



City of Bloomington  
Common Council

Legislative Packet

Regular Session  
and  
Committee of the Whole Discussion

19 July 2006

Office of the Common Council  
P.O. Box 100  
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Bloomington, Indiana 47402

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## Packet Related Material

### Memo Agenda Calendar

### Notices and Agendas:

None

### Legislation for Final Action at the Regular Session on July 19<sup>th</sup>:

#### Res 06-07 Recognizing the Peak of World Petroleum Production

- Memo from Councilmember Rollo; Executive Summary from *Peaking of World Oil Production: Impacts, Mitigation and Risk Management* (prepared as account of work sponsored by the United States Department of Energy) (**Hirsch Report**); Executive Summary from *Energy Trends and Their Implications for U.S. Army Installations* (prepared for the U.S. Army Corps of Engineers) (**Army Report**)

Contact: Dave Rollo at 349-3409 or [rollod@bloomington.in.gov](mailto:rollod@bloomington.in.gov)

### Legislation and Background Material for Introduction at the Regular Session and Discussion at the Committee of the Whole – Both to be Held on July 19<sup>th</sup>:

#### App Ord 06-03 To Specially Appropriate from the General Fund Expenditures Not Otherwise Appropriated (Appropriating Funds from the General Fund for Grants Awarded to the Fire Department)

- Memo from Susan Clark, Controller

Contact: Susan Clark at 349-3416 or [clarks@bloomington.in.gov](mailto:clarks@bloomington.in.gov)

#### Ord 06-12 To Amend Title 15 Of The Bloomington Municipal Code Entitled “Vehicles And Traffic” – Re: Expanding the Elm Heights Proximate Residential Neighborhood Permit Parking Zone (Zone 1)

- Memo from Justin Wykoff, Manager of Engineering Services; Map of Changes

Contact: Justin Wykoff at 349-3593 or [wykoffj@bloomington.in.gov](mailto:wykoffj@bloomington.in.gov)

### Legislation and Background Material for Final Action at a Special Session Proposed for July 25<sup>th</sup>:

#### Res 06-08 To Authorize and Approve the Execution of a Collective Bargaining Agreement Between the City of Bloomington and the Fraternal Order Of Police

- Memo from Kevin Robling, Corporation Counsel (*forthcoming*);  
Collective Bargaining Agreement

Contact: Kevin Robling, Corporation Counsel, at 349-3426 or  
[roblingk@city.bloomington.in.gov](mailto:roblingk@city.bloomington.in.gov)

**Minutes from Regular Session:**

*None*

**Memo**

**Chair of Committee of the Whole Meeting: Mayer**

**Regular Session Followed by Committee of the Whole on July 19<sup>th</sup>  
Special Session Requested to Approve FOP Contract on July 25<sup>th</sup>**

There is a Regular Session immediately followed by a Committee of the Whole next Wednesday. During the Regular Session you are scheduled to take final action on **Res 06-07** (Peak Oil) and introduce **App Ord 06-03** (Grant for Fire Department Equipment) and **Ord 06-12** (Expanding the Elm Heights Residential Parking Zone). Then you will adjourn and reconvene for the Committee of the Whole where the above ordinances will be discussed.

This packet includes these three items in addition to **Res 06-08**, which approves a four-year Collective Bargaining Agreement with the Fraternal Order of Police. Please note that there is a request to take final action on this resolution at a Special Session on Tuesday, July 25<sup>th</sup>, immediately before considering the budget for the Police Department. The Annual Schedule mentions but does not establish a Special Session on that day, and for that reason, the Council will need to vote on it next Wednesday in order to meet for a Special Session the following Tuesday.

**Item Ready for Final Action at July 19<sup>th</sup> Regular Session**

**Res 06-07 - Recognizing the Peak of World Petroleum Production**

**Res 06-07** is sponsored by Councilmember Rollo and documents the phenomenon of peak oil and recognizes that global petroleum production may soon peak.

According to the *Resolution*:

- petroleum accounts for approximately forty percent of the United States' energy consumption and over ninety percent of its liquid fuel needs for transportation;

- most industrialized, non-OPEC countries have peaked in their production of oil;
- reserve accounting in OPEC nations is unreliable and therefore, some OPEC nations may have also reached peak production;
- world demand is outpacing production;
- geologists, energy analysts and other scientists warn that global production of oil may be nearing the half-way mark, or “peak”;
- oil is key to domestic transportation, agricultural, chemical and plastic industries;
- no known substitute matches petroleum’s portability, energy density and energy return on energy investment;
- a petroleum shortage would devastate many industries and economies;
- mitigation efforts must occur 15-20 years in advance of a peak to compensate for increasing scarcity.

Based on those propositions, the *Resolution*:

- calls for immediate action to mitigate a decline in oil reserves;
- supports the adoption of a global depletion protocol (The Oil Depletion Protocol -- formerly known as the Rimini Protocol – can be found at <http://www.oildepletionprotocol.org/theprotocol>);
- accepts that the City must prepare for the inevitability of peak oil; and
- directs the City Clerk send the *Resolution* to the Indiana Congressional Delegation, the Governor, and all the members of the Indiana Statehouse, urging them to take action to mitigate the effects of the peak and to prepare for its consequences.

In support of the *Resolution*, Councilmember Rollo points to two government-commissioned studies: *Energy Trends and Their Implications for U.S Army Installations* (the “Army Report”) (prepared for the U.S. Army Corps of Engineers), Eileen Westervelt and Fournier, Donald (2005) and *Peaking of World Oil Production: Impacts, Mitigation and Risk Management* (the “Hirsch Report”) (prepared as account of work sponsored by the United States Department of Energy), Robert L. Hirsch and Bezdek, Roger (2005). Both studies point to the immanent nature of a global peak and the need to aggressively mitigate the impact of such petroleum production shortage.

## The Phenomenon of Peak Oil

It is widely-acknowledged that because oil is a finite resource, world oil production will reach a maximum – a peak – after which production will decline. (Hirsch, p. 11) The United States reached maximum oil production in 1970 and global petroleum production is nearing its peak (*see* both Army and Hirsch Reports). As the Hirsch Report points out, oil reservoirs have lifetimes measured in decades and peak production often occurs approximately ten years after discovery. The largest reserves are called, “Super Giants,” the last of which was discovered in 1967. *Id.*

While it is widely-agreed that petroleum production will peak; scientists disagree when the peak will occur. Some locate the peak in the next decade while others place it in 2025 or later (Hirsch, p. 25). The Hirsch Report explains that:

Projections of future world oil production will be the sum total of:

- 1) output from the entire world’s then existing producing oil reservoirs, which will be in various stages of development, and
- 2) all the yet-to-be discovered reservoirs in their various states of development. This is an extremely complex summation problem, because of the variability and possible biases in publicly available data. (p. 17).

Of the twelve studies cited by Hirsch, nine locate the world peak within the next ten years, one locates the peak in 2020 (CERA), one in 2025 or later (Shell), and one economist estimates no visible peak.

As production peaks, consumption of petroleum is expected to grow. World-wide consumption of energy is projected to increase 60 percent by 2030 and may triple by 2050 (Army Report, p. iii). After oil production peaks, production will steadily decline. This presents the world with an unprecedented problem. The Hirsch Report points out, “[a]s peaking is approached, liquid fuel prices and price volatility will increase dramatically, and, without timely mitigation, the economic, social, and political costs will be unprecedented.” (p.4) Indeed, the U.S. and other industrialized countries rely on petroleum as a key component in transportation, agricultural, chemical and plastics industries. As pointed out in the Hirsch Report, a decline in production will reshape the way we live and trigger economic crisis that may resemble the economic crisis following the 1973-1974 embargo (p. 27). Hirsch estimates that the economic loss to the U.S. could be measured on a trillion dollar scale. *Id.* And unlike other energy transitions -- such as the move from

wood to coal, or from coal to oil -- Hirsch points out that the peaking of oil “will be abrupt and revolutionary.”

### Mitigation

To avoid protracted economic hardship, both the Army and Hirsh studies call for steps to help mitigate the shortage. Hirsch points out that any prudent mitigation strategy should be implemented 15-20 years before peak to bring substitutes online to compensate for the expected decline in the rate of production of 2-3% per year. However, because the precise date of the peak is unknown, mitigation presents a classic risk management problem: If peaking is long delayed, mitigation initiated earlier than required may turn out to be premature; on the other hand, if peaking is imminent, failure to mitigate in a timely manner could occasion great damage. Indeed, waiting until production peaks could leave the world in a liquid fuel deficit for more than twenty years (Hirsch, p. 65). Hirsh concludes that “[e]arly mitigation will almost certainly be less expensive than delayed mitigation.” (p.6)

Both the Army and the Hirsh Reports outline mitigation opportunities. The Army Report calls for energy options that satisfy issues of availability, affordability, sustainability and security and concludes that petroleum satisfies none these criteria. The Report reviews the following non-oil energy sources.

- 1) Natural gas – “Domestic production of both oil and natural gas have passed their peak. Almost half of the existing U.S. natural gas reserves are considered to be either remote or stranded....Construction of an Alaskan natural gas pipe-line and the importation of Liquefied Natural Gas (LNG) are possible solutions.” However, the necessary production and distribution infrastructure will take years to construct. (p. iii)
- 2) Electricity – Domestic electrical grids are gentrifying and overtaxed; appropriate investments should be made once regulation and deregulation issues are settled. (p. viii)
- 3) Coal -- Current research suggests that “deploying polygeneration techniques with carbon sequestration on a large scale may potentially allow the United States to use the nation’s coal reserves in an environmentally friendly way to meet both liquid fuel and electricity requirements. However, carbon sequestration techniques must be well thought-out to avoid unintended ecosystems consequences such as unexpected large releases of carbon into the environment.” (p. vii) Coal supplies may last until the next century depending on technology and consumption trends. (p. xi)

- 4) Nuclear power – The Report makes clear that developing a breeder reactor program and closing the fuel cycle “could offer true energy independence, but at the cost of increased environmental and security risks. It remains to be seen if this is a viable solution from both political and ecological perspectives.” (p. vii)
- 5) Renewable energy – “Renewable energy technologies will certainly be a growing part of the energy mix and will penetrate faster and further than conventional energy advocates think. Early adoption to promote this market and these technologies is inherently in the Army’s interest. From an economic perspective, the cost of renewable technologies continues to fall while the cost of conventional energy sources continues to rise.” (p. viii)

The Army Report concludes that the best options for meeting future energy requirements are energy efficiency and renewable sources. Energy efficiency ensures the greatest benefit from every Btu used and involved optimizing operation and controls to minimize waste and implementing state-of-the-art technology. The Report projects efficiency measures would save the Army “30 percent of current and future consumption.” (p. xi-xii) The Army Report points out that renewable energy options, such as solar, wind, geothermal, geoexchange, hydrology, tidal movements, agricultural products and municipal wastes are available, sustainable and secure options. “The affordability of renewable technologies is improving steadily and if the market is pulled by large Army application the cost reductions could be dramatic.” (p. xii).

Similarly, the Hirsh Report outlines steps for mitigation that include commercial options for increasing world oil supply and for the production of substitute liquid fuels. These strategies include: 1) Improved Oil Recovery (IOR) – a technique that can marginally increase production from existing reservoirs; 2) heavy oil/oil sands – lower-grade oils primarily produced in Canada and Venezuela; 3) coal liquefaction; 4) remotely-located natural gas may be a clean substitute fuel, but must compete with world demand for liquefied gas. (Hirsh Report, p.4)

**Items Ready for Introduction at the Regular Session and Discussion at the Committee of the Whole – Both to be Held on July 19<sup>th</sup>**

**Item One - App Ord 06-03 – Appropriating \$93,000 from the General Fund for Equipment in the Fire Department that will be Reimbursed through Grants**

**App Ord 06-03** appropriates \$93,000 from the General Fund for equipment in the Fire Department that will be reimbursed through grants. According to the memo

from Susan Clark, Controller, the Federal Emergency Management Administration has provided a \$65,100 grant and the Community Foundation has agreed to donate the \$27,900 in local matching funds (30%). The money will be used to acquire about 15 sets of Self Contained Breathing Apparatus (ACBA) equipment (e.g. breathing apparatus, tanks, rapid intervention air packs, and face pieces), which will bring the total number of sets for the department to 51.

