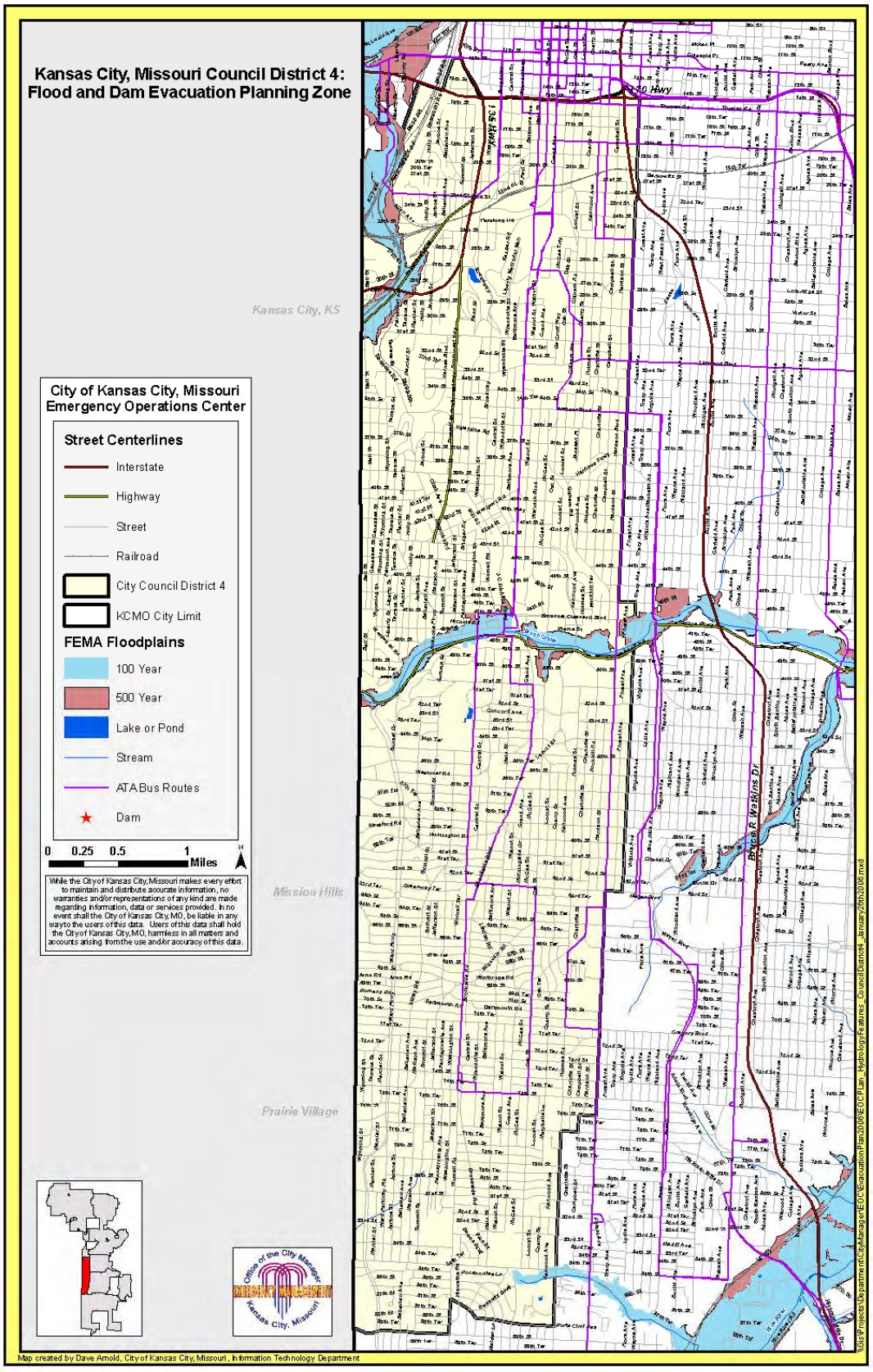
I-70 Hwy
I-35 Hwy
Bruce R. Watkins Dr
Map created by Dave Arnold, City of Kansas City, Missouri, Information Technology Department


Kansas City, Missouri Council District 4:
Flood and Dam Evacuation Planning Zone
Kansas City, KS
City of Kansas City, Missouri
Emergency Operations Center
Street Centerlines
Interstate
Highway
Street
Railroad
City Council District 4
KCMO City Limit
FEMA Floodplains
100 Year
500 Year
Lake or Pond
Stream
ATA Bus Routes
Dam
0 0.25 0.5 1 Miles
N
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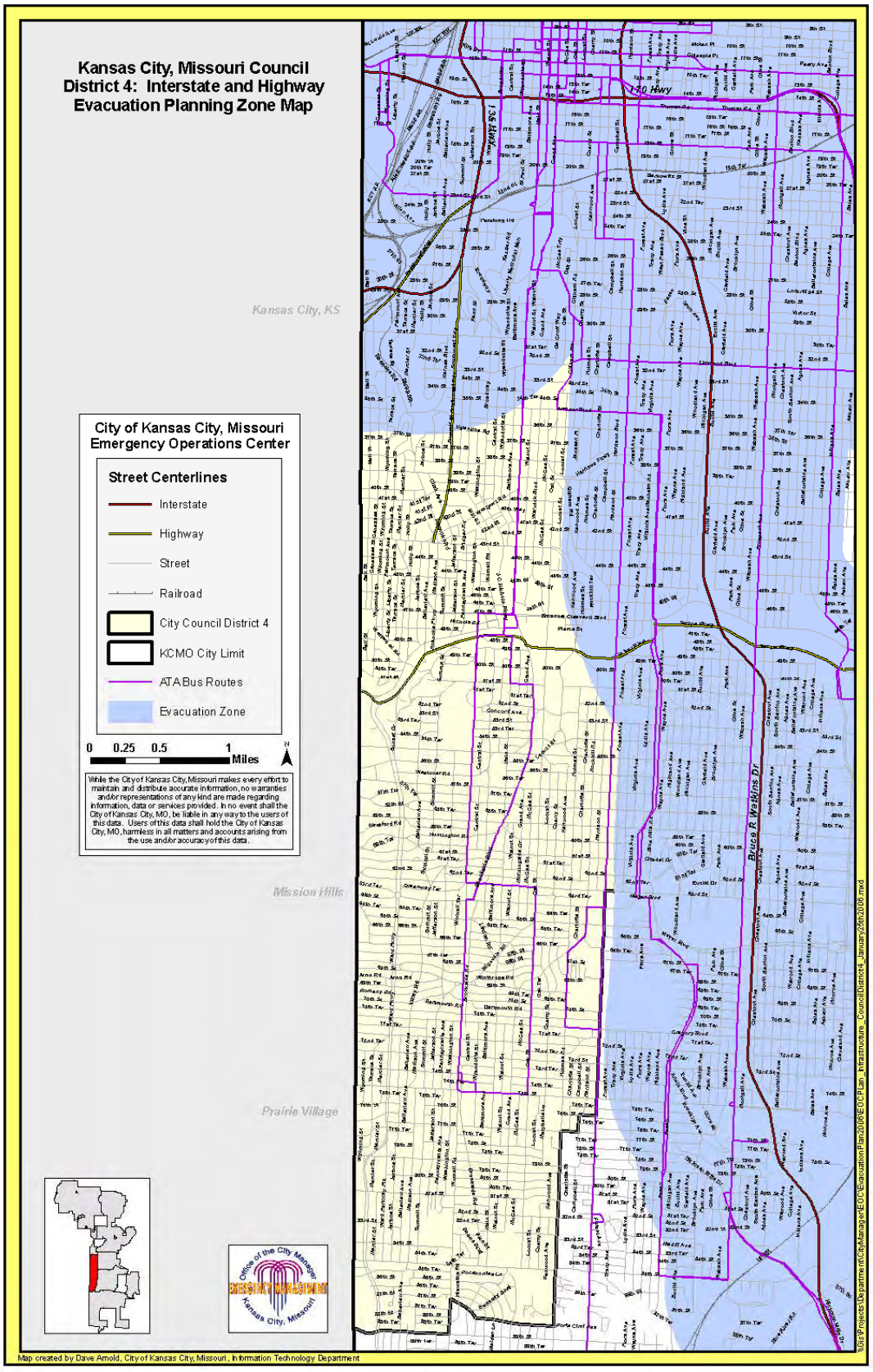
Mission Hills
Prairie Village
Office of the City Manager
Emergency Management
Kansas City, Missouri
Map created by Dave Arnold, City of Kansas City, Missouri, Information Technology Department
I:\GIS Projects\Department\CityManager\EOC\Evacuation Plan\2008 EOC Plan - Hydrology\Features_CouncilDistrict4_January26th2008.mxd