**Item Two - Ord 06-12 – Amending Title 15 (Vehicles and Traffic) in Order to Expand the Elm Heights Residential Permit Parking Zone (Zone 1)**

**Ord 06-12** brings forward a recommendation of the Traffic Commission at its June 28<sup>th</sup> meeting to amend Chapter 15.37.020 of the BMC to expand the Elm Heights Neighborhood Permit Parking Zone (Zone 1) south along Ballantine Road and Highland Avenue. Please see the memo and map provided by Justin Wykoff, Manager of Engineering Services regarding this proposal.

The Elm Heights Neighborhood Proximate Permit Parking Zone was established as the City's first neighborhood parking zone in 1992 in response to persons attending and working at the university who chose to park there and walk to campus. At that time, its boundaries were Third Street on the north, Jordan on the west, Maxwell Lane on the south, and Henderson on the west. Since then it has been extended south a quarter block to Bryan Park, along Manor Road and Hawthorne to where they dead-end north of Deer Park, and along Sheridan from Woodlawn to Hawthorne.

The request for the change came from Councilmember Rollo who was acting on behalf of some residents wanting the zone expanded to include Ballantine Road south of Southdowns. The request also dealt with Highland south of Maxwell Lane. Residents on the affected streets as well as on parts of Maxwell Lane were notified of a general proposal to expand the zone at the Traffic Commission. They were also subsequently notified of the specific proposal being considered by the Council this month.

Please note that along with the two changes noted above, the ordinance also makes other non-substantive changes to BMC 15.37.020. These changes reduce the references to streets within the zone by combining street segments and also bring Southdowns from Woodlawn to Highland into the zone. The latter change does not change the parking on Southdowns (which is not allowed), but merely includes this street within the boundaries of this zone.

## **Final Action at Proposed Special Session on July 25<sup>th</sup>**

### **Res 06-08 Approving a 4-Year Collective Bargaining Agreement Between the City and the Fraternal Order of Police (Lodge 88)**

With your vote Wednesday, **Res 06-08** would be given final action at a Special Session on Tuesday, July 25<sup>th</sup>, immediately before consideration of the Police Department budget. It approves and authorizes the execution of a new four-year collective bargaining agreement between the City and the Fraternal Order of Police, Lodge 88, which will operate from the year 2007 through the year 2010. The negotiations went quickly, beginning in late-May and culminating by mid-June, when the membership ratified the contract by a vote of 44 -12. The City was represented by Kevin Robling (lead negotiator), Susan Clark, Daniel Grundmann, and myself and the FOP was represented by Jim Haverstock (lead negotiator), John Kovach, Brandon Lopossa, Trae Luck, and Bill Jeffers.

Chapter 2.32 of the BMC sets forth the procedures for negotiating this agreement and the appropriate subjects of bargaining. Those subjects generally include salary and pay schedules, vacation schedules, the accumulation of vacation time, lay off and grievance procedures, and group insurance. The Council must approve the agreement before it goes into effect, but since it is negotiated between the City and the bargaining unit, does not have a direct means for amending it. The agreement is attached to the resolution and a memo from Kevin Robling, Corporation Counsel, will be provided next week.

#### **Summary of Proposal**

The changes to the contract can be separated into the monetary, which include almost of them and are discussed in the following paragraphs, and non-monetary, which were few and are discussed in the last paragraph.

#### **Monetary**

The monetary package would increase the base pay for Police Officers First Class and Senior Police Officers by 3% per year for each year of the contract, which means these officers will receive \$42,372 and \$44,446 respectively in 2007. (Section XX) Please note that, in addition to the base pay, the City pays the State a supplemental retirement amount for each officer that is equal to 25% of the base pay for an Officer First Class with 20 years of service.

The other monetary changes of the agreement affect the following provisions:

- **Unit Pay Plan.** The contract compensates officers for years of service (which is capped at 30), certifications, professional classifications, and education in accordance with a Unit Pay Plan. Each unit under this plan is worth \$100. The proposal would increase the maximum number of units at the rate of one unit per year for each year of the contract, so that the maximum payout would be \$4,500 in 2007. The proposal would also add five new certifications. (Section XXIII)
- **Shift Differentials.** The contract currently pays officers in the afternoon, night, and what is known as the senior shift an additional sum per week. These sums will increase by \$3 to \$5 per week and yield weekly totals that would range from \$16 to \$30. (Section XXII)
- **Clothing Allotment.** The contract provides funds for uniforms and equipment that will increase from \$1,400 to \$1,600. (Section X)
- **Overtime Pay.** The proposal increases the rate for overtime pay from \$30 to \$31 per hour in the first two years and increases it to \$33 for the last two years of the contract. (Section XXI)
- **Life Insurance Benefits.** The proposal increases death benefits from \$35,000 to \$50,000 (and from \$70,000 to \$100,000 in the event of accidental death). (Section XXIV)
- **Vacation Days.** The contract currently grants officers with five years of service one vacation day for each year of service, except for the 14<sup>th</sup> through 16<sup>th</sup> year. The proposal removes that three-year exception, but imposes a maximum of 50 calendar days per year. (Section V)

### Non-Monetary

There were three non-monetary changes to the contract. First, the proposed contract reduces the minimum amount of benefit time officers may take off from two hours to one half hour and then in increments of a quarter of an hour thereafter. (Section V) Second, the proposal clarifies that all officers who are on temporary sick leave may be assigned to other duties, not merely officers who are pregnant. (Section XV) Third, the proposal acknowledges that the motorcycle patrol is an exception to the three-shift schedule (e.g. Morning - 5:30 a.m. to 2.00 p.m.; Afternoon – 1:30 p.m. to 10:00 p.m.; and, Night – 9:30 p.m. to 6:00 a.m.), along with the high intensity patrols and bike patrols. Since shift assignments are made on the basis of seniority and prized by the officers, it also provides some assurances that any new, voluntarily manned shift won't compromise the system of seniority-based shift bidding. (Section XV)

**Happy Birthday Mike Diekhoff (July 17<sup>th</sup>)**

**NOTICE AND AGENDA  
BLOOMINGTON COMMON COUNCIL  
REGULAR SESSION AND COMMITTEE OF THE WHOLE  
7:30 P.M., WEDNESDAY, JULY 19, 2006  
COUNCIL CHAMBERS  
SHOWERS CENTER, 401 N. MORTON**

**REGULAR SESSION**

**I. ROLL CALL**

**II. AGENDA SUMMATION**

**III. APPROVAL OF MINUTES FOR:** None

**IV. REPORTS FROM:**

- 1. Council Members**
- 2. The Mayor and City Offices**
- 3. Council Committees**
- 4. Public**

**V. APPOINTMENTS TO BOARDS AND COMMISSIONS**

**VI. LEGISLATION FOR SECOND READING**

1. Resolution 06-07 Recognizing the Peak of the World Petroleum Production

Committee Recommendation: None

**VII. LEGISLATION FOR FIRST READING**

1. Appropriations Ordinance 06-03 To Specially Appropriate from the General Fund Expenditures Not Otherwise Appropriated (Appropriating Funds from the General Fund for Grants Awarded to the Fire Department)
2. Ordinance 06-12 To Amend Title 15 of the Bloomington Municipal Code Entitled "Vehicles and Traffic" - Re: Expanding the Elm Heights Proximate Residential Neighborhood Permit Parking Zone (Zone 1)

**VIII. PRIVILEGE OF THE FLOOR** (This section of the Agenda is limited to a maximum of 25 minutes. Each speaker is allotted 5 minutes.)

**IX. ADJOURNMENT**

**COMMITTEE OF THE WHOLE**

**Chair: Tim Mayer**

1. Appropriations Ordinance 06-03 To Specially Appropriate from the General Fund Expenditures Not Otherwise Appropriated (Appropriating Funds from the General Fund for Grants Awarded to the Fire Department)

Asked to Attend: Jeff Barlow, Fire Chief

2. Ordinance 06-12 To Amend Title 15 of the Bloomington Municipal Code Entitled "Vehicles and Traffic" - Re: Expanding the Elm Heights Proximate Residential Neighborhood Permit Parking Zone (Zone 1)

Asked to Attend: Justin Wykoff, Manager of Engineering Services

City of  
Bloomington  
Indiana



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**Office of the Common Council**  
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To: Council Members  
From: Council Office  
Re: Calendar for the Week of July 17-22, 2006  
Date: July 14, 2006

**Monday, July 17, 2006**

1:30 pm Safe Routes to School, McCloskey  
4:00 pm Council for Community Accessibility, McCloskey  
5:00 pm Farmers' Market Advisory Council, Showers Building, Room 250  
5:30 pm Bicycle and Pedestrian Safety Commission, Hooker Room  
5:30 pm Plan Commission Workshop, Unified Development Ordinance (UDO), Council Chambers

*Happy Birthday to Councilmember Mike Diekhoff!*

**Tuesday, July 18, 2006**

12:00 pm Bloomington Industrial Development Advisory Council, Hooker Room  
3:00 pm Board of Public Safety, McCloskey  
3:30 pm Community and Family Resources Commission, Hooker Room  
5:30 pm Animal Control Commission, McCloskey  
6:00 pm Thomson Park Traffic Calming, Public Meeting, Council Chambers

**Wednesday, July 19, 2006**

9:30 am Tree Commission, Rosehill Cemetery, 930 W. Fourth Street  
2:00 pm Hearing Officer, Kelly  
4:00 pm Martin Luther King Jr. Birthday Commission, McCloskey  
5:30 pm 3<sup>rd</sup> Street and Atwater Corridor, Council Chambers  
7:00 pm Council of Neighborhood Associations, Hooker Room  
7:30 pm Common Council Regular Session *immediately followed by* a Committee of the Whole, Council Chambers

**Thursday, July 20, 2006**

8:00 am Bloomington Housing Authority, Bloomington Housing Authority, 320 N. Morton Street Suite 113  
3:00 pm Firefighter Recruit Graduation, Council Chambers  
5:30 pm Board of Zoning Appeals, Council Chambers  
7:00 pm Environmental Commission, McCloskey

**Friday, July 21, 2006**

10:30 am Council for Community Accessibility, Arts Access, Dunlap  
12:00 pm Domestic Violence Taskforce, Hooker Room

**Saturday, July 22, 2006**

7:00 am Bloomington Community Farmers' Market, Showers Common

## RESOLUTION 06-07

### RECOGNIZING THE PEAK OF WORLD PETROLEUM PRODUCTION

- WHEREAS, Petroleum accounts for approximately forty percent of the United States' energy consumption and over ninety percent of its liquid fuel needs for transportation; and,
- WHEREAS, The United States and most other countries who are not members of the Organization of the Petroleum Exporting Countries (OPEC) have peaked in their production of oil; and,
- WHEREAS, Reserve accounting in OPEC nations is unaudited and unverifiable – this creates doubts whether these nations can supply the world's shortfall; and,
- WHEREAS, Global oil discovery peaked in the early 1960s; and,
- WHEREAS, Worldwide demand is increasing and is nearly outstripping production; and,
- WHEREAS, The global supply of petroleum is finite and is constrained by geological processes; and,
- WHEREAS, These geological processes result in a peaking of production at approximately the midpoint of total extraction; and,
- WHEREAS, Many geologists, energy analysts and physicists warn that global production of petroleum may be nearing the halfway mark and is at, or near, an all-time global peak; and,
- WHEREAS, Petroleum is vital to our national transportation, agricultural, chemical and plastic industries; and,
- WHEREAS, Petroleum scarcity would have a severe impact on all sectors of our national, regional and local economies; and,
- WHEREAS, No known substitute matches petroleum's portability, energy density, and energy return on energy investment; and,
- WHEREAS, Experts warn that efforts to mitigate the impending decline in production must occur 15 to 20 years before petroleum production peaks in order to effectively compensate for increasing scarcity; and,

NOW, THEREFORE, BE IT HEREBY ORDAINED BY THE COMMON COUNCIL OF THE CITY OF BLOOMINGTON, MONROE COUNTY, INDIANA, THAT:

SECTION 1. The Bloomington City Council acknowledges the unprecedented challenge of peak global petroleum production.

SECTION 2. The Bloomington City Council recognizes that the City of Bloomington must prepare for the inevitability of oil peak, and encourages the community to become better informed on energy-related matters.

SECTION 3. The Bloomington City Council supports the adoption of a global depletion protocol that will reduce petroleum use, conserving what remains, decreasing the likelihood of a rapid production decline, and lending predictability to supply and limiting market volatility.

SECTION 4. The Bloomington City Council directs the City Clerk to distribute this Resolution to the attention of the Indiana Congressional delegation, the Governor of the State of Indiana, and all members of the Indiana Statehouse, and urges them to take action on the impending peak in petroleum production and prepare for its consequences.