Kansas City, Missouri Council District 4: Interstate and Highway Evacuation Planning Zone Map
Kansas City, KS
Mission Hills
Prairie Village
City of Kansas City, Missouri Emergency Operations Center
Street Centerlines
Interstate
Highway
Street
Railroad
City Council District 4
KCMO City Limit
ATA Bus Routes
Evacuation Zone
0 0.25 0.5 1 Miles
N
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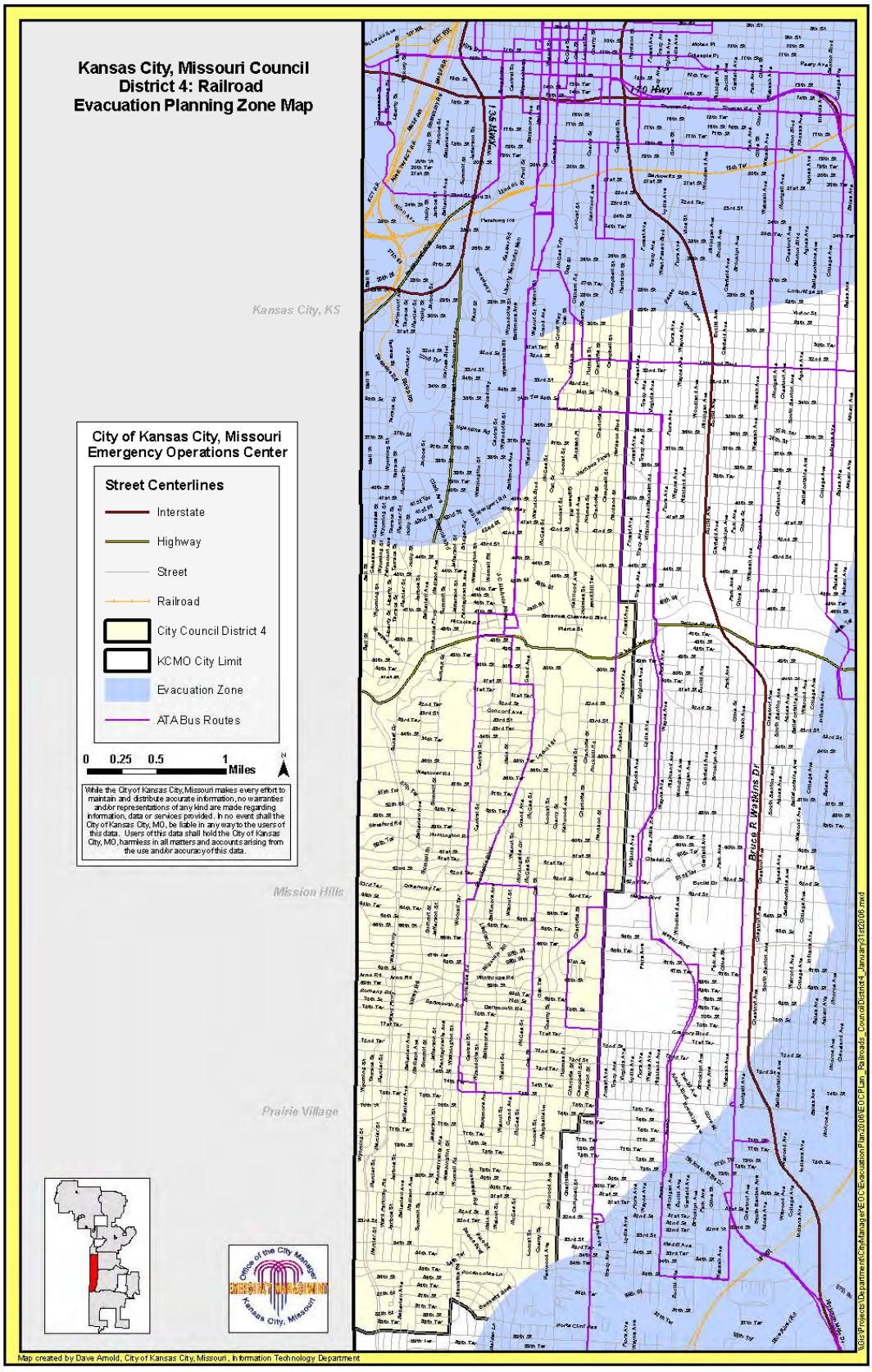
I-70 Hwy
I-35 Hwy
Bruce R. Watkins Dr
Office of the City Manager EMERGENCY MANAGEMENT Kansas City, Missouri
Map created by Dave Arnold, City of Kansas City, Missouri, Information Technology Department
\\bis\Projects\Department\CityManager\EOC\Evacuation Plan\2006\EOC Plan_Infrastructure_CouncilDistrict4_January\26th2006.mxd


Kansas City, Missouri Council
District 4: Railroad
Evacuation Planning Zone Map
Kansas City, KS
Mission Hills
Prairie Village
City of Kansas City, Missouri
Emergency Operations Center
Street Centerlines
Interstate
Highway
Street
Railroad
City Council District 4
KCMO City Limit
Evacuation Zone
ATA Bus Routes
0 0.25 0.5 1 Miles
N
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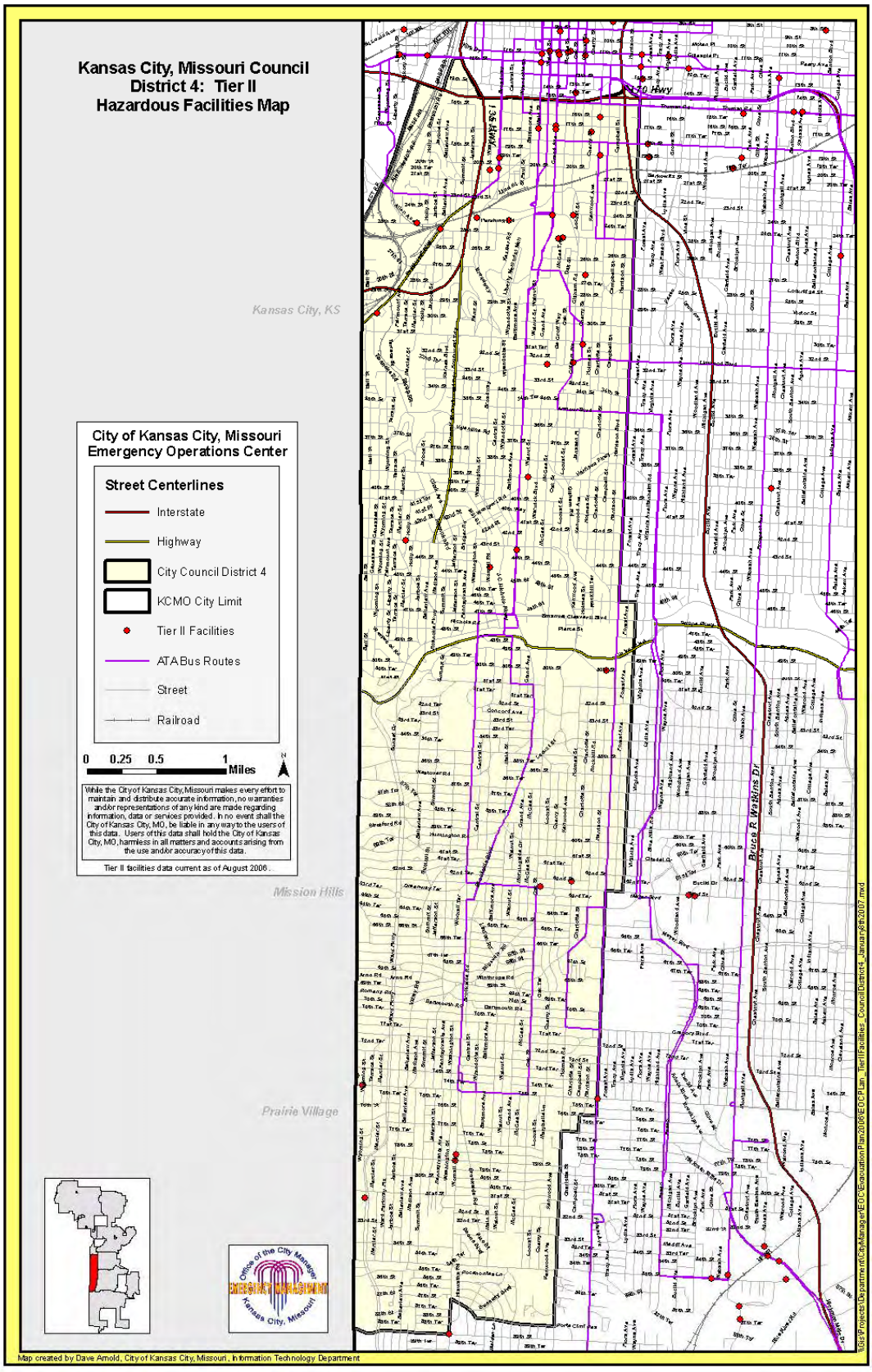
Bruce R. Watkins Dr
Map created by Dave Arnold, City of Kansas City, Missouri, Information Technology Department
G:\GIS Projects\Department\CityManager\EOC\Evacuation Plan\2008\EOC Plan_Railroads_CouncilDistrict4_January\31st2008.mxd