PASSED AND ADOPTED by the Common Council of the City of Bloomington, Monroe County, Indiana, upon this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

\_\_\_\_\_  
CHRIS STURBAUM, President  
Bloomington Common Council

ATTEST:

\_\_\_\_\_  
REGINA MOORE, Clerk  
City of Bloomington

PRESENTED by me to the Mayor of the City of Bloomington, Monroe County, Indiana, upon this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

\_\_\_\_\_  
REGINA MOORE, Clerk  
City of Bloomington

SIGNED and APPROVED by me upon this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

\_\_\_\_\_  
MARK KRUZAN, Mayor  
City of Bloomington

#### SYNOPSIS

This resolution recognizes that global petroleum production will soon peak and that such a peak will reshape many key industries and economies. It acknowledges the unprecedented nature of the phenomenon of peak oil. The resolution supports the adoption of a global depletion protocol and accepts that the City must prepare for the inevitability of peak oil. The resolution calls upon federal and State governments to take action to mitigate the effects of the peak and to prepare for its consequences.



**City of Bloomington  
Office of the Common Council**

To: Members of the Common Council  
From: Dave Rollo, Councilmember, District IV  
Date: July 14, 2006  
Re: Resolution 06-07 -- *Recognizing the Peak of World Petroleum Production*

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Petroleum constitutes a major energy source for the industrialized world. In the U.S. alone, our transportation systems rely on oil for ninety percent of its operations. In addition to the direct energy used in fuel and generators, petroleum is embodied in a whole host of products used in manufacturing processes associated with transportation. Crude oil is also a uniquely-suited material for the creation of plastics, lubricants, paints, and chemicals (including herbicides and pesticides). Such wide-spread use and reliance makes oil a truly-ubiquitous constituent of nearly every synthetic product.

Since oil is non-renewable and its supply is finite, it follows that we will run out someday. Indeed, the consensus among many geologists and energy analysts (including major oil companies such as Chevron), is that we have used up approximately half of all the petroleum that exists in the world – petroleum that has taken hundreds of millions of years to create.

Despite these alarming facts, the urgent question is not, “When will we run out of oil.” Indeed, the world will not likely run out of oil for at least the next hundred years or longer. Instead, the more important question asks, “When will we reach maximum production?” When we reach maximum production, oil reserves will begin an inexorable decline. Maximum production, and the ensuing decline in oil will be a tremendous shock for a global economy that relies on a continuous supply of oil.

Maximum production, known as “Peak Oil,” is not a controversial geological phenomenon. The phenomenon is documented as occurring on scales ranging from large fields to entire nations. The U.S. reached peak production in the early 1970s and has never regained its peak output, despite intense exploration and drilling, advanced technology, offshore and deepwater field development, and even additional production from Alaska.

Global peak oil is widely-recognized among scientists studying the issue. The U.S. Department of Energy commissioned a study of peak oil, its effects and strategies for mitigation (*see Peaking of World Oil Production: Impacts, Mitigation and Risk Management*, Hirsch et. al. [2005]). This report explains that currently, there is no substitute for petroleum as a primary energy source that matches petroleum’s ease of use,

and energy density. Our nation's infrastructure is enormously oil-dependent, in an increasingly oil-scarce world, without any single substance that would serve as a substitute. The U.S. Army Corps of Engineers has done its own analysis, *Energy Trends and Their Implications for U.S. Army Installation*, Westervelt and Fournier [2005]).<sup>1</sup> Both of these reports address the severe predicament we will find ourselves in if we fail to act in anticipation of this natural limit.

The City Council approved my request to attend the *Energy and Sustainability Conference*<sup>2</sup> that took place May of this year in Washington, DC. The subject of the conference was "Peak Oil and the Environment." The conference drew upon experts in geopolitics, energy, environmental trends, economics and geology, all of whom agreed that the peaking of world oil production would occur in the near future.

Here, the meaning of "near future" is informed by the work of energy analysts Robert Hirsch and Roger Bezdek (a conference presenter). Hirsch and Bezdek found that the U.S. would need 15 -20 years before petroleum peaks in order to bring substitutes online to compensate for the expected decline rate of production of 2-3% per year.<sup>3</sup> Despite this 15-20 year pre-peak timeframe needed to institute substitutes, many indicators point out that we may be nearing peak oil production within the next several years.

Resolution 06-07 acknowledges the likelihood of global peak production in the near future. It recognizes that we need to consider this eventuality, and begin to prepare for a future with declining oil supplies. To this end, Resolution 06-07 urges an adoption of a global depletion protocol<sup>3</sup>, to aid in avoiding the shocks, instability and competition that will otherwise occur without an orderly transition. It also urges State and federal representatives to recognize the problem and plan for it in a timely manner.

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<sup>1</sup> Both reports are available in full in the electronic *Legislative Packet*; executive summaries are found in hard-copy Packets.

<sup>2</sup> <http://www.beyondpeak.org/>

<sup>3</sup> *See Peaking of World Oil Production* referenced above

3. The Oil Depletion Protocol (Formerly known as the Rimini Protocol).  
<http://www.oildepletionprotocol.org/theprotocol>

**PEAKING OF WORLD OIL PRODUCTION:  
IMPACTS, MITIGATION, & RISK MANAGEMENT**

Robert L. Hirsch, SAIC, Project Leader  
Roger Bezdek, MISI  
Robert Wendling, MISI

February 2005

## **DISCLAIMER**

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## EXECUTIVE SUMMARY

The peaking of world oil production presents the U.S. and the world with an unprecedented risk management problem. As peaking is approached, liquid fuel prices and price volatility will increase dramatically, and, without timely mitigation, the economic, social, and political costs will be unprecedented. Viable mitigation options exist on both the supply and demand sides, but to have substantial impact, they must be initiated more than a decade in advance of peaking.

In 2003, the world consumed just under 80 million barrels per day (MM bpd) of oil. U.S. consumption was almost 20 MM bpd, two-thirds of which was in the transportation sector. The U.S. has a fleet of about 210 million automobiles and light trucks (vans, pick-ups, and SUVs). The average age of U.S. automobiles is nine years. Under normal conditions, replacement of only half the automobile fleet will require 10-15 years. The average age of light trucks is seven years. Under normal conditions, replacement of one-half of the stock of light trucks will require 9-14 years. While significant improvements in fuel efficiency are possible in automobiles and light trucks, any affordable approach to upgrading will be inherently time-consuming, requiring more than a decade to achieve significant overall fuel efficiency improvement.

Besides further oil exploration, there are commercial options for increasing world oil supply and for the production of substitute liquid fuels: 1) Improved Oil Recovery (IOR) can marginally increase production from existing reservoirs; one of the largest of the IOR opportunities is Enhanced Oil Recovery (EOR), which can help moderate oil production declines from reservoirs that are past their peak production; 2) Heavy oil / oil sands represents a large resource of lower grade oils, now primarily produced in Canada and Venezuela; those resources are capable of significant production increases; 3) Coal liquefaction is a well-established technique for producing clean substitute fuels from the world's abundant coal reserves; and finally, 4) Clean substitute fuels can be produced from remotely located natural gas, but exploitation must compete with the world's growing demand for liquefied natural gas. However, world-scale contributions from these options will require 10-20 years of accelerated effort.

Dealing with world oil production peaking will be extremely complex, involve literally trillions of dollars and require many years of intense effort. To explore these complexities, three alternative mitigation scenarios were analyzed:

- Scenario I assumed that action is not initiated until peaking occurs.
- Scenario II assumed that action is initiated 10 years before peaking.
- Scenario III assumed action is initiated 20 years before peaking.

For this analysis estimates of the possible contributions of each mitigation option were developed, based on an assumed crash program rate of implementation.

Our approach was simplified in order to provide transparency and promote understanding. Our estimates are approximate, but the mitigation envelope that results is believed to be directionally indicative of the realities of such an enormous undertaking. The inescapable conclusion is that more than a decade will be required for the collective contributions to produce results that significantly impact world supply and demand for liquid fuels.

Important observations and conclusions from this study are as follows:

1. When world oil peaking will occur is not known with certainty. A fundamental problem in predicting oil peaking is the poor quality of and possible political biases in world oil reserves data. Some experts believe peaking may occur soon. This study indicates that “soon” is within 20 years.
2. The problems associated with world oil production peaking will not be temporary, and past “energy crisis” experience will provide relatively little guidance. The challenge of oil peaking deserves immediate, serious attention, if risks are to be fully understood and mitigation begun on a timely basis.
3. Oil peaking will create a severe liquid fuels problem for the transportation sector, not an “energy crisis” in the usual sense that term has been used.
4. Peaking will result in dramatically higher oil prices, which will cause protracted economic hardship in the United States and the world. However, the problems are not insoluble. Timely, aggressive mitigation initiatives addressing both the supply and the demand sides of the issue will be required.
5. In the developed nations, the problems will be especially serious. In the developing nations peaking problems have the potential to be much worse.
6. Mitigation will require a minimum of a decade of intense, expensive effort, because the scale of liquid fuels mitigation is inherently extremely large.
7. While greater end-use efficiency is essential, increased efficiency alone will be neither sufficient nor timely enough to solve the problem. Production of large amounts of substitute liquid fuels will be required. A number of commercial or near-commercial substitute fuel production technologies are currently available for deployment, so the production of vast amounts of substitute liquid fuels is feasible with existing technology.
8. Intervention by governments will be required, because the economic and social implications of oil peaking would otherwise be chaotic. The experiences of the 1970s and 1980s offer important guides as to government actions that are desirable and those that are undesirable, but the process will not be easy.

Mitigating the peaking of world conventional oil production presents a classic risk management problem:

- Mitigation initiated earlier than required may turn out to be premature, if peaking is long delayed.
- If peaking is imminent, failure to initiate timely mitigation could be extremely damaging.

Prudent risk management requires the planning and implementation of mitigation well before peaking. Early mitigation will almost certainly be less expensive than delayed mitigation. A unique aspect of the world oil peaking problem is that its timing is uncertain, because of inadequate and potentially biased reserves data from elsewhere around the world. In addition, the onset of peaking may be obscured by the volatile nature of oil prices. Since the potential economic impact of peaking is immense and the uncertainties relating to all facets of the problem are large, detailed quantitative studies to address the uncertainties and to explore mitigation strategies are a critical need.

The purpose of this analysis was to identify the critical issues surrounding the occurrence and mitigation of world oil production peaking. We simplified many of the complexities in an effort to provide a transparent analysis. Nevertheless, our study is neither simple nor brief. We recognize that when oil prices escalate dramatically, there will be demand and economic impacts that will alter our simplified assumptions. Consideration of those feedbacks will be a daunting task but one that should be undertaken.

Our study required that we make a number of assumptions and estimates. We well recognize that in-depth analyses may yield different numbers. Nevertheless, this analysis clearly demonstrates that the key to mitigation of world oil production peaking will be the construction a large number of substitute fuel production facilities, coupled to significant increases in transportation fuel efficiency. The time required to mitigate world oil production peaking is measured on a decade time-scale. Related production facility size is large and capital intensive. How and when governments decide to address these challenges is yet to be determined.

Our focus on existing commercial and near-commercial mitigation technologies illustrates that a number of technologies are currently ready for immediate and extensive implementation. Our analysis was not meant to be limiting. We believe that future research will provide additional mitigation options, some possibly superior to those we considered. Indeed, it would be appropriate to greatly accelerate public and private oil peaking mitigation research. However, the reader must recognize that doing the research required to bring new technologies to commercial readiness takes time under the best of circumstances. Thereafter, more than a decade of intense implementation will

be required for world scale impact, because of the inherently large scale of world oil consumption.

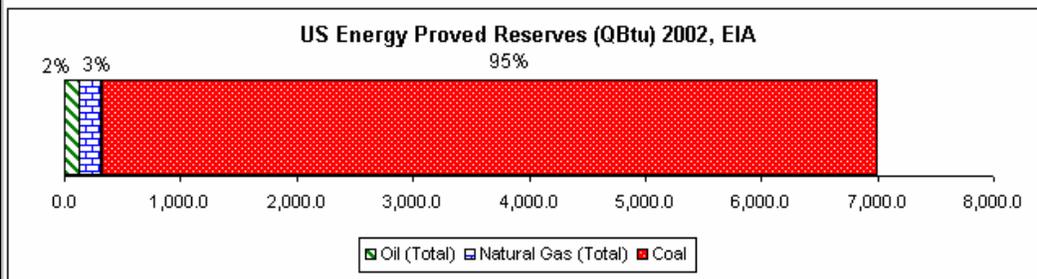
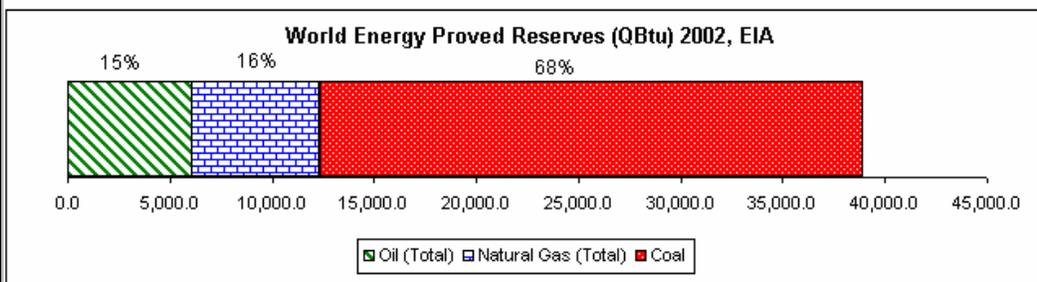
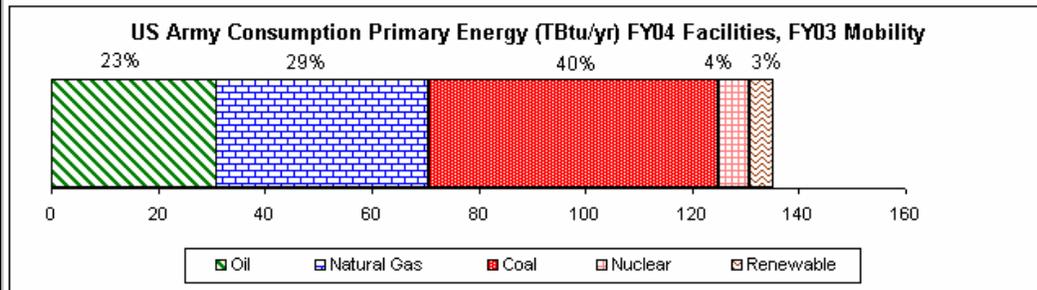
In summary, the problem of the peaking of world conventional oil production is unlike any yet faced by modern industrial society. The challenges and uncertainties need to be much better understood. Technologies exist to mitigate the problem. Timely, aggressive risk management will be essential.



# Energy Trends and Their Implications for U.S. Army Installations

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September 2005



# **Energy Trends and Their Implications for U.S. Army Installations**

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**ABSTRACT:** The primary issues affecting energy options are those of availability, affordability, sustainability, and security. Since energy resources are unevenly distributed around the world, and the impacts of energy consumption have global reach in both environmental and political terms, any meaningful review of energy-related issues must take a global perspective. This work synthesizes world and national energy issues (including energy source options, resource stocks, and future prognosis) in the context of how Army installations need to respond to changing trends. This report presents implications of actions that may be taken in response to the national and world energy situation, to help the Army to make informed choices on energy utilization that will contribute to sustaining the Army's mission.

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## Executive Summary

The Army operates in a domestic and world energy situation that is highly uncertain. To chart an effective and viable path for its energy future, the Army must immediately begin to consider the short- and long-term issues involved in developing enduring energy policies and solutions for its military installations. To sustain its mission and ensure its capability to project and support the forces, the Army must insulate itself from the economic and logistical energy-related problems coming in the near to mid future. This requires a transition to modern, secure, and efficient energy systems, and to building technologies that are safe and environmental friendly. These supply- and demand-side challenges require thoughtful planning and execution using integrated solutions.

### Issues

The primary issues affecting energy options are those of availability, affordability, sustainability, and security. Since energy resources are unevenly distributed around the world, the impacts of energy consumption have global reach in both environmental and political terms. Thus, any meaningful review of energy-related issues must take a global perspective. Additionally, world-wide consumption of energy is projected to increase 60 percent by 2030 and may triple by 2050.

- **Availability.** Future availability of customary energy sources is problematic. Domestic production of both oil and natural gas are past their peak and world petroleum production is nearing its peak. Growing domestic consumption will continue to increase dependence on foreign and potentially unstable energy sources. Almost half of the existing U.S. natural gas reserves are considered to be either remote or stranded, i.e., they are too far from existing infrastructure, located on restricted Federal lands, or considered too environmentally detrimental to harvest. Construction of an Alaskan natural gas pipe-line and the importation of Liquefied Natural Gas (LNG) are possible solutions to domestic natural gas problems. However, the necessary production and distribution infrastructure will require years to construct. Further, our electrical transmission grid is aging and overtaxed. It was not designed to accommodate the complex high load traffic it must now handle due to deregulation. Its reliability will degrade until appropriate investments are made.

- **Affordability.** As demand for natural gas and petroleum exceeds supply on a national or worldwide basis, prices rise. As the Earth's population swells and as standards of living are improved for the developing world, competition for finite resources will increase. The Army's energy demand at CONUS installations will grow as a major Base Realignment and Closure actions re-station 70,000 troops from Europe and Asia to the United States and as the Army's transformation of home base support of deployed elements expands computer-processing needs.
- **Sustainability.** Worldwide consumption of fossil fuels and its coincident environmental impact continue to grow. The earth's endowment of natural resources are depleting at an alarming rate—exponentially faster than the biosphere's ability to replenish them. It took nature 100 million years to create the energy the world uses in 1 year. Fuel combustion affects the global climate with the production of green house gases and localized production of acid rain, low lying ozone, and smog. Mining and production of fuels destroys ecosystems and biodiversity. The loss of habitat is leading to localized extinction of species. This reduction of biodiversity results in greater vulnerability of the planet to ecological stresses. Wastes from nuclear power generation plants are accumulating and no viable means exists to safely and effectively dispose of them. Current energy policies and consumption practices are not sustainable. They clearly limit and potentially eliminate options for future generations.
- **Security.** In an age of terrorism, combustible and explosive fuels along with potential weapons-grade nuclear materials create security risks. The United States currently has 5 percent of the world's population, but uses 25 percent of the world's annual energy production. This disproportionate consumption of energy relative to global consumption causes loss of the world's good will and provides a context for potential military conflicts, at the cost of lives, money, and political capital. A more equitable distribution of resources is in our best interest for a peaceful future.

## Energy Trends

Table E1 and Figure E1 summarize the current demand, supply, and proportionate distribution of energy on a global, national, and Army basis. Table E2 lists world reserves. Note that the United States currently imports 26 percent of its total energy supply and 56 percent of its oil supply. The Army and the nation's heavy use of oil and natural gas is not well coordinated with either the nation's or the earth's resources and upcoming availability. The relative fuel shares of energy use versus energy reserves underscore our need to supplement oil and natural gas as our staple fuels. The domestic supply and demand imbalance would lessen if coal and/or nu-

clear energy could be made more environmentally acceptable or if the renewable share of our energy portfolio were to vastly increase.

Worldwide energy consumption is expected to increase by 2.1 percent/yr and domestic energy consumption by 1.4 percent per year. This will exacerbate global energy competition for existing supplies. Army energy consumption is dominated by facilities consumption. Facilities consumption may decrease in both total quantity and in intensity basis—but not without an aggressive energy program with careful planning, diligent monitoring, and prudent investment. The absorption of overseas troops onto domestic installations will make this outcome especially challenging. The energy consumption associated with Army mobility is expected to remain constant, but may potentially increase depending of future phases of the Global War on Terror and on geopolitical tensions resulting from the world energy situation.

**Table E1. Summary of U.S. and world energy consumption.**

	Oil	Natural Gas	Coal	Nuclear	Renewable	Electricity	Purchased Steam	Total
Fuel Share of U.S. consumption	40%	23%	23%	8%	6%			100%
U.S. consumption (Q/yr) 2003, EIA	39	23		8	6			98
U.S. Imports (Q/yr)	22	4						26
U.S. imported share	56%	17%						26%
World consumption (Q/yr) 2003, BP renewables, EIA, 2002	147	94	104	24	32			401
U.S. consumed share of world consumption	27%	24%	22%	32%	18%			24%
U.S. Army end use consumption (TBtu/yr), Annual Reports, FY04 facilities, FY03 mobility	29	26	7		1	30	7	100
End use fuel share of Army consumption	29%	26%	8%	0%	1%	30%	7%	100%
U.S. Army consumption primary fuels (TBtu/yr) FY04 facilities, FY03 mobility, EIA 2003 generation mix	31	40	54	6	4			135
Primary fuel share of Army consumption	23%	29%	40%	4%	3%			100%

**Table E2. Summary of U.S. and world energy reserves.**

	Oil	Natural Gas	Coal	Nuclear	Renewable	Total
U.S. proved reserves (Q) 2002, EIA	132	193	6,678			7,003
Domestic proportion fossil fuel	2%	3%	95%			
World proved reserves (Q) 2002, EIA	6,027	6,317	2,6578			38,921
World proportion fossil fuel	15%	16%	68%			



Figure E1. Energy resources and consumption patterns.

### ***Natural Gas Trends***

The natural gas market for the near and mid-term is expected to be volatile. Prices will fluctuate significantly based on weather and supply. In the near term, prices will increase continually until the natural gas market is normalized by constructing a gas pipeline from Alaska and northern Canada, expanding exploration and production to areas of the United States now off limits, and greatly increasing imports of liquefied natural gas. The world market for natural gas is currently limited by demand, not supply. However, domestic natural gas production plateaued in 1973 and the United States currently imports 17 percent of the natural gas it consumes. This imported share will increase dramatically in the long term as domestic supplies deplete and the amount of natural gas used to fuel the electric system increases. World natural gas markets will reach equilibrium in about 10 years, but at higher prices that will reflect the higher costs of production and transportation. In the long run, worldwide natural gas production will peak in the 2030-2035 time range and then decline as an available resource.

### ***Petroleum Trends***

The oil market will remain fairly stable in the very near term, but with steadily increasing prices as world production approaches its peak. The doubling of oil prices from 2003-2005 is not an anomaly, but a picture of the future. Oil production is approaching its peak; low growth in availability can be expected for the next 5 to 10 years. As worldwide petroleum production peaks, geopolitics and market economics will cause even more significant price increases and security risks. One can only speculate at the outcome from this scenario as world petroleum production declines. The disruption of world oil markets may also affect world natural gas markets since most of the natural gas reserves are collocated with the oil reserves.

### ***Coal Trends***

Coal is the nation's largest fossil fuel resource with a two-hundred and fifty-year supply at current consumption rates. Despite of the large production of CO<sub>2</sub> and other air pollutants generated by coal consumption, the utility sector and, possibly, the large industrial sector will continue and increase their use the nation's large supplies of coal. Using current technologies, coal combustion remains problematic, but research shows some promising technological solutions. Deploying poly-generation techniques with carbon sequestration on a large scale may potentially allow the United States to use the nation's coal reserves in an environmentally friendly way to meet both liquid fuel and electricity requirements. Carbon sequestration technologies will begin to play a larger role in the mid-term. However, car-

bon sequestration techniques must be well thought-out to avoid unintended ecosystem consequences such as unexpected large releases of carbon into the environment.

### ***Nuclear Power Trends***

Nuclear power appears headed for a small renaissance. Some nuclear plant upgrades are planned in the short term. In the mid term, a modest construction program is getting under way and some shut-down reactors may be restarted. Light water reactors, for which the United States imports much of its nuclear fuel, are only an interim technology. Developing a breeder reactor program and closing the fuel cycle could offer true energy independence, but at the cost of increased environmental and security risks. It remains to be seen if this is a viable solution from both political and ecological perspectives. Other nations such as France and Japan have closed the fuel cycle and are taking an energy path with a much higher nuclear profile.

### ***Renewable Energy Trends***

Renewable energy technologies will certainly be a growing part of the energy mix and will penetrate faster and further than conventional energy advocates think. Early adoption to promote this market and these technologies is inherently in the Army's interest. From an economic perspective, the cost of renewable technologies continues to fall while the cost of conventional energy sources continues to rise.

### ***Electrical System Trends***

The electrical system will likely become increasingly problematic over the next 5 to 10 years. Power capacity should suffice. Utilities have overbuilt to meet the peaking market and are planning additions to base capacity. The grid, itself, however is the weak point in the Nation's electrical system. Investments are not keeping up with power flow demands; consequently, bottlenecks exist in certain regions, which lowers the reliability of the grid as a whole. Once ongoing regulation and deregulation activities are settled, appropriate investments can achieve grid expansions and upgrades. The fraudulent electrical pricing and supply manipulations by commodity traders that led to the California energy crisis in 2001 should not recur.