Kansas City, Missouri Council
District 4: Tier II
Hazardous Facilities Map
Kansas City, KS
City of Kansas City, Missouri
Emergency Operations Center
Street Centerlines
Interstate
Highway
City Council District 4
KCMO City Limit
Tier II Facilities
ATA Bus Routes
Street
Railroad
0 0.25 0.5 1 Miles
N
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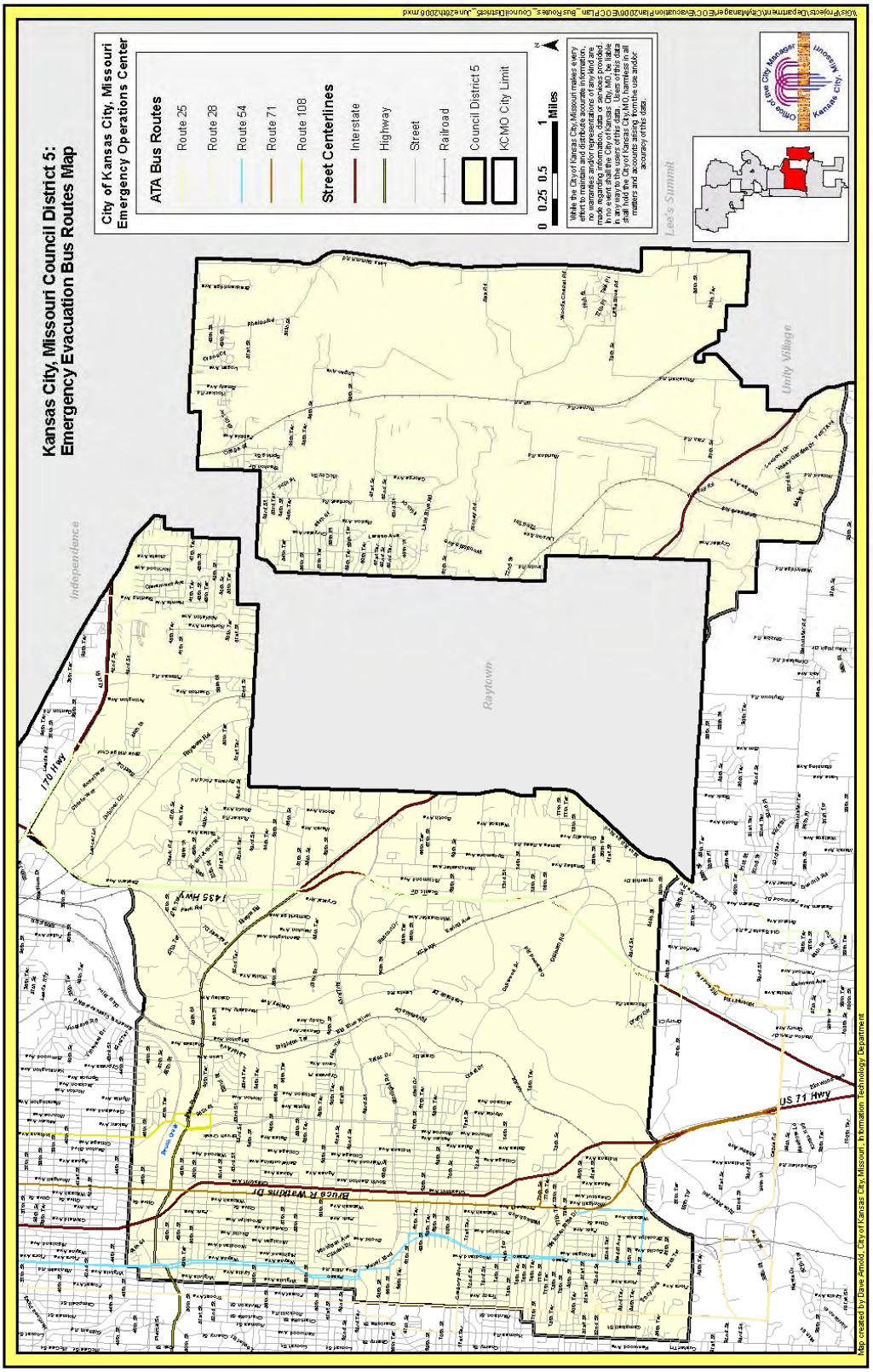
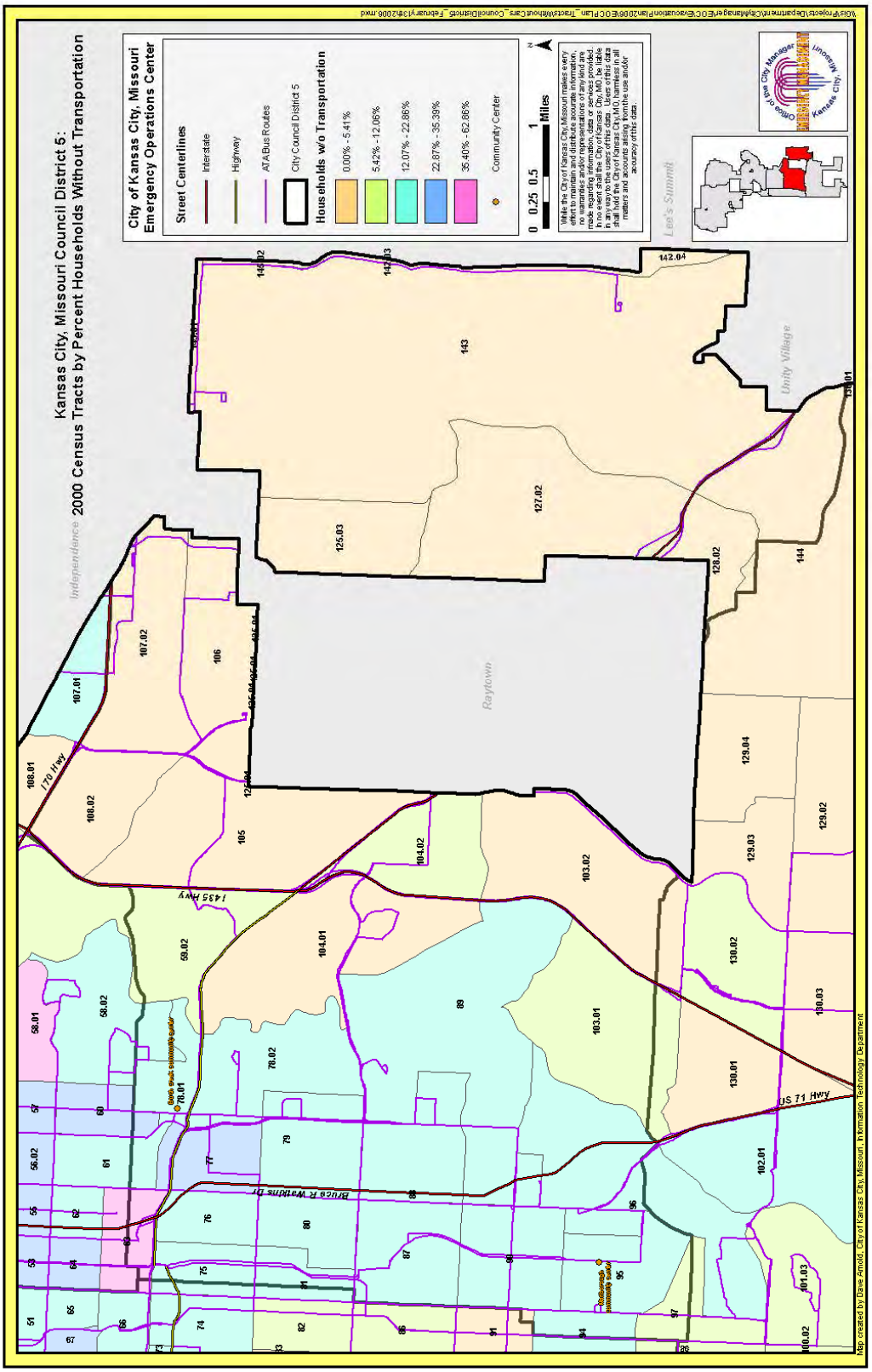
Tier II facilities data current as of August 2006.
Mission Hills
Prairie Village
Bruce R. Watkins Dr
Map created by Dave Arnold, City of Kansas City, Missouri, Information Technology Department

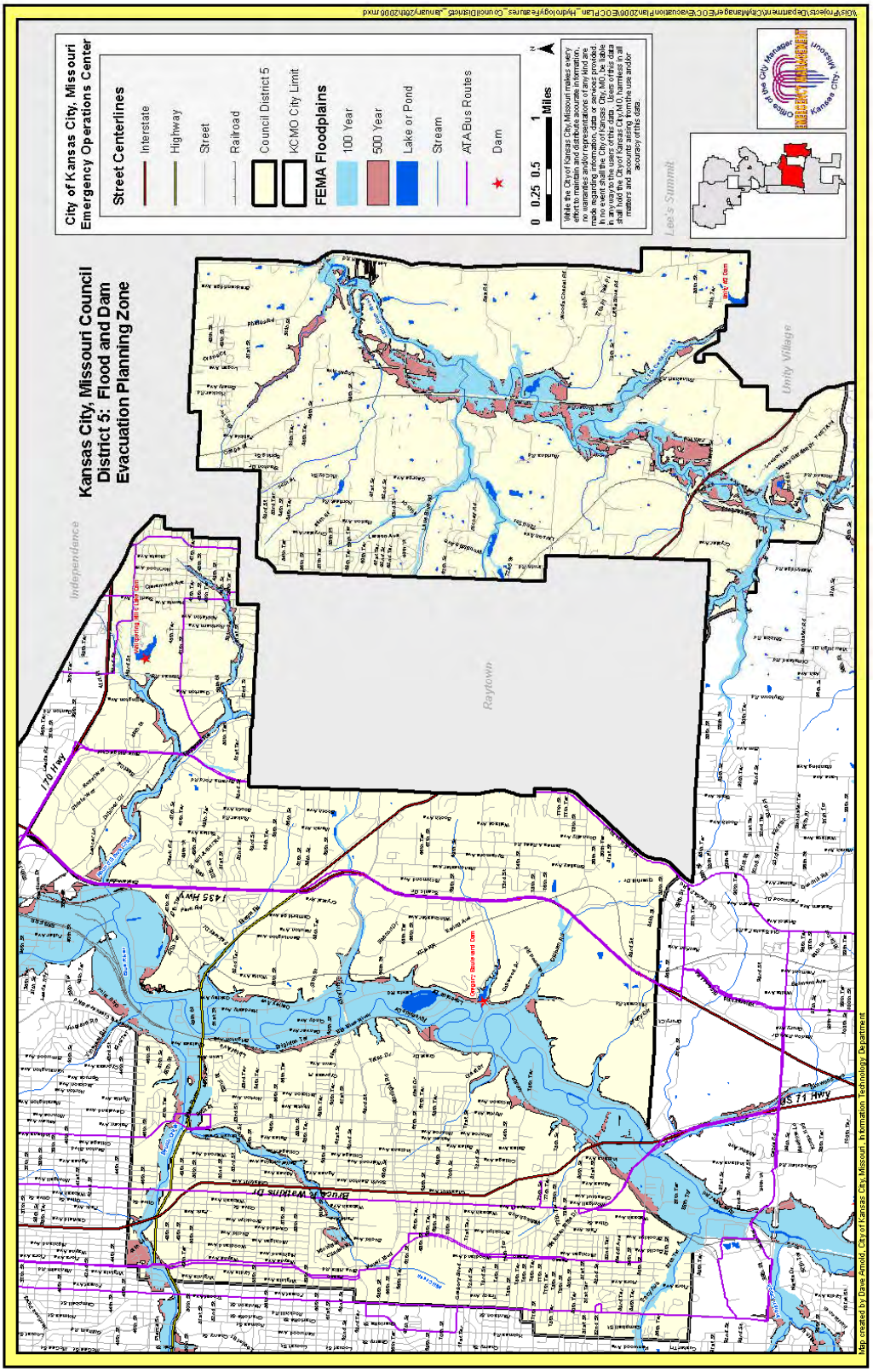
Council District 5

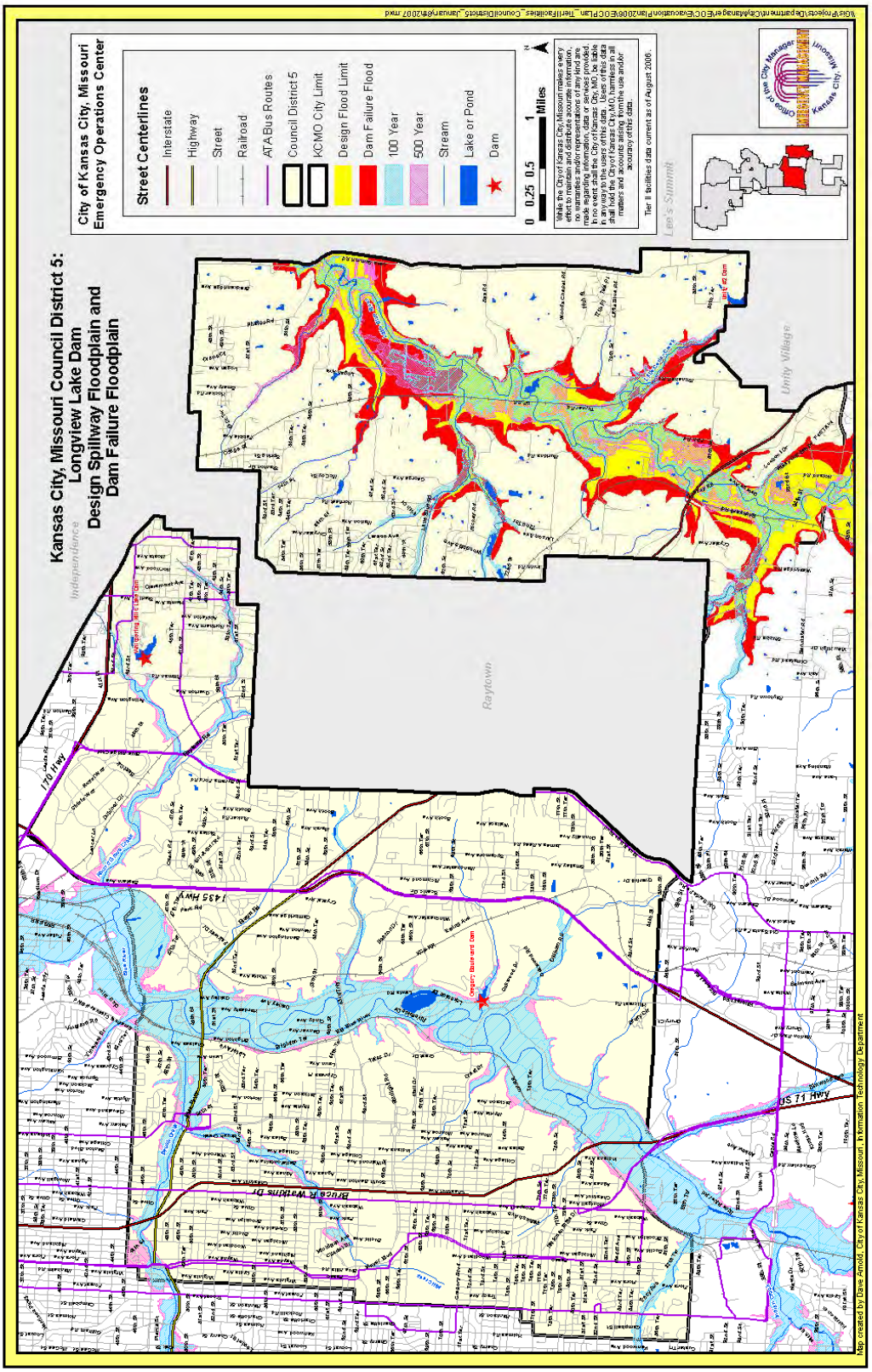
Council District 5 includes the area around the City of Raytown. It is bordered by I-70 on the north, 85th Street on the south, Troost Avenue on the west, and the City limit on the east. The district has several dams, and is at risk from flooding along the Blue River, Little Blue River, and several creeks (including Brush Creek). The district includes extensive highway and rail lines, including a small segment of I-70, and large segments of 71 Highway and 435. Thus, most of the district is within the 1 mile evacuation planning zone for rail, highway or both.

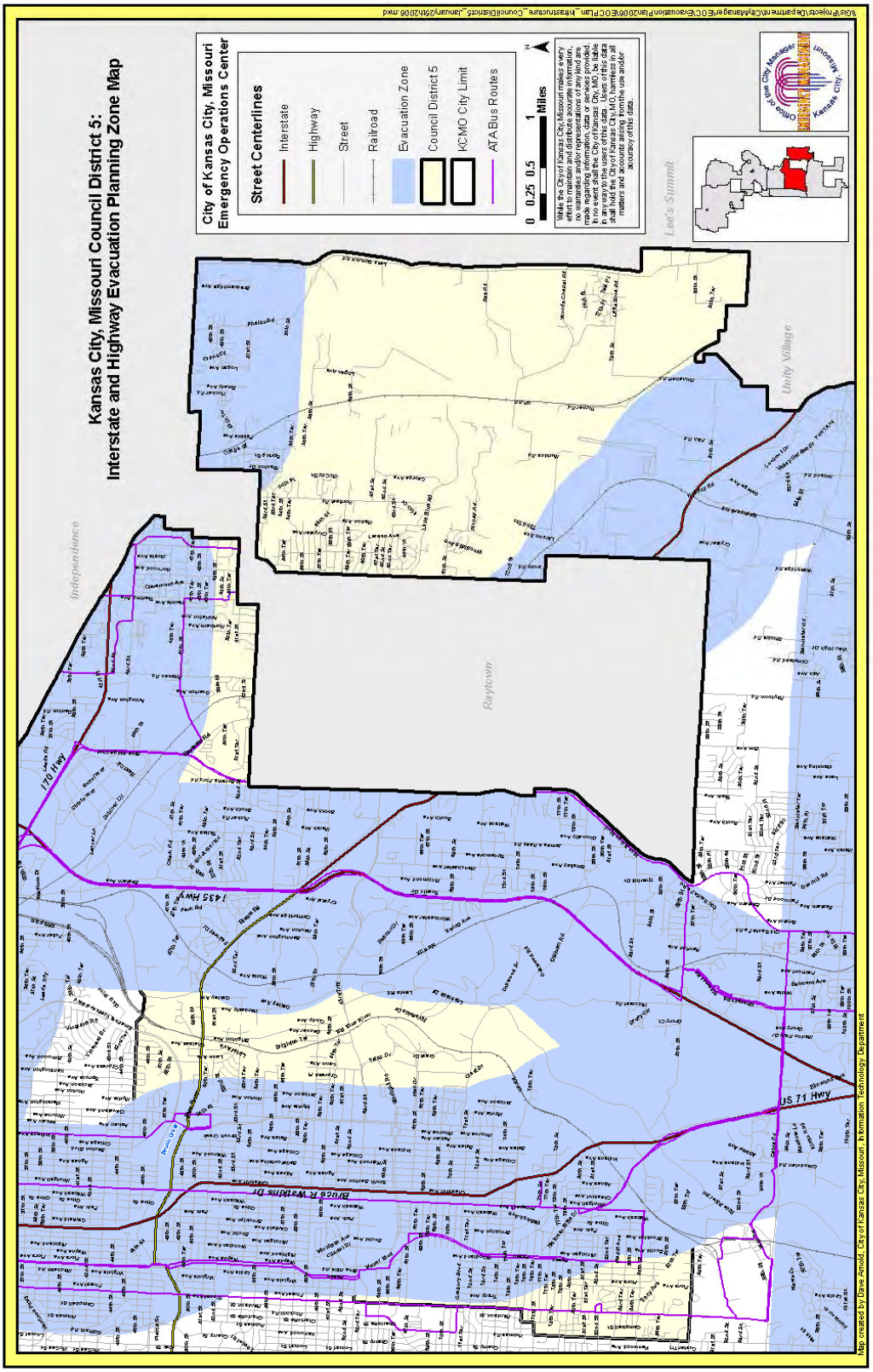
(MAPS FOLLOW)

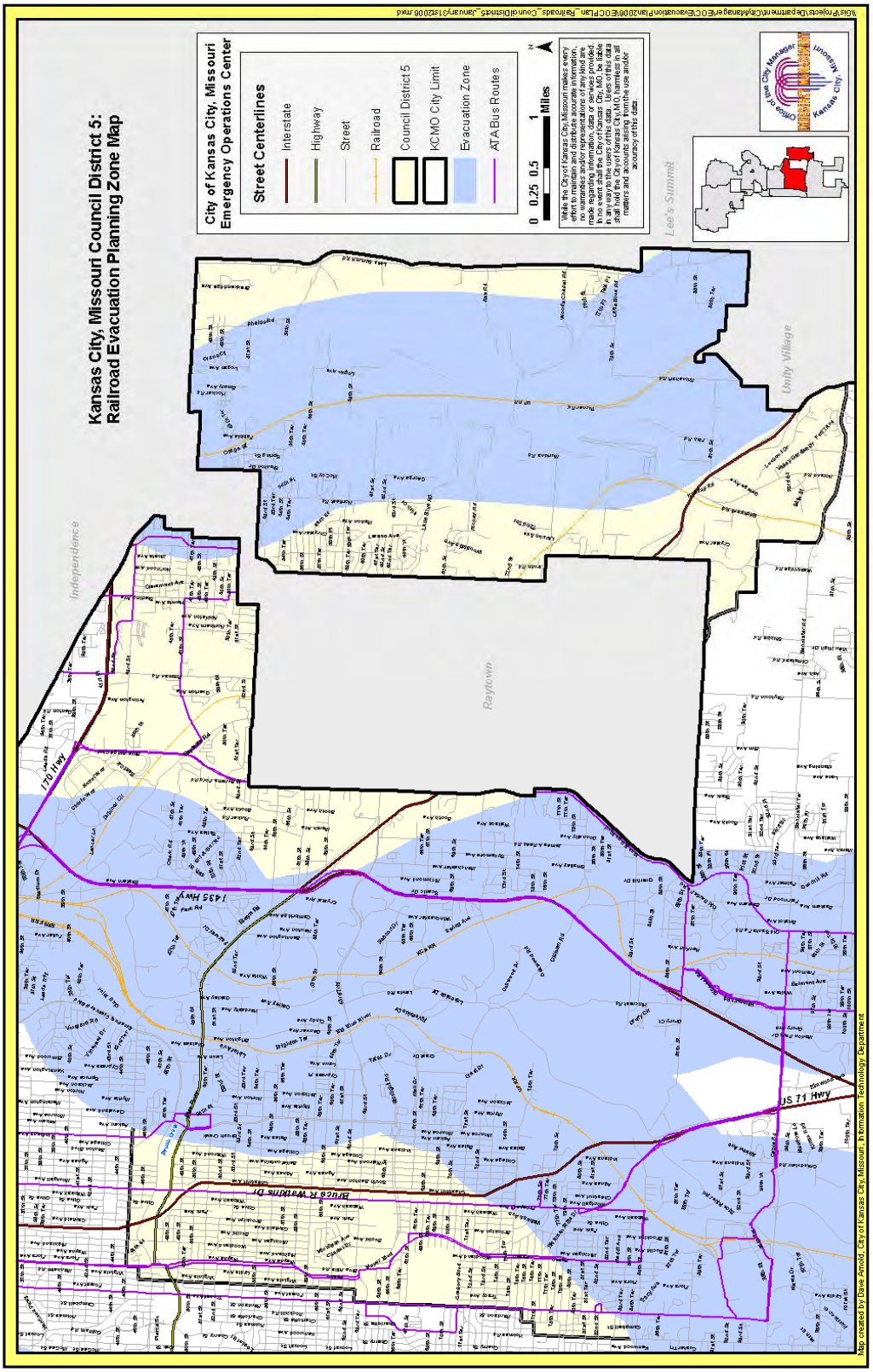

Kansas City, Missouri Council District 5:
Emergency Evacuation Bus Routes Map
City of Kansas City, Missouri
Emergency Operations Center
ATA Bus Routes
Route 25
Route 28
Route 54
Route 71
Route 108
Street Centerlines
Interstate
Highway
Street
Railroad
Council District 5
KCMO City Limit
0 0.25 0.5 1 Miles
N
Independence
Raytown
Unity Village
Lee's Summit
170 Hwy
435 Hwy
US 71 Hwy
Bruce R Watkins Dr
Map created by Dave Arnold, City of Kansas City, Missouri - Information Technology Department