Table E3. Energy options.

	Fossil fuels						
	Conventional Oil	Nat Gas Liquids, Deep Water, and Polar Oil	Unconventional Oil - Natural Bitumen (tar sands and extra-heavy crude)	Unconventional Oil - Oil shale	Natural Gas	Liquefied Natural Gas	Coal
Current price	\$70/Barrel (WTI-world price)	World oil price	World oil price	Oil shale not economically viable	\$6-7/MBtu wholesale at Henry Hub	\$4.77/MBtu	\$28.62/ton steam coal
Projected price trend	Steady increases expected as world production at or near peak (high was in 1973 @ \$75/b in today's dollars).	NA	NA	Unknown	Volatile near term. Stable as LNG imports increase and AK pipeline built. Realistic floor is about \$7/mbtu.	Price levels should sustain in the \$3-4 dollar range until depletion sets in.	Fairly stable, but will tend to follow other fuels in an upward trend.
World production	25GB/yr	3.6GB/yr	0.25GB/yr	351 metric tons oil/yr	95 TCF	5.9 TCF	104 Quadrillion Btu
Demand expectations	Up 33% worldwide 2004-2020, 2.1%/yr	Part of conventional demand.	Will have to make up increasing portion of oil supply in the future.	If economically and environmentally viable, demand would take all that could be produced.	Up 50% in U.S. 2002-2022 Est. 2.5%/yr growth in U.S.	2 BCF/day, 3% of NG total in U.S., expected to expand rapidly as domestic NG production drops and world market develops, could eventually make up 33-50% of U.S. supplies.	Estimated at 1.5%/yr
Advantages	High energy density, easy to extract, transport and store, highly versatile for technologies, burns at high temp (suitable for IC engines)	High energy density, highly versatile for technologies, burns at high temp (suitable for IC engines)	Can be processed to conventional oil substitute.	Can be processed to conventional oil substitute.	Clean burning with low emissions, supplied by an extensive grid, can be used in a variety of equipment and substitute for petroleum in most cases.	Can be imported to make up for domestic shortage.	High specific energy density, readily available domestic supply, relatively low cost.
Disadvantages	Heavy dependence drives U.S. general economy. Increases reliance on foreign sources. Depletion causes price increases, could lead to disruption and geopolitical instability.	Deep water and polar oil are expensive to develop and limited in extent.	Deposits are mostly located in two countries: tar sands in Canada and extra-heavy crude in Venezuela.	Oil shale and tar sands energy ROI is negative, significant environmental impact	Demand exceeds domestic supply, decline rate about 30%, price volatility,	Infrastructure not ready, 7+yr lead time, high demand in the world market, supply terminals and ships must be expanded to meet demand, 33% energy loss in production.	High emissions. Mining is dangerous, destroys environment and pollutes surface and groundwater. Produces more CO <sub>2</sub> than other fossil fuels.
Domestic availability	Peaked in 1970. U.S. imports 62% of crude oil. Proved reserves are 132Q.	NA	NA	Est. 500Bbl from oil shale in U.S.	Peaked in 1973, plateaued since 1980 due to massive exploration. U.S. has 4% of world reserves. Proved reserves are 193Q.	None, this is an import fuel.	High
Domestic Proved Reserve Life (R/C ratio) if no incr. demand	3.4yrs			500 GB	8.4yrs	LNG is a Product.	140 years hard coal -260 including sub-bituminous coal
Expected world peak production	Est. Peak 2005-2020, non-OPEC first	Natural gas liquids expected to peak in 2027, deep water in 2014, and polar in 2030	Production limited but increasing; heavy dependence; will not peak for decades, production in 2050 expected to be about 5GB/yr	Est. 138,500 billion metric ton of oil	Estimated peak of Production is 2030-2035	Est. Peak 2025	Est. Peak 2050
Current world stock	930-1300 gb	200gb	Est. 170gb from tar sands in Alberta, Canada; est. 27 GB extra-heavy crude in Orinoco, Venezuela	992gb	6204 tcf proved reserves (bp world statistics)	Lng is a product	26,578 qbtu (1,102,587 million tons)
World Proved Reserve Lifetime (No increased demand)	37-52 years	55yrs	999 years	Unknown	65 years	27yrs	255 years
World Proved Reserve Lifetime (projected demand increases)	28-37 years if 2.1% increase	Na	Na	Na	39 years if 2.5%/yr increase		109 years if 1.4%/yr increase
Environmental impact	Production of greenhouse gases, NOx, and CO, drilling and production leads to local pollution.	Production of greenhouse gases, NOx, and CO, drilling and production leads to local pollution.	Production from tar sands results in significant waste, consumes other energy due to the steam required for extraction, and pollutes watersheds.	Large quantities of contaminated water, sulfur, asphalt, and bitumen contaminated sand	Production of ghgs, nox, and CO, drilling and production leads to local pollution. Exploitation of now restricted areas lead to environmental damage.	Same impact as NG when combusted. Terrorist targets. Shipping impacts.	Most environmentally damaging fossil fuel, ghgs, nox, CO, sox, and PM when burned, mining leads to significant local damage.
Applications	97% of transportation industry, to a lesser degree for heating and power generation, chemical feed-	Same as conventional oil.	Same as conventional oil.	Industrial combustion and petrochemical feedstock.	Combustion processes, petrochemical feedstock, could be expanded into a transportation fuel.	Same applications as natural gas, flexible and readily usable fuel.	90% of u.s. coal consumption is in power production.
Technology issues	Except for the Mideast, cheap oil is becoming hard to find. Technology for deep offshore and polar exploration needs to continue to develop.	Expensive to harvest deepwater as depth increases. New technology breakthroughs required. NG liquids a	More energy efficient and environmentally benign extraction technologies required.	Oil shale not currently viable for extraction.	Deep water, polar, in-situ liquefaction all need more research and development.	LNG production facilities have 7yr lead time, LNG ships are potential security threats, LNG terminals need to be constructed.	IGCC technology needed. Polygeneration to liquid crude petroleum currently too costly. R&D thrust.
Investment needs/ limiting factors	Worldwide oil investment required to 2030 is about \$3T.	See conventional oil	See conventional Oil	R&D to make process more efficient and environmentally acceptable.	\$40B/yr in U.S. for exploration \$2.5B/yr in U.S. for transmission pipeline from AK, worldwide investment to 2030 is about \$2.7T	Infrastructure needs to be expanded. About \$250B in the Middle East is required to built production facilities. See natural gas investment.	R&D in clean combustion and carbon sequestration required. Worldwide investment required to 2030 is approximately \$400B.

**Table E3. Energy options (cont'd).**

Nuclear Power		Renewables							Grid
Nuclear Power	Ethanol	Hydrogen	Biomass	Solar	Wind	Hydroelectricity	Geothermal	Conservation	Electrical System
\$33-41/MWh (Uranium costs approx \$10/lb U3O8)	About 3 times the price of gasoline.	On a large scale equal to gasoline at the refinery.	\$20-40/ton	Electric: 24-48 cents/kWh	3-5 cents/kWh	2.4-7.7 cents/kWh	Cost varies depending on technology.	Cost varies depending on technology.	U.S. average 7.5 cents/kWh
Fairly stable electrical prices. Uranium market has been volatile over the last decade.	Will remain stable unless new technology using cellulosic biomass is perfected, then price will drop.	Highly dependent on technology and transportation issues.	Stable, but somewhat dependent on transportation costs.	Price reduces 20% for every doubling of production.	Price reduces with increased production of turbines and larger turbine sizes.	Very few sites being developed. Price is stable.	NA	Decreasing over time.	Slow growth over time.
32,600 tU in 1999.	3.3 Bgal (U.S. only)	50 million tons	50 EJ/yr (2000) Biomass is not a world commodity.	0.2 Exajoules/yr (2000)	0.2 Exajoules/yr (2000)	10 Exajoules/yr (2000)	57TWh (2002)	NA	13,920 Billion kWh
In the United States, existing plants are being uprated, 2-3 new plants are in the planning stages, demand could grow significantly if carbon dioxide production becomes regulated or taxed.	Demand expected to grow as MBTE is banned in more states and may be banned in U.S. Another 750MGal of capacity under construction. Worldwide it is expected to quadruple over the next 25 yrs.	The demand depends on technology development and the ability to create from sources other than fossil fuels. Increasing demand expected next 10-15 yr.	DOE projects low growth rate, although state renewable portfolio requirements may spur growth	Continues to expand. Production of Solar Electric PV by 2030 expected to be 98 TWh. Solar thermal electric expected to be 21 TWh by 2030.	Fastest growing energy resource. In 2005 it is expected that 2500 MW will be deployed.	High head hydro has peaked in U.S.; all likely sites have been used. New sites controversial in other countries due to environmental impact. Low growth expected.	Production expected to triple by 2030. Will be developed where available, not a world or national market.	Efficiency cost is reducing over time while energy costs are increasing. More demand for conservation expected.	Worldwide expected to double by 2030. U.S. growth expected to grow about 2%/yr.
No air pollution, no GHG emissions, limited import dependence (just source fuel) high reliability, lowest fuel costs, least sensitive to fuel costs	Made from a renewable resource, low emissions, carbon neutral.	Clean burning.	Carbon neutral, renewable resource.	Carbon neutral, renewable resource.	Carbon neutral, renewable resource	Carbon neutral, renewable resource.	Carbon neutral, renewable resource, continuously available 24/7.	Carbon neutral, renewable resource, continuously available 24/7.	Extremely flexible high end commodity.
Plant construction costs \$5k/kW (Watts Bar - last one built), extended construction times for new plants, fuel cycle not closed, no spent fuel disposal method at this time, great public fear and resistance to new facilities.	Low return on energy invested to produce, lower specific energy density than gasoline	Derived from fossil fuels, usually NG. Low specific energy density. Leakage problems for pipeline usage.	Should be used near where produces to avoid high shipping costs, low specific energy density compared to fossil fuels.	High cost, still needs considerable R&D and market penetration. Solar access required. Intermittent resource.	Limited sites in areas of high population density. Intermittent resource.	High head applications destroy aquatic systems.	Regional resource, not generally available, mostly in the Western U.S.	None, best path to follow.	Extremely inefficient electric production and distribution paradigm.
104 licensed generating plants = 97.4GW.	Production increasing as demand increases to replace MBTE.	11 Million tons/yr	512 Mton dry of biomass equivalent to 8.09Qbtu of primary energy could be available at < \$50/dry ton delivered.	NA	10,777 TWh	High head almost fully exploited. Low head potential is about 21,000 MW	Regional resource, not generally available, mostly in the Western U.S.	20-40% of existing and future usage.	System meets demands with isolated problems.
14 yrs	NA	NA	Renewable	Renewable	Renewable	Renewable	Renewable	NA	NA
NA	NA	NA	>250 EJ/yr	>1600 EJ/yr	600 EJ/yr	50 EJ/yr	>250 EJ/yr	NA	NA
0.92 MtU at \$15/lbU3O8 (2.96 MtU at \$50/lbU3O8).	NA	NA	50 EJ/yr	0.2 EJ/yr	0.2 EJ/yr	10 EJ/yr	2 EJ/yr	NA	NA
10 yrs at low price-33yrs at high price	NA		Renewable	Renewable	Renewable	Renewable	Renewable	NA	NA
10-20 years	NA	NA	Renewable	Renewable	Renewable	Renewable	Renewable	NA	NA
Power plants have large thermal signature. Waste disposal unresolved. Accidents could spread fission products over a large area leading to cancer deaths and unusable land areas.	Ethanol is a by-product of agriculture and has the same agricultural impacts, combustion emissions.	Very benign.	Direct combustion results in CO, NOx, and Particulates. Harvesting and transportation has impacts depending on type and source.	Land consumption. Hazardous waste in production. Some deaths mostly associated with falls from roofs, etc.	Bird kills, noise, visual pollution, and land consumption.	Large dams completely change river hydrology, water temperature, and flood large riparian areas. Low head hydro much more benign and can use run of river.	Some sulfur emissions, significantly less impact than fossil fuels.	None	Electromagnetic radiation, transmission lines, and power plant impacts.
Production of electricity, has potential for production of hydrogen and district heating.	Automobile fuel as a substitute for MBTE or as a motor fuel E85.	Fuel cells	Electric generation and heat source.	Solar thermal and solar electric	Electric Power	Electric Power	Electric Power and thermal loads.	Throughout economy.	Throughout economy.
New, safe reactor designs. Waste disposal unresolved issue. New licensing process underway.	High cost. Low net energy. Cellulose and hemicellulose technology needed to increase feedstock and lower costs.	Carbon fiber storage tanks for compressed H2 could be breakthrough technology.	Continued research on gasification and liquefaction.	Photovoltaics too expensive. Efficiency must be higher and collector costs must be lower.	Turbines continue to increase in size and economies of scale still in effect.	Well developed technology. Fish friendly turbines needed.	Well developed, source constrained.	Somewhat of a market failure, although cost decreasing. Needs more emphasis as national strategy.	Some congestion on grid. Building new infrastructure problematical.
Waste disposal unresolved, closing the fuel cycle unresolved, R&D in breeder reactors and fusion power.	Ethical concern with using food quality starch as feedstock.	R&D on H2 sources, storage, and distribution	R&D on gasification.	R&D in energy storage	Good wind sites are far from population centers.	Most sites for high head used. Environmental factors will prevent further development in OECD countries.	Availability of sites.		\$10T worldwide by 2030.