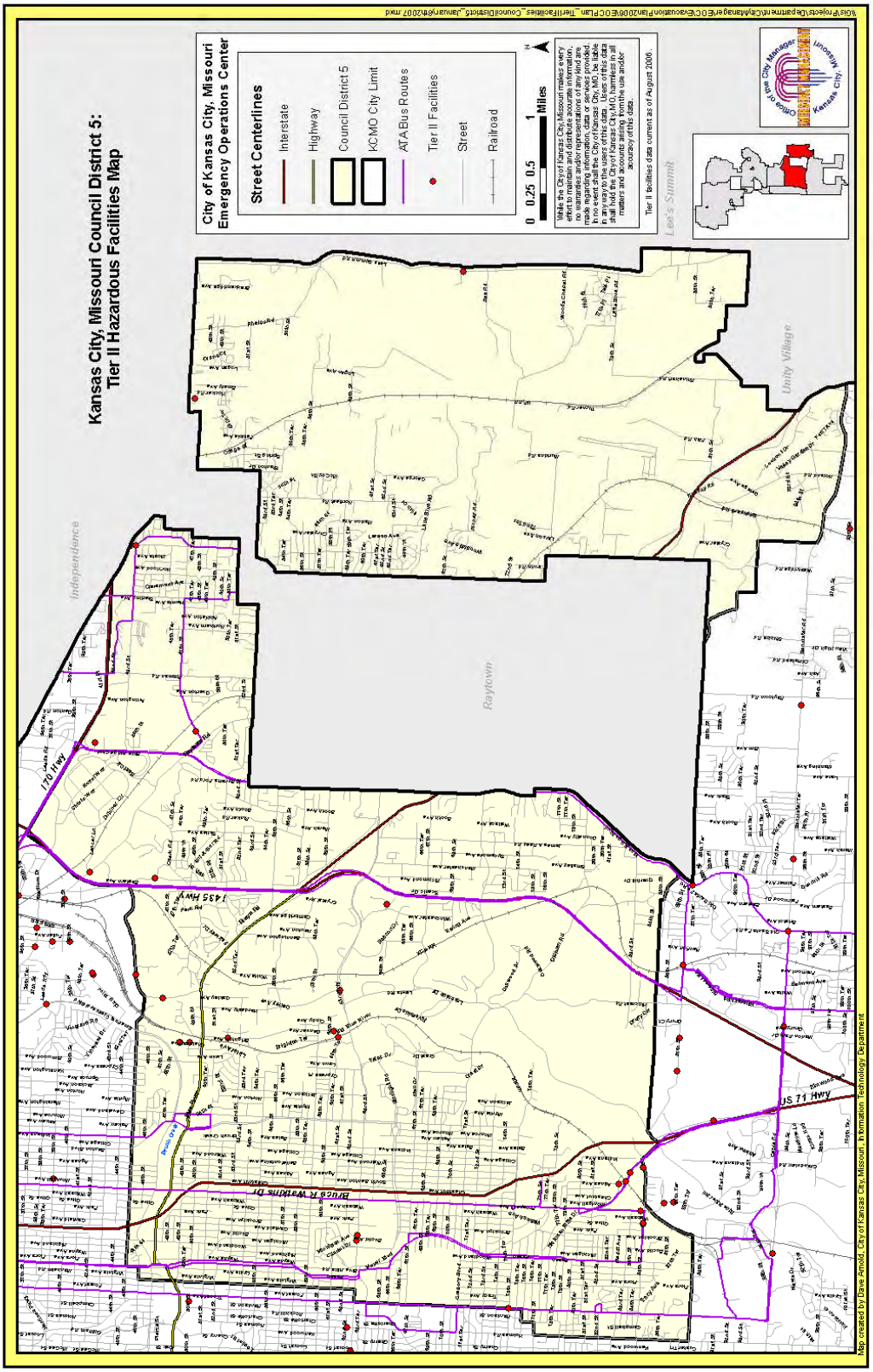

Kansas City, Missouri Council District 5:
2000 Census Tracts by Percent Households Without Transportation
City of Kansas City, Missouri
Emergency Operations Center
Street Centerlines
Interstate
Highway
ATA Bus Routes
City Council District 5
Households w/o Transportation
0.00% - 5.41%
5.42% - 12.06%
12.07% - 22.86%
22.87% - 35.39%
36.40% - 62.86%
Community Center
0 0.25 0.5 1 Miles
Office of the City Manager
Kansas City, Missouri
Independence
Raytown
Unity Village
Lee's Summit
170 Hwy
I-435 Hwy
Bruce R Watkins Dr
Map created by Dave Arnold, City of Kansas City, Missouri, Information Technology Department


City of Kansas City, Missouri
Emergency Operations Center
Street Centerlines
Interstate
Highway
Street
Railroad
Council District 5
KCMO City Limit
FEMA Floodplains
100 Year
500 Year
Lake or Pond
Stream
ATA Bus Routes
Dam
0 0.25 0.5 1 Miles
Kansas City, Missouri Council
District 5: Flood and Dam
Evacuation Planning Zone
Independance
Raytown
Unity Village
Lee's Summit
170 Hwy
435 Hwy
US 71 Hwy
Bruce R. Watkins Dr.
Map created by Dave Arnold, City of Kansas City, Mission Information Technology Department


Kansas City, Missouri Council District 5:
Longview Lake Dam
Design Spillway Floodplain and
Dam Failure Floodplain
City of Kansas City, Missouri
Emergency Operations Center
Street Centerlines
Interstate
Highway
Street
Railroad
AT'A Bus Routes
Council District 5
KCMO City Limit
Design Flood Limit
Dam Failure Flood
100 Year
500 Year
Stream
Lake or Pond
Dam
0 0.25 0.5 1 Miles
Tier II facilities data current as of August 2006.
Office of the City Manager
Kansas City, Missouri
Lee's Summit
Unity Village
Raytown
Independence
170 Hwy
I-435 Hwy
US 71 Hwy
Bruce R Watkins Dr
Map created by Dave Arnold, City of Kansas City, Missouri, Information Technology Department


Kansas City, Missouri Council District 5:
Interstate and Highway Evacuation Planning Zone Map
City of Kansas City, Missouri
Emergency Operations Center
Street Centerlines
Interstate
Highway
Street
Railroad
Evacuation Zone
Council District 5
KCMO City Limit
ATA Bus Routes
0 0.25 0.5 1 Miles
N
Office of the City Manager
Kansas City, Missouri
Lee's Summit
Unity Village
Independence
Raytown
170 Hwy
I-435 Hwy
US 71 Hwy
Bruce R Watkins Dr
Map created by Dave Arnold, City of Kansas City, Missouri - Information Technology Department

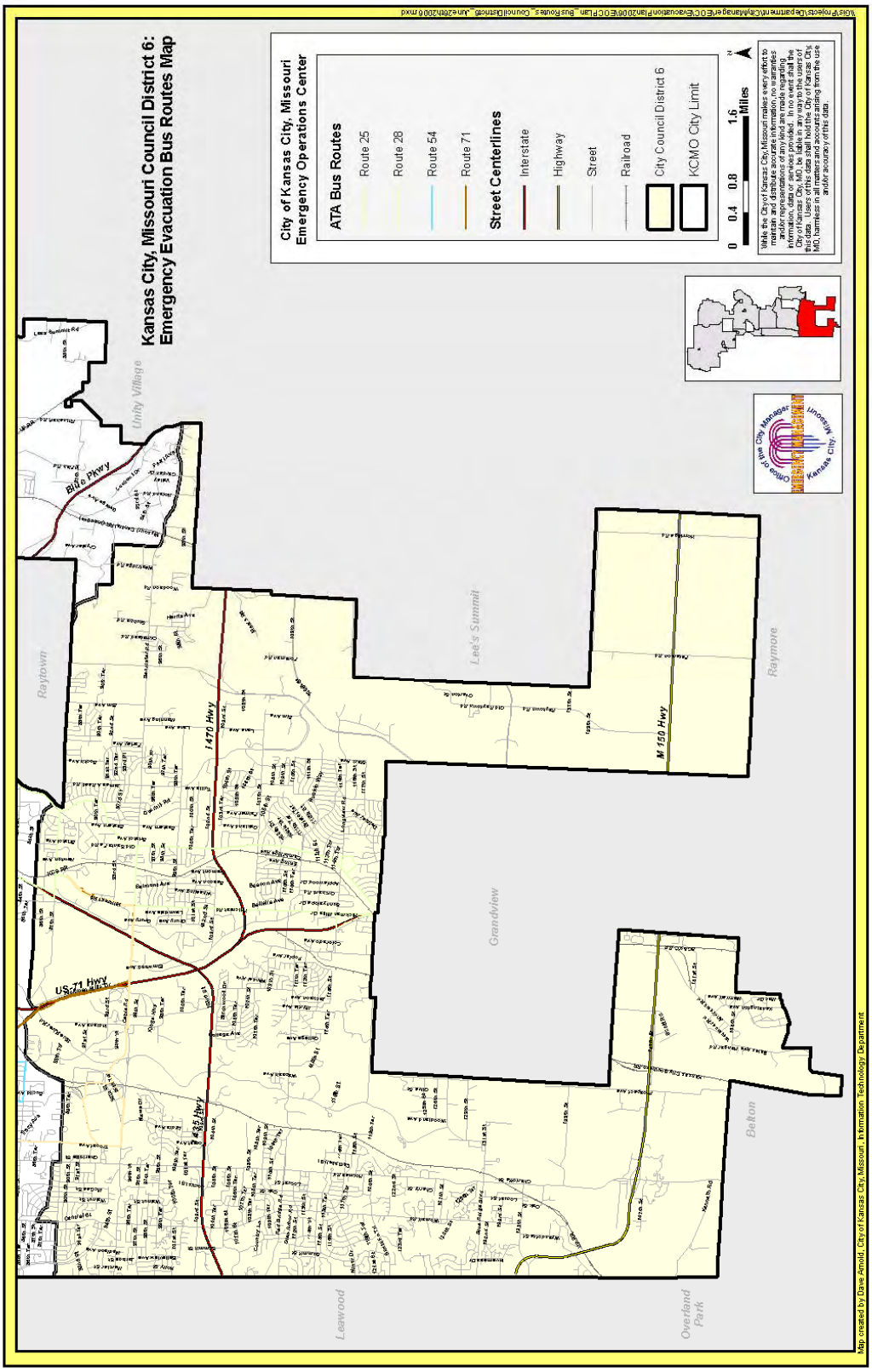

Kansas City, Missouri Council District 5:
Railroad Evacuation Planning Zone Map
City of Kansas City, Missouri
Emergency Operations Center
Street Centerlines
Interstate
Highway
Street
Railroad
Council District 5
KCMO City Limit
Evacuation Zone
ATA Bus Routes
0 0.25 0.5 1 Miles
Office of the City Manager
Kansas City, Missouri
Independence
Raytown
Unity Village
Lee's Summit
170 Hwy
I-435 Hwy
US 71 Hwy
Bruce R Watkins Dr
Map created by Dave Arnold, City of Kansas City, Missouri - Information Technology Department

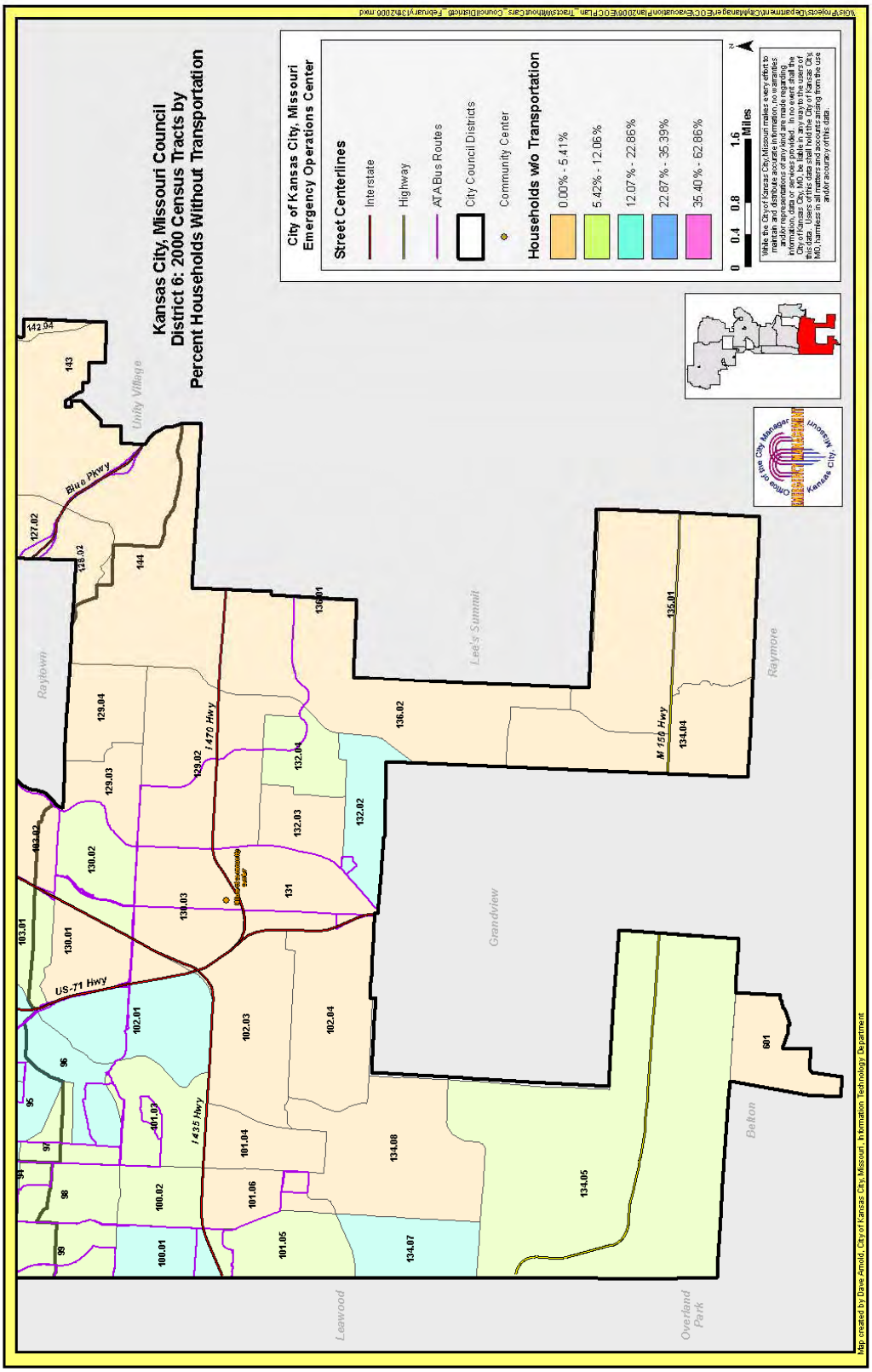

Kansas City, Missouri Council District 5:
Tier II Hazardous Facilities Map
City of Kansas City, Missouri
Emergency Operations Center
Street Centerlines
Interstate
Highway
Council District 5
KCMO City Limit
ATA Bus Routes
Tier II Facilities
Street
Railroad
0 0.25 0.5 1 Miles
N
Tier II facilities data current as of August 2006.
Independence
Raytown
Unity Village
Lee's Summit
170 Hwy
435 Hwy
US 71 Hwy
Bruce R Watkins Dr
Map created by Dave Arnold, City of Kansas City, Missouri - Information Technology Department