## Energy Options

Energy consumption is indispensable to our standard of living and a necessity for the Army to carry out its mission. However, current trends are not sustainable. The impact of excessive, unsustainable energy consumption may undermine the very culture and activities it supports. There is no perfect energy source; all are used at a cost. Table E3 lists energy options and their associated features, including applications, advantages, disadvantages and projected reserve lifetimes.

## Energy Implications for Army Installations

The days of inexpensive, convenient, abundant energy sources are quickly drawing to a close. Domestic natural gas production peaked in 1973. The proved domestic reserve lifetime for natural gas at current consumption rates is about 8.4 yrs. The proved world reserve lifetime for natural gas is about 40 years, but will follow a traditional rise to a peak and then a rapid decline. Domestic oil production peaked in 1970 and continues to decline. Proved domestic reserve lifetime for oil is about 3.4 yrs. World oil production is at or near its peak and current world demand exceeds the supply. Saudi Arabia is considered the bellwether nation for oil production and has not increased production since April 2003. After peak production, supply no longer meets demand, prices and competition increase. World proved reserve lifetime for oil is about 41 years, most of this at a declining availability. Our current throw-away nuclear cycle will consume the world reserve of low-cost uranium in about 20 years. Unless we dramatically change our consumption practices, the Earth's finite resources of petroleum and natural gas will become depleted in this century. Coal supplies may last into the next century depending on technology and consumption trends as it starts to replace oil and natural gas.

We must act now to develop the technology and infrastructure necessary to transition to other energy sources. Policy changes, leap ahead technology breakthroughs, cultural changes, and significant investment is requisite for this new energy future. Time is essential to enact these changes. The process should begin now.

Our best options for meeting future energy requirements are energy efficiency and renewable sources. Energy efficiency is the least expensive, most readily available, and environmentally friendly way to stretch our current energy supplies. This ensures that we get the most benefit from every Btu used. It involves optimizing operations and controls to minimize waste and infusing state of the art technology and techniques where appropriate. The potential savings for the Army is about 30 per-

cent of current and future consumption. Energy efficiency measures usually pay for itself over the life cycle of the application, even when only face value costs are considered.

Renewable options make use of Earth's resources that are not depleted by our energy consumption practices: namely solar, wind, geothermal, geoexchange, hydrology, tidal movements, agricultural products, and municipal wastes. Renewable options also make use of the large stretches of land in America, much of which is owned by the government. These options are available, sustainable, and secure. The affordability of renewable technologies is improving steadily and if the market is pulled by large Army application the cost reductions could be dramatic. For efficiency and renewables, the intangible and hard to quantify benefits—such as reduced pollution and increased security—yield indisputable economic value.

Many of the issues in the energy arena are outside the control of the Army. Several actions are in the purview of the national government to foster the ability of all groups, including the Army, to optimize their natural resource management. The Army needs to present its perspective to higher authorities and be prepared to proceed regardless of the national measures that are taken. The following steps by the national government would help the Army with its energy challenges:

- Increase supplies.
  - Recognize and promote energy efficiency as the cheapest, fastest, cleanest source of new energy.
  - Recognize and promote that renewable energy technologies make sense for America on a very large scale.
  - Promote renewable applications and work to change the image of solar roofs and off-shore wind farms.
  - Appropriate the necessary funding to bring Federal facilities to state-of-the-art efficiency.
  - Pull renewable technology markets to produce more cost effective solutions with tax incentives and large Federal applications.
  - Provide incentives for green power production through continued and expanded tax credits.
  - Open up Federal lands for oil and natural gas harvesting where environmentally appropriate.
  - Encourage the development of LNG terminals and infrastructure by streamlining approvals and assisting with local approvals.
- Modernize infrastructure.
  - Support modernizing and expanding the electricity grid.
  - Support the construction of a natural gas pipeline from AK and Canada.
  - Enhance the expansion of LNG terminals and natural gas infrastructure.

- Diversify sources.
  - Invest in research and development (R&D) in clean coal technologies, renewable technologies, carbon sequestration, breeder reactor nuclear power.
  - Invest in R&D in energy efficiency in the built environment.
- Optimize end-use.
  - Significantly increase Corporate Average Fuel Efficiency (CAFE) standards and expand to all classes of motor vehicles.
  - Expand rebate programs for hybrid vehicles.
  - Expand appliance and equipment efficiency standards as many states are doing.
  - Continue and enhance the Federal Energy Management Program.
  - Continue and enhance the Energy Star Program.
- Minimize Environmental Impact.
- Cooperate in global energy markets.

The national and world energy situation mandates strategic planning and action by the Army. The pending challenges of meeting the Army's ongoing energy requirements in a reliable, affordable, sustainable, and secure fashion demand thoughtful and comprehensive approaches. A deliberate careful review of energy source options and resulting tradeoffs is necessary. The informed and disciplined management of consumption is imperative.

The Army has already begun this necessary strategic planning and its *Army Energy Strategy for Installations* defines the overarching mission and goals, and outlines broad approaches for reaching the Army's full potential.\* The mission of the Army Energy Program is to provide safe, secure, reliable, environmentally compliant, and cost-effective energy and water services to soldiers, families, civilians and contractors on Army Installations. The five major goals for the program are to:

- eliminate energy waste in existing facilities
- increase energy efficiency in renovation and new construction
- reduce dependence on fossil fuels
- conserve water resources
- improve energy security.

This strategy is timely and on-target with the realities of the energy arena.

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\* Available through URL: <http://hqda-energypolicy.pnl.gov/programs/plan.asp>

The Army is developing a Campaign Plan, which details the energy policy, projects and programs necessary to achieve these program's major goals. ERDC-CERL Technical Report (TR)-04-10, [\*A Candidate Army Energy and Water Management Strategy\*](#), enumerates many ideas for consideration in this next level effort including necessary policy changes and an operational framework with review and adjustment to ensure success. It assesses the current practices and needs of Army energy and water management, aligns present efforts with objectives, identifies gaps in programming, and advises courses for improvement including the centralized management of goals.

In these times of tightening classical energy options, the Army needs to take steps comparable to those in the national agenda mentioned above by modernizing infrastructure, optimizing end-use, minimizing environmental impact, pulling technology markets, cooperating in regional purchases, and leveraging alternate financing. Special attention to the diversification of sources is appropriate. This incorporates a massive expansion in renewable energy purchases, a vast increase in renewable distributed generation including photovoltaic, solar thermal, wind, microturbines and biomass, and the large-scale networking of on-site generation.

The awareness of the energy options, trends, tradeoffs and the implications for Army installations allows for informed decisions, targeting planning and pertinent investment. The Army must continue to improve and optimize its energy and water management to meet mission requirements.

**APPROPRIATION ORDINANCE 06-03**

**TO SPECIALLY APPROPRIATE FROM THE GENERAL FUND EXPENDITURES  
NOT OTHERWISE APPROPRIATED  
(Appropriating Funds from the General Fund for Grants Awarded  
to the Fire Department)**

WHEREAS, the Bloomington Fire Department has been awarded and wishes to expend a \$65,100 grant from the Federal Emergency Management Administration (FEMA) for Self Contained Breathing Apparatus (SCBA) equipment; and

WHEREAS, the FEMA grant award requires a local match of \$27,900 which has been awarded by the Community Foundation;

NOW, THEREFORE, BE IT HEREBY ORDAINED BY THE COMMON COUNCIL OF THE CITY OF BLOOMINGTON, MONROE COUNTY, INDIANA, THAT:

SECTION I. For the expenses of said municipal corporation, the following additional sums of money are hereby appropriated and ordered set apart from the funds herein named and for the purposes herein specified, subject to the laws governing the same:

	AMOUNT REQUESTED
General Fund – Fire	
Line 52420 – Other Supplies	\$ 93,000
Grand Total General Fund	<u>\$ 93,000</u>

SECTION II. This ordinance shall be in full force and effect from and after its passage by the Common Council of the City of Bloomington and approval by the Mayor.

PASSED AND ADOPTED by the Common Council of the City of Bloomington, Monroe County, Indiana, upon this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

\_\_\_\_\_  
CHRIS STURBAUM, President  
Bloomington Common Council

ATTEST:

\_\_\_\_\_  
REGINA MOORE, Clerk  
City of Bloomington

PRESENTED by me to the Mayor of the City of Bloomington, Monroe County, Indiana, upon this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

\_\_\_\_\_  
REGINA MOORE, Clerk  
City of Bloomington

SIGNED and APPROVED by me upon this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

\_\_\_\_\_  
MARK KRUZAN, Mayor  
City of Bloomington

**SYNOPSIS**

This ordinance appropriates \$93,000 from the General Fund – Fire Department for grants.



MARK KRUZAN  
MAYOR

CITY OF BLOOMINGTON

401 N Morton St  
Post Office Box 100  
Bloomington IN 47402

SUSAN CLARK  
CONTROLLER

CONTROLLER'S OFFICE

p 812.349.3412  
f 812.349.3456  
controller@bloomington.in.gov

## Memorandum

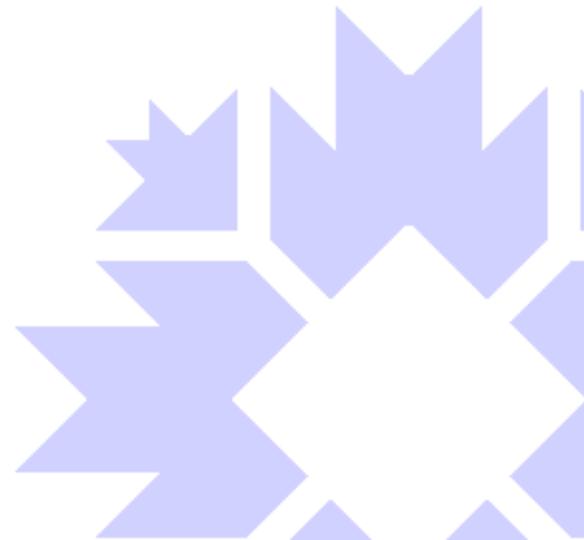
**To:** Council Members  
**From:** Susan Clark, Controller  
**Date:** July 13, 2006  
**Re:** Appropriation Ordinance 06-03

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1. **General Fund – Fire.** The Bloomington Fire Department (BFD) seeks authorization to spend \$93,000 for two grants awarded for purchasing self contained breathing apparatus (SCBA) equipment. The BFD received an award of \$65,100 from the Federal Emergency Management Administration (FEMA) which requires a 30% local match (\$27,900), and the Community Foundation has agreed to provide the local match. We will receive the funds upon providing documentation of the purchase to FEMA and the Community Foundation. The money will purchase breathing apparatus, tanks, rapid intervention air packs, and face pieces, bringing the total number of “units” to 51 for the department.

The total of this appropriation is \$93,000.

Feel free to contact me by email at [clarks@bloomington.in.gov](mailto:clarks@bloomington.in.gov) or by phone at 349-3412 at any time.



**ORDINANCE 06-12**

**TO AMEND TITLE 15 OF THE BLOOMINGTON MUNICIPAL CODE  
ENTITLED “VEHICLES AND TRAFFIC”**

**Re - Expanding the Elm Heights Proximate Residential Neighborhood Permit  
Parking Zone (Zone 1)**

WHEREAS, the Traffic Commission has recommended certain changes be made in Title 15 of Bloomington Municipal Code entitled “Vehicles and Traffic”;

NOW, THEREFORE, BE IT HEREBY ORDAINED BY THE COMMON COUNCIL OF THE CITY OF BLOOMINGTON, MONROE COUNTY, INDIANA, THAT:

SECTION I. Section 15.37.020 entitled “Applicability” shall be amended to delete the following street segments from the Elm Heights Proximate Residential Neighborhood Permit Parking Zone (Zone 1)

<b>Street</b>	<b>From</b>	<b>To</b>	<b>Side of Street</b>
Fess Street	Third	Maxwell	East/West
Fess Avenue	Maxwell Lane	Northside of Bryan Park	East/West
Hawthorne	Third	Southdowns	East/West
Hawthorne Drive	Southdowns Drive	Dead End	East/West
Highland Avenue	Third	Maxwell	East/West
Manor Road	Maxwell Lane	Sheridan Drive	East/West
Manor Road	Southdowns Drive	Dead End	East/West
Park Avenue	Atwater	Maxwell	East/West
Park Avenue	Maxwell Lane	North side of Bryan Park	East/West
Sheridan Drive	Woodlawn Avenue	Hawthorne Drive	North
Sheridan Drive	Hawthorne Drive	Highland Avenue	North/South
Stull Avenue	First	Maxwell	East/West
Stull Avenue	Maxwell Lane	North side of Bryan Park	East/West

SECTION II. Section 15.37.020 entitled “Applicability” shall be amended to add the following street segments to the Elm Heights Proximate Residential Neighborhood Permit Parking Zone (Zone 1)

<b>Street</b>	<b>From</b>	<b>To</b>	<b>Side of Street</b>
Ballantine Road	Maxwell Lane	Dead End	East/West
Fess Avenue	Third Street	North side of Bryan Park	East/West
Hawthorne Drive	Third Street	Dead End	East/West
Highland Avenue	Third Street	Tarzian Lane	East/West
Manor Road	Maxwell Lane	Dead End	East/West
Park Avenue	Atwater Avenue	North side of Bryan Park	East/West
Sheridan Drive	Woodlawn Avenue	Highland Avenue	North/South
Southdowns Drive	Woodlawn Avenue	Highland Avenue	North/South
Stull Avenue	First Street	North side of Bryan Park	East/West

SECTION III. If any sections, sentence or provision of this ordinance, or the application thereof to any person or circumstances shall be declared invalid, such invalidity shall not affect any of the other sections, sentences, provisions, or applications of this ordinance which can be given effect without the invalid provision or application, and to this end the provisions of this ordinance are declared to be severable.

SECTION IV. This ordinance shall be in full force and effect from and after its passage by the Common Council of the City of Bloomington and approval of the Mayor.

PASSED AND ADOPTED by the Common Council of the City of Bloomington, Monroe County, Indiana, upon this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

\_\_\_\_\_  
CHRIS STURBAUM, President  
Bloomington Common Council

ATTEST:

\_\_\_\_\_  
REGINA MOORE, Clerk  
City of Bloomington

PRESENTED by me to the Mayor of the City of Bloomington, Monroe County, Indiana, upon this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

\_\_\_\_\_  
REGINA MOORE, Clerk  
City of Bloomington

SIGNED and APPROVED by me upon this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

\_\_\_\_\_  
MARK KRUZAN, Mayor  
City of Bloomington

#### SYNOPSIS

This ordinance amends Title 15 of the Bloomington Municipal Code entitled "Vehicles and Traffic" by expanding the Elm Heights Proximate Residential Neighborhood Permit Parking Zone (Zone 1) and reducing the references to streets within the zone by combining street segments.

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**ENGINEERING MEMORANDUM**

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**TO:** COMMON COUNCIL MEMBERS  
**FROM:** JUSTIN WYKOFF, MANAGER OF ENGINEERING SERVICES  
**SUBJECT:** ORDINANCE 06-12  
**DATE:** 7/14/2006  
**CC:** DAN SHERMAN, COUNCIL ADMINISTRATOR/ATTORNEY

---

Ordinance 06-12 is composed of modifications to Title 15 "Vehicles and Traffic" due to recent code corrections, and other requested changes by both City Officials and members of the public. It is my goal with this memo to answer potential questions and explain the variety of changes included with this ordinance.

**Section I**

Section I deletes several descriptive lines regarding the limits of Zone 1 Parking which will be added to or modified in Section II.

**Section II**

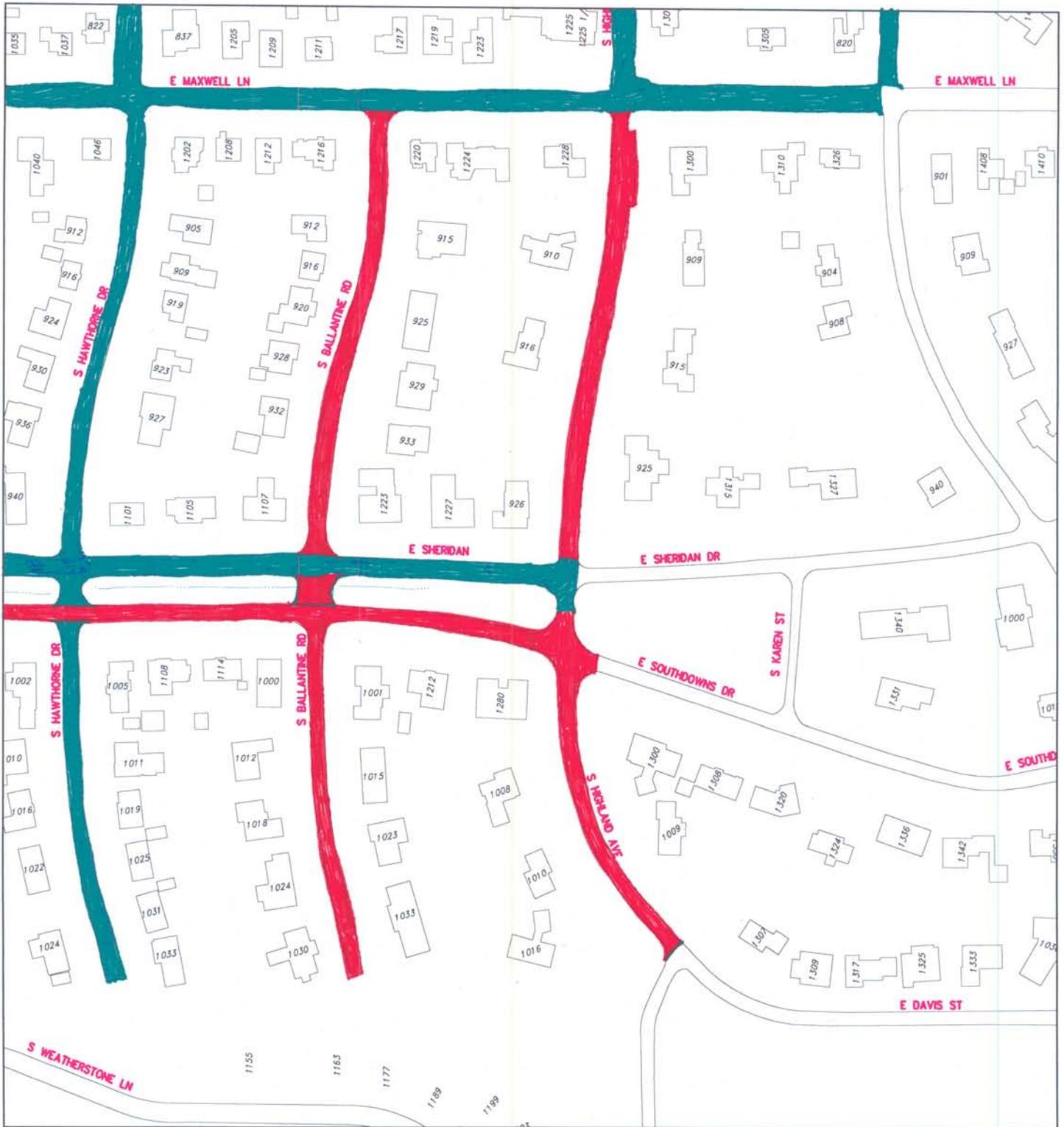
Section II adds the requested two streets of Ballantine Road and Highland Avenue to Zone 1 Parking, following the request from a citizen, that was forwarded to me by Councilman Rollo. This request was heard at the June 28<sup>th</sup> Traffic Commission meeting, and was voted unanimously to be forwarded to the City Council for consideration of adoption into the Bloomington Municipal Code. Area residents were notified in advance of the Traffic Commission meeting, and at the request of the Traffic Commission, residents were notified of this issue being addressed by the City Council at the upcoming meetings.

Section II also adds for code correction the addition of Southdowns Drive to the Zone 1 Parking area to provide for some clarification to the limits of the zone. Southdowns Drive currently does not allow parking per the Bloomington Municipal Code, so no net change in parking, or impact is caused with this change.

**Map #1**

If you have any questions regarding Ordinance 06-12, please let me know.

Thanks,



Map 1 - Zone 1 Extension

- EXISTING ZONE
- PROPOSED ADDITION

By: wykoffj  
13 Jul 06



For reference only; map information NOT warranted.



City of Bloomington  
Engineering



Scale: 1" = 200'

**RESOLUTION 06-08**

**TO AUTHORIZE AND APPROVE THE EXECUTION OF A  
COLLECTIVE BARGAINING AGREEMENT BETWEEN THE  
CITY OF BLOOMINGTON AND THE FRATERNAL ORDER OF POLICE**

WHEREAS, Chapter 2.32 of the Bloomington Municipal Code establishes a procedure for Police Collective Bargaining; and

WHEREAS, the City and the Fraternal Order of Police have negotiated and reached agreement on provisions for a collective bargaining agreement; and

WHEREAS, it is in the best interests of the City to approve and execute the Agreement;

NOW, THEREFORE, BE IT HEREBY RESOLVED BY THE COMMON COUNCIL OF THE CITY OF BLOOMINGTON, MONROE COUNTY, INDIANA, THAT:

The Common Council hereby approves and authorizes the execution of the Collective Bargaining Agreement between the City of Bloomington and the Fraternal Order of Police, a copy of which is attached and made a part of this resolution.

PASSED AND ADOPTED by the Common Council of the City of Bloomington, Monroe County, Indiana, upon this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

\_\_\_\_\_  
CHRIS STURBAUM, President  
Bloomington Common Council

SIGNED and APPROVED by me upon this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

\_\_\_\_\_  
MARK KRUZAN, Mayor  
City of Bloomington

ATTEST:

\_\_\_\_\_  
REGINA MOORE, Clerk  
City of Bloomington

**SYNOPSIS**

This resolution approves and authorizes the execution of a four-year Collective Bargaining Agreement between the City of Bloomington and the Fraternal Order of Police Lodge 88 that will operate from the year 2007 through the year 2010.

**Res 06-08** To Authorize and Approve  
the Execution of a Collective  
Bargaining Agreement Between the  
City of Bloomington and the Fraternal  
Order Of Police

**Further Material**

Memo from Kevin Robling,  
Corporation Counsel

(Forthcoming)

COLLECTIVE BARGAINING AGREEMENT  
BETWEEN THE CITY OF BLOOMINGTON  
AND THE FRATERNAL ORDER OF POLICE LODGE 88

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**COLLECTIVE BARGAINING AGREEMENT  
BETWEEN THE CITY OF BLOOMINGTON  
AND THE FRATERNAL ORDER OF POLICE LODGE 88**

This Agreement is entered into by and between the City of Bloomington, Indiana (hereafter "City") and Fraternal Order of Police Lodge 88 (hereafter "Union").

The City and the Union recognize and declare that they have bargained collectively with respect to terms and conditions of employment for police officers, and it is their desire and in the best interests of the citizens of the City of Bloomington to promote harmonious relations between the City and the Union and improve police protection for the citizens of the City. Understandings reached have been incorporated into this written contract which will provide an orderly and equitable means of resolving any future differences between the parties.

IT IS THEREFORE AGREED AS FOLLOWS:

SECTION I. Terms and Conditions of Agreement

This Agreement between the parties constitutes a four (4) year settlement of all bargainable issues, as defined in Bloomington Municipal Code § 2.32, and following, for calendar years 2007, 2008, 2009 and 2010. It is understood and expressly agreed by the parties that all terms and conditions in this Agreement are contingent on and subject to the following conditions:

(1) Receipt in each and every year of the Agreement (2007, 2008, 2009, and 2010) by the Civil City of Bloomington of no less than nine hundred thousand dollars (\$900,000.00) from the Utility Department of the City of Bloomington in satisfaction of what is commonly known as the "Franchise Agreement."

(2) The City of Bloomington being legally authorized in each and every year of the Agreement to increase its *ad valorem* property tax by a minimum of three percent (3%) rate of growth over the previous year's maximum permissible *ad valorem* property tax levy, and a maximum increase equal to the total non-farm personal income growth multiplied by the maximum permissible *ad valorem* property tax levy for the preceding year (beginning with fiscal year 2007) as provided for and defined in Ind. Code § 6-1.1-18.5-1 *et seq.* entitled "Civil Government Property Tax Controls." The City shall not be required to petition for financial relief as provided for and defined in the above-cited chapter as a prerequisite to showing its inability to increase its *ad valorem* property tax levies in the above-stated amounts.

(3) Receipt in each and every year of the Agreement by the City of Bloomington of no less than six million dollars (\$6,000,000.00) as county option income tax distribution as provided for and defined in Ind. Code § 6-3.5-6-1 *et seq.* entitled "County Option Income Tax."

(4) Any and all changes in State and/or Federal law, policies, procedures, or regulations which have a fiscal impact upon the City of Bloomington shall be fully funded by the source from which such change originates.

In the event that any of the above-stated conditions do not occur, then it is specifically understood and agreed by the parties that the City may declare this Agreement open with respect to the salary rates provided in Section XX for all subsequent years covered by this Agreement. The City shall inform the Union of such declaration in writing. In the event of such declaration by the City, the parties shall immediately as practicable begin new negotiations on the subject of said salary rates

only, pursuant to Bloomington Municipal Code 2.32, and following. In the event that Bloomington Municipal Code 2.32.040, "Issues Subject to Bargaining" is amended, then it is specifically understood and agreed by the parties that either party may declare this Agreement open with respect to said added issue (or issues) for all subsequent years covered by this Agreement.

## SECTION II. Recognition

This Agreement between the parties is entered into pursuant to and in compliance with Bloomington Municipal Code § 2.32, and following.

## SECTION III. Management Rights

This Agreement shall not be deemed in any way to limit or diminish the authority and responsibility of the City to manage and direct the operation and activities of the City, including the police operation and activities, to the full extent authorized or permitted by law.

Nothing in this Section shall be construed to negate the clear and unambiguous meaning of this Agreement.

## SECTION IV. Labor-Management Committee

The City and Union agree to form a joint labor/management committee which shall consist of two representatives appointed by the mayor and two representatives appointed by the Union. The committee shall meet quarterly or as needed and may discuss, *inter alia*, issues not subject to bargaining pursuant to the Bloomington

Municipal Code Section 2.32. The results of the committee deliberations shall be in the form of a recommendation forwarded to the chief of police. The chief shall have thirty (30) days to forward the recommendation to the board of public safety along with his/her comments. The board may then consider the recommendation at a subsequent regularly scheduled meeting.

In the event the chief is a member of the committee, the recommendation shall be forwarded directly to the board of public safety along with any comments, pro or con, from committee members.

#### SECTION V. Benefit Time

Unit members will receive Benefit Time by the following formula:

Members who have completed one year of employment shall receive twenty-eight (28) vacation days (also referred to as "benefit time") per year. One additional vacation day per year shall be added at the completion of year five (5) through year twenty-six (26). Vacation days under this section shall not exceed fifty (50) days per calendar year.

Work days are eight and one-half (8 ½) hours for members assigned to Uniform Division and eight (8) hours for members assigned to Detective or Administration duty. Benefit Time may be taken subject to staff approval which will not be arbitrarily withheld. The minimum amount of benefit time taken at any one time shall be no less than one-half hour, but additional time after the first one-half hour may be used in increments of fifteen (15) minutes.

No accumulated Benefit Time may be carried over into the next year.

In addition, any bargaining unit member who resigns or retires shall be eligible to receive a credit for earned benefit time prorated over the entire year by payroll periods and based upon the last day the employee is actually present and working. For the purposes of benefit time credit, 16 of the benefit time days are considered to be subject to pro-ration. The formula is as follows: 16 benefit time days divided by number of payroll periods in year times number of payroll periods worked. The number of payroll periods worked shall include any partial payroll period worked, even if only one day of the payroll period is worked. The number of days shall be rounded up if the calculation contains a decimal of .5 or above, and rounded down if below .5. (For example, an employee "eligible" for 28 benefit time days in 2007 works his/her last day on October 2, 2007. The calculation is: 16 days divided by 26 payroll periods = .615, times 20 periods worked = 12.3 days. This employee is entitled to receive 12 prorated benefit days and the 12 benefit days not subject to pro-ration for 2007).

#### SECTION VI. Benefit Time Buy-Back and Bank

A bargaining unit member may opt to sell Benefit Time back to the City at a buy-back rate of one hundred seventy-five dollars (\$175.00) per day. A maximum of ten (10) vacation days per calendar year may be sold back by each member of the unit.

A bargaining unit member may request that a benefit bank be established for a qualifying event under the Family Medical Leave Act (FMLA). Eligibility shall be determined by the Employee Services Department and the member shall be required to utilize one-half (1/2) of their benefit leave before utilizing donated leave. Members of

the bargaining unit may donate a maximum of six (6) benefit days per calendar year to a benefit bank in lieu of selling days back to the City.

#### SECTION VII. Pay Days

Employees shall be paid their wages bi-weekly every other Friday. An annual bi-weekly schedule of pay days shall be posted before the first pay day of the calendar year.

When possible, overtime pay shall be paid with the next pay check following the period such overtime pay was earned.

When possible, errors in an employee's pay shall be corrected no later than the next pay period.

#### SECTION VIII. Personnel Service Records

Inspection of documents contained in an employee's personnel file shall be in accordance with state law. Each employee shall be given a copy of all additions to their personnel file at the time such additions are made.

Complaints determined to be unfounded or those in which the employee was found not to be involved or is exonerated will not be placed in the personnel file or any other departmental file. Sustained complaints will be retained in accordance with state law.

Adverse personnel actions may not be considered by the department beyond three years from date of the personnel action.

## SECTION IX. Bereavement Leave

Upon the death of an officer's spouse, registered domestic partner, child, brother, sister, parent, stepparent, parent or child of a registered domestic partner, duly appointed legal guardian, duly appointed legal ward, or the parent, stepparent, legal guardian or ward of an officer's spouse or registered domestic partner, the officer will be granted three (3) days of leave with pay.

Upon the death of an in-law or relative other than immediate family (grandparent, grandchild, brother-in-law, sister-in-law, aunt, uncle, cousin, niece, or nephew), the officer will be granted one (1) day leave with pay.

Bereavement leave shall be granted at the officer's request, unless extreme circumstances, including but not limited to civil emergency or manpower shortage, require rescheduling of such leave.

Additional leave in the above cases, or leave in connection with the death of other relatives or friends, may be granted with pay at the discretion of the Chief of Police, by using benefit time. Special circumstances may be approved without pay at the discretion of the Chief of Police.

## SECTION X. Clothing and Uniform Allowance

A basic departmental uniform, clothing, and accessory issue shall be established by general order. This initial issue shall be at the City's expense. All maintenance, repair, replacement, cleaning and upkeep of said items is to be borne by the individual officer except for the following items (which remain the property of the department):

1. helmet
2. gas mask (if issued)
3. firearm, magazines and duty ammunition
4. handcuffs; 1 pair w/2 keys
5. portable radio and batteries
6. shield, badge, shoulder patches
7. identification
8. defensive weapons, unless damage is due to individual negligence or misuse.

Changes in style or additional clothing or equipment mandated by the Department shall be furnished at City expense. Maintenance, repair, cleaning and upkeep shall be an employee expense.

An annual allowance to defray the costs of the replacement purchase, maintenance, etc. of the officer's uniform and equipment in the amount of One Thousand Six Hundred Dollars (\$1,600.00) shall be provided by the City to each officer after the first full year of employment and annually thereafter. This allowance shall be paid in two equal installments on or before June 15 and December 15.

#### SECTION XI. Private Vehicle Parking

While on duty, officers shall be provided with parking in a designated area within three blocks of the Police Department. If a permit is required, the cost will not exceed \$10.00 per year.

## SECTION XII. Meal and Rest Breaks

Employees are entitled to meal and rest breaks for a period not to exceed one (1) hour for each eight (8) hour shift worked. Work periods of less than four (4) hours do not entitle the employee to a break. Extended work periods of twelve (12) or more hours entitle the employee to an additional half ( $\frac{1}{2}$ ) hour break for each four (4) hour period in excess of eight (8) hours.

Breaks will be taken at times acceptable to shift supervisors and are subject to cancellation or interruption because of emergencies or staff shortages. The employee will be entitled to resume the break at the next opportunity to do so and at the shift supervisor's discretion.

## SECTION XIII. Bulletin Boards

Union shall have access to all bulletin boards, voice mail and electronic mail channels of communication within the Police Department for information from either the Lodge Executive Board or the Bargaining Committee.

## SECTION XIV. Shift Transfers

All shift transfers shall conform with the following procedures:

1. Between December 1 and December 15 for each year affected by this Agreement, a "bidding season" shall be open for each member in the Bargaining Unit to submit their first and second choice for shift assignment in the patrol division. Shift assignments will be determined based solely upon seniority, with the most senior members of the unit assigned to their preferred shifts first. Management retains the

authority and responsibility for the determination of the required staffing level assigned to each shift. Shift assignments become effective on the first (1st) day of January of each year of this Agreement following the "bidding season." The most junior officers on the shift to which the transfer is made can be reassigned.

2. Officers assigned to the patrol division may not request, nor be granted an assignment to detective division or other position in the department solely on the basis of seniority. The "bidding season" described in paragraph one (1) shall apply to assignments only within the patrol division.

3. Officers may agree to temporarily exchange shifts for full or partial days with the approval of their supervisors. Shift differential pay will not be altered unless the temporary exchange is in excess of one (1) month.

4. An officer in the detective division or other position within the department may return to the patrol division by:

- a. Requesting transfer to patrol division if an opening exists in a shift;
- or
- b. Requesting transfer to a desired shift during "bidding season" of each year of this Agreement.

5. Officers may request a shift transfer outside of the "bidding season" for special circumstances such as medical or family needs. The officer must submit supportive documentation of the special circumstance, including the reasons the present assignment cannot reasonably be fulfilled. The Chief of Police shall retain the final authority for such reassignment based upon special circumstances. The most

junior officer on the requested shift shall be reassigned, and such reassignment shall not exceed ninety (90) days.

6. The Chief or a designee of the Chief may offer a Senior Assignment shift differential to officers who are entitled to a shift bid seniority preference in exchange for another shift assignment that management perceives to be in the best interest of the department. The offer shall only apply to officers who are entitled to their first "choice" preference and shall be made to the officer in the presence of a labor representative. The duration of a Senior Assignment shall be for three (3) months and may be extended for that period of time upon mutual agreement of the Chief or designee and the officer. The Senior Assignment shift differential shall be in addition to any other applicable shift differential. (See Section XXII) Officers may elect to accept the offer for the Senior Assignment shift differential and be assigned to another shift or to remain on their preferred shift. Officers who have accepted the offer for the Senior Assignment may, at the conclusion of the three (3) month assignment or any increment thereof, elect to return to their preferred shift.

7. Shift assignments may be altered during this Agreement only by the procedures indicated in this section and by:

- a. Agreement of the City and the Union; or
- b. In the event of a civil emergency declared by the Mayor; or
- c. By order of the Police Chief on a temporary basis (not to exceed ninety consecutive (90) days per year), due to a manpower shortage as expressed in writing to the Board of Safety. In the case of a declaration of civil emergency by the Mayor, or a

temporary order by the Police Chief, officers shall be paid at current contractual rates of accumulation and pay for all time worked outside their regular schedule.

SECTION XV. Sickness/Injury

Officers of the Department shall report sick only when they are suffering from an illness or injury which would prevent them from properly performing their assigned duties. Such report shall be made to the commanding officer at least one (1) hour prior to reporting time for each tour of duty.

Sick leave in excess of two (2) work days in a specified work week will require a doctor's statement. That statement will be forwarded to the Chief's office. The statement should include the expected date of return and specify any limitations of duty.

The Chief of Police or Board of Public Safety may order a member to consult a physician, psychiatrist or clinic regarding a physical or psychological condition or for the purpose of obtaining a second opinion. Cost of such diagnostic consultation and/or testing shall be borne by the Department. Cost of therapy and/or treatment shall be borne by the officer. Reports of diagnostic consultation and/or testing shall be submitted to the Chief or Board.

Officers shall be entitled to sick leave with full pay without limitation, subject to processing of medical disability pension status under current Indiana law. Additionally, the City will pay for the medical expenses of the officer in accordance with Indiana law at the time of the illness or injury