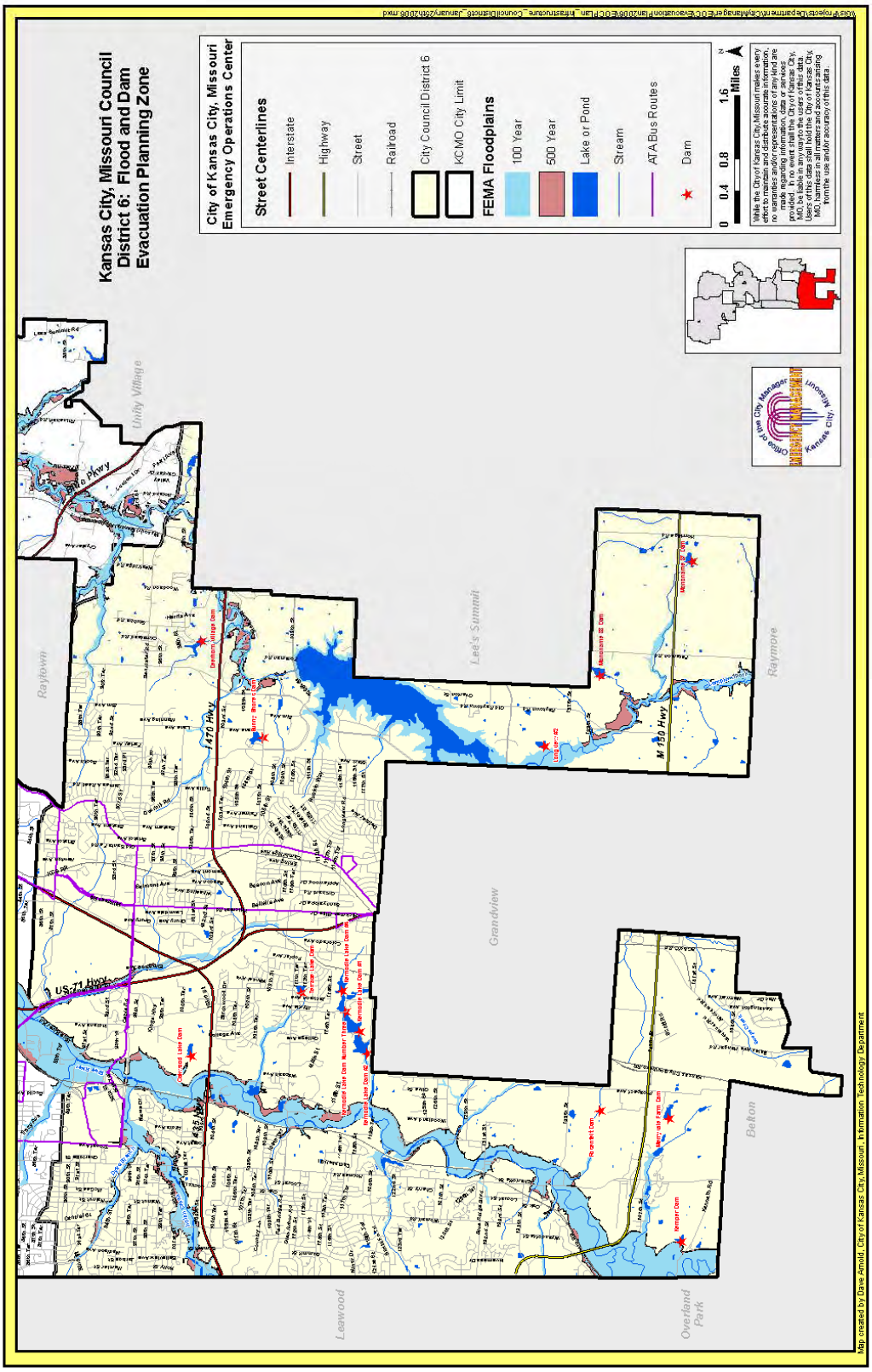
Council District 6

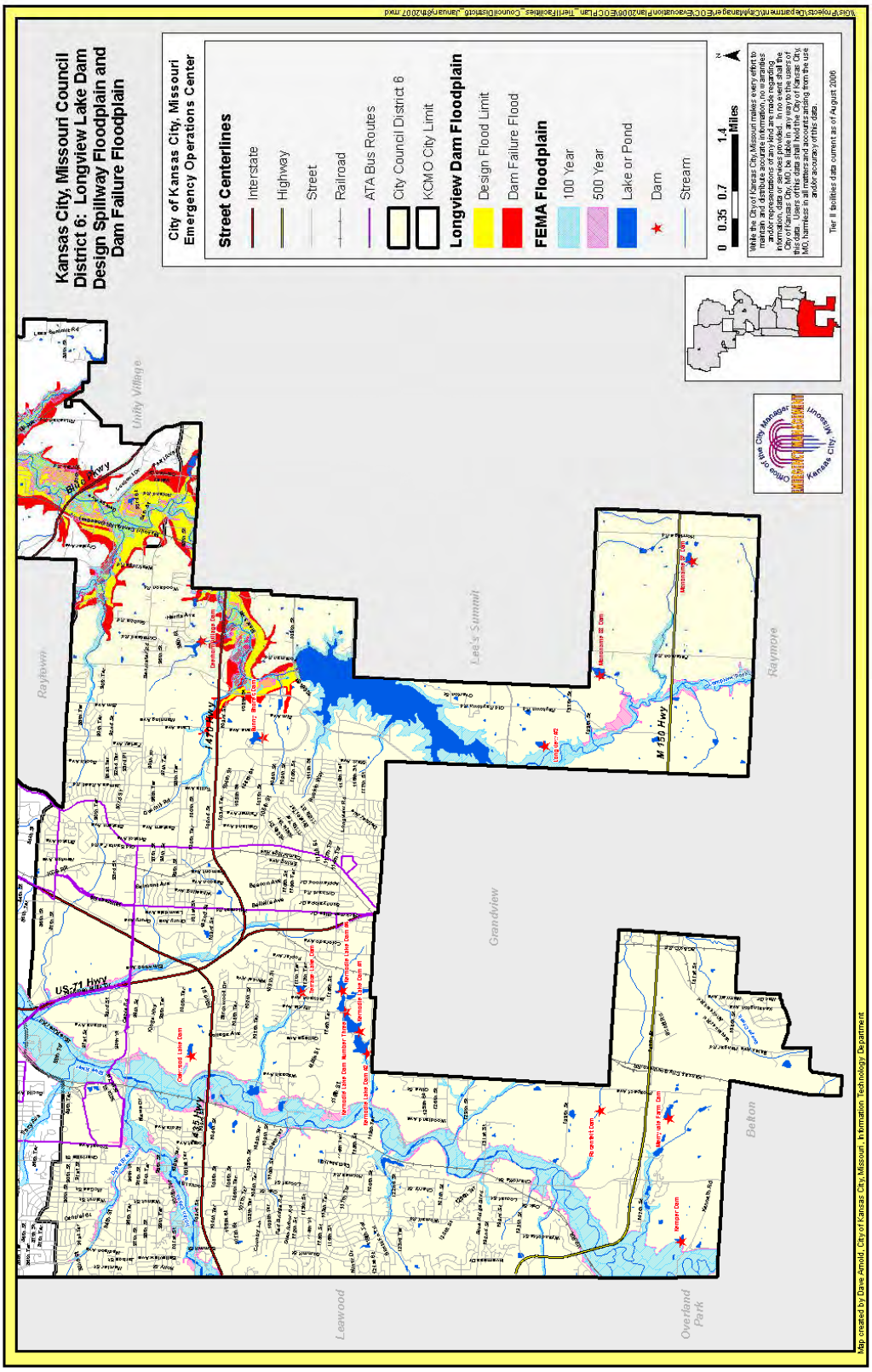
Council District 6 is an oddly shaped section of the southeast corner of the City. It is bounded by 89th Street and the City of Raytown on the north, and the City limits on the south, east and west sides. The district includes several significant dams, including Longview Lake. It also includes portions of the lower Blue River and Indian Creek. Both have flooded in the past. The district includes short segments of I-435, I-470, 71 Highway, and the Missouri 150 Highway. Additionally, two significant rail lines transect the center of the district along a north/south axis. Thus, most of the district is within the 1 mile evacuation planning zone for rail, highway or both.

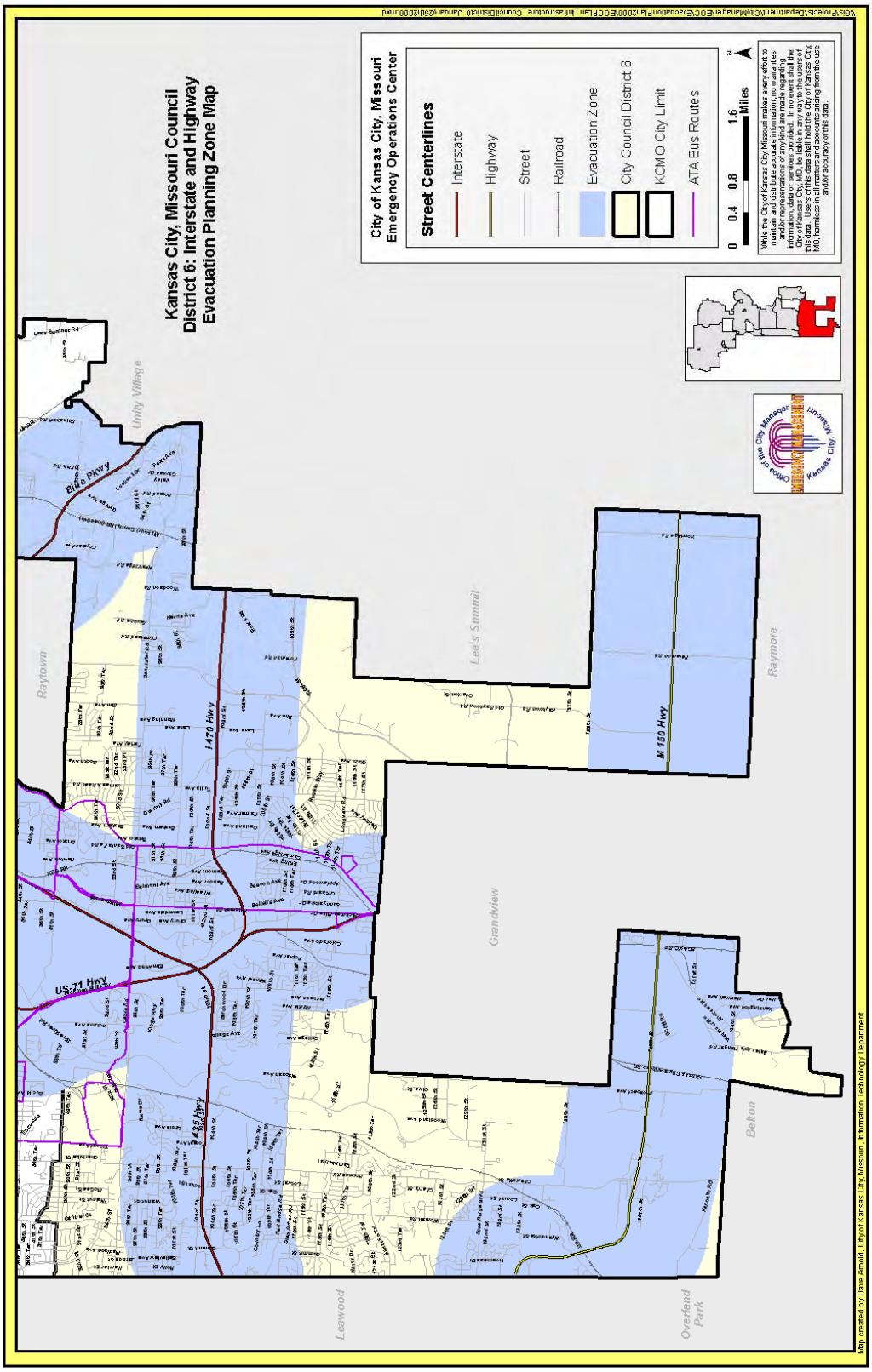
(MAPS FOLLOW)

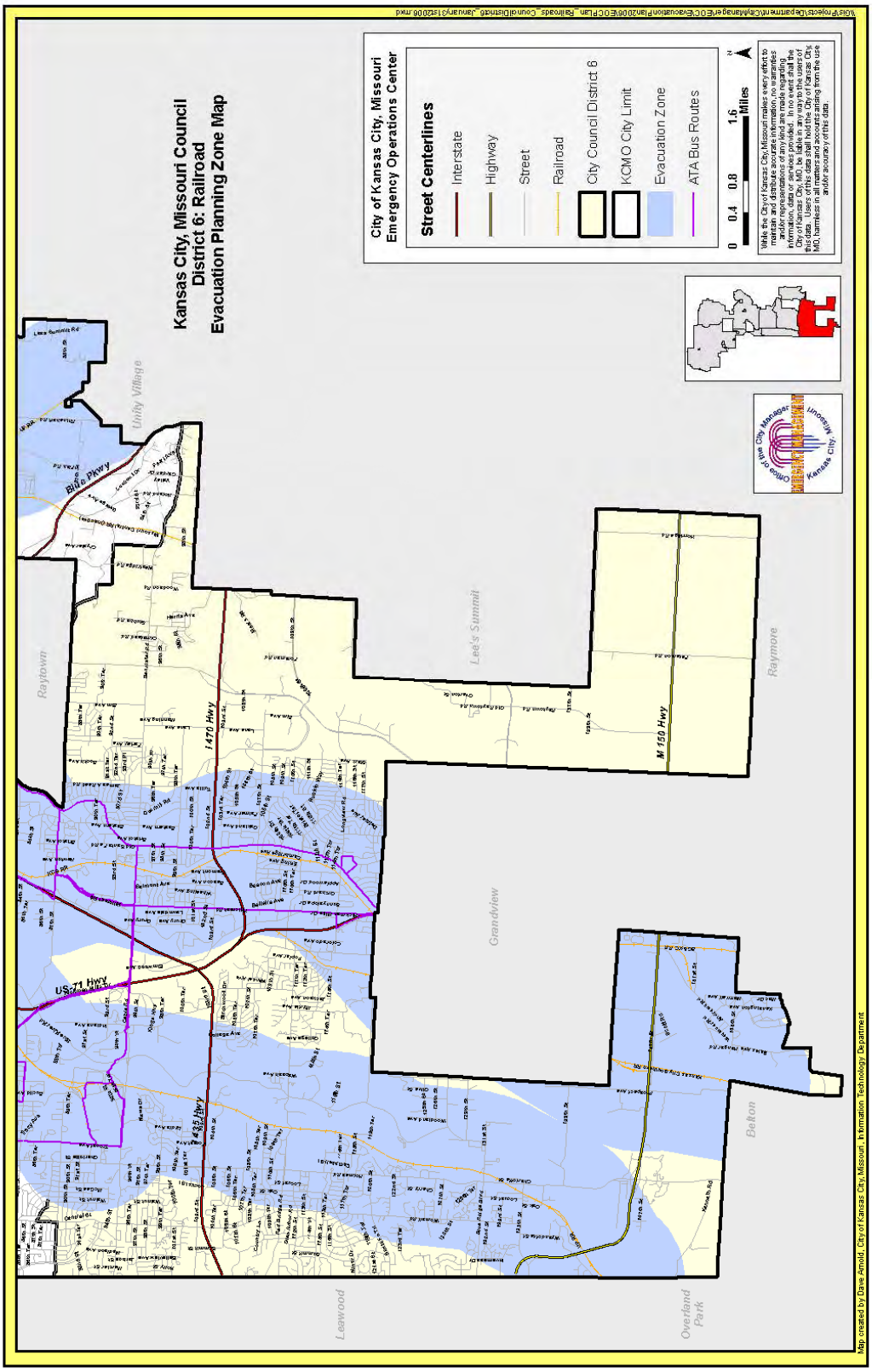

Kansas City, Missouri Council District 6:
Emergency Evacuation Bus Routes Map
City of Kansas City, Missouri
Emergency Operations Center
ATA Bus Routes
Route 25
Route 28
Route 54
Route 71
Street Centerlines
Interstate
Highway
Street
Railroad
City Council District 6
KCMO City Limit
0 0.4 0.8 1.6 Miles
N
Unity Village
Raytown
Lee's Summit
Raymore
Grandview
Belton
Leawood
Overland Park
Blue Pkwy
1470 Hwy
M 150 Hwy
US-71 Hwy
I-435 Hwy
Map created by Dave Arnold, City of Kansas City, Missouri, Information Technology Department

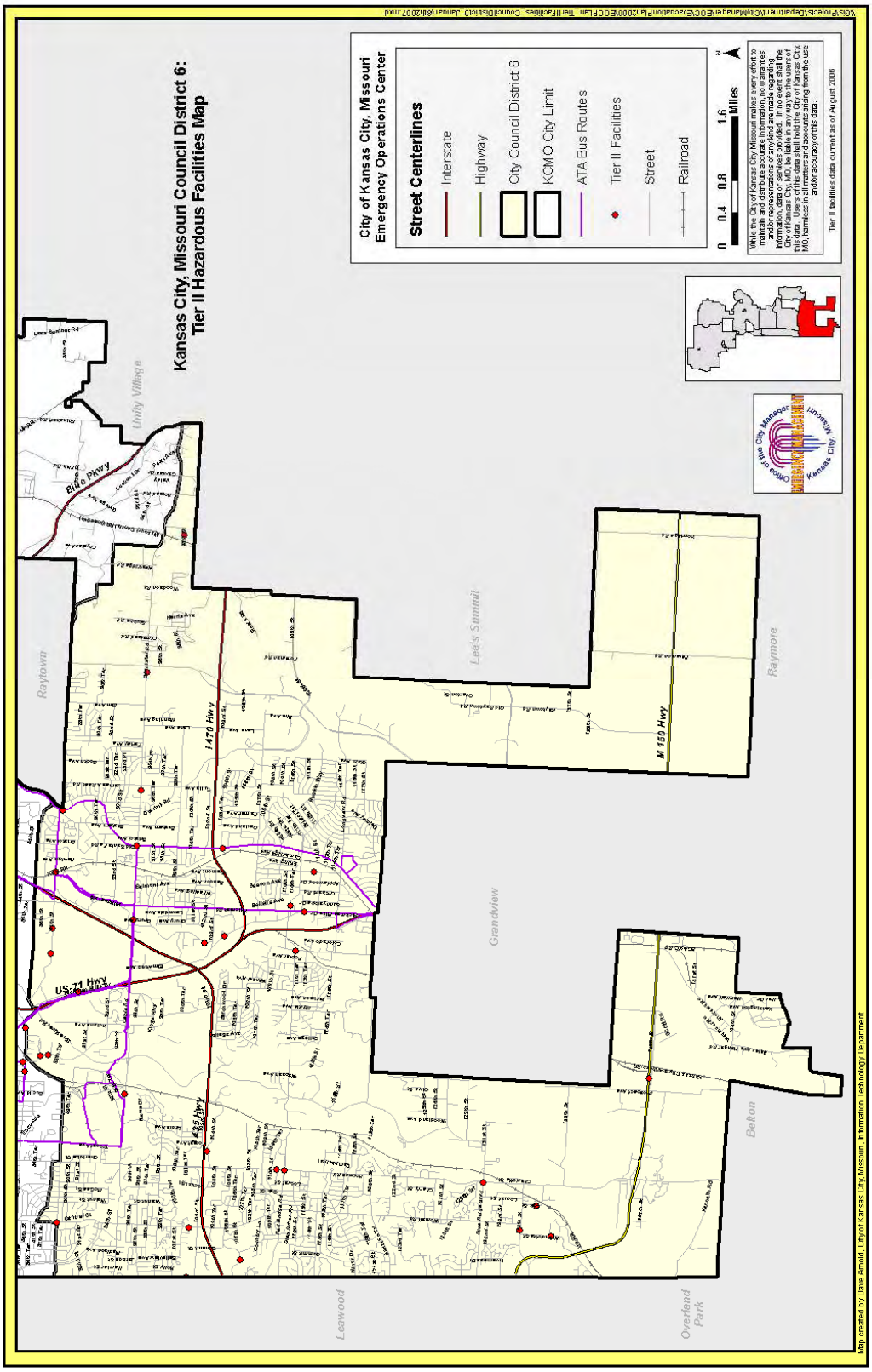

Kansas City, Missouri Council
District 6: 2000 Census Tracts by
Percent Households Without Transportation
City of Kansas City, Missouri
Emergency Operations Center
Street Centerlines
Interstate
Highway
ATA Bus Routes
City Council Districts
Community Center
Households w/o Transportation
0.00% - 5.41%
5.42% - 12.06%
12.07% - 22.86%
22.87% - 35.39%
35.40% - 62.86%
0 0.4 0.8 1.6
Miles
Unity Village
Raytown
Lee's Summit
Raymore
Grandview
Belton
Leawood
Overland Park
Blue Pkwy
US-71 Hwy
I-470 Hwy
I-435 Hwy
M-150 Hwy
Map created by Dave Arnold, City of Kansas City, Missouri, Information Technology Department


Kansas City, Missouri Council
District 6: Flood and Dam
Evacuation Planning Zone
City of Kansas City, Missouri
Emergency Operations Center
Street Centerlines
Interstate
Highway
Street
Railroad
City Council District 6
KCMO City Limit
FEMA Floodplains
100 Year
500 Year
Lake or Pond
Stream
ATA Bus Routes
Dam
0 0.4 0.8 1.6 Miles
Unity Village
Raytown
Lee's Summit
Raymore
Grandview
Belton
Leawood
Overland Park
I-470 Hwy
M-150 Hwy
US-71 Hwy
Map created by Dave Arnold, City of Kansas City, Missouri, Information Technology Department


Kansas City, Missouri Council District 6: Longview Lake Dam Design Spillway Floodplain and Dam Failure Floodplain
City of Kansas City, Missouri Emergency Operations Center
Street Centerlines
Interstate
Highway
Street
Railroad
ATA Bus Routes
City Council District 6
KCMO City Limit
Longview Dam Floodplain
Design Flood Limit
Dam Failure Flood
FEMA Floodplain
100 Year
500 Year
Lake or Pond
Dam
Stream
0 0.35 0.7 1.4 Miles
Unity Village
Raytown
Lee's Summit
Raymore
Grandview
Belton
Leawood
Overland Park
M 150 Hwy
US-71 Hwy
Map created by Dave Arnold, City of Kansas City, Missouri, Information Technology Department


Kansas City, Missouri Council
District 6: Interstate and Highway
Evacuation Planning Zone Map
City of Kansas City, Missouri
Emergency Operations Center
Street Centerlines
Interstate
Highway
Street
Railroad
Evacuation Zone
City Council District 6
KCMO City Limit
ATA Bus Routes
0 0.4 0.8 1.6 Miles
Unity Village
Raytown
Lee's Summit
Raymore
Grandview
Belton
Leawood
Overland Park
Blue Pkwy
1470 Hwy
M 150 Hwy
US-71 Hwy
I-435 Hwy
Map created by Dave Arnold, City of Kansas City, Missouri, Information Technology Department


Kansas City, Missouri Council
District 6: Railroad
Evacuation Planning Zone Map
City of Kansas City, Missouri
Emergency Operations Center
Street Centerlines
Interstate
Highway
Street
Railroad
City Council District 6
KCMO City Limit
Evacuation Zone
ATA Bus Routes
0 0.4 0.8 1.6 Miles
Unity Village
Raytown
Lee's Summit
Raymore
Grandview
Belton
Leawood
Overland Park
Blue Pkwy
I-470 Hwy
M 150 Hwy
US-71 Hwy
I-435 Hwy
Map created by Dave Arnold, City of Kansas City, Missouri, Information Technology Department


Kansas City, Missouri Council District 6:
Tier II Hazardous Facilities Map
City of Kansas City, Missouri
Emergency Operations Center
Street Centerlines
Interstate
Highway
City Council District 6
KCMO City Limit
ATA Bus Routes
Tier II Facilities
Street
Railroad
0 0.4 0.8 1.6 Miles
Tier II facilities data current as of August 2006
Unity Village
Blue Pkwy
Raytown
Lee's Summit
Raymore
I-470 Hwy
M 150 Hwy
US-71 Hwy
I-435 Hwy
Grandview
Belton
Leawood
Overland Park
Map created by Dave Arnold, City of Kansas City, Missouri, Information Technology Department

ATTACHMENT E

Evacuation Assembly Points

NOTE: EAP SITE INFORMATION IS NOT FOR PUBLIC RELEASE PRIOR TO EVACUATION OPERATIONS!

Evacuation Assembly Points are pre-designated locations where the public can assemble to be transported to a shelter. These points are located on or near an ATA bus route, and are intended to provide temporary and minimal protection from the elements while additional transportation resources are activated to take them to a shelter. Signed Memorandums of Understanding (MOU) with each location are kept on file in the EOC.

The Logistics Section Chief will utilize existing Evacuation Assembly Points or will designated others as necessary to provide a safe, temporary location for people to assemble before being transported to a shelter.

Evacuation Assembly Points (as of July, 2006) include:

THIS INFORMATION NOT PROVIDED IN THIS VERSION

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ATTACHMENT F

Intergovernmental Agreements and Memoranda of Understanding

The City of Kansas City has entered into various agreements to provide shelter for its citizens in the event of a catastrophic disaster; to create Evacuation Assembly Points to aid with the transfer of evacuees, and others.

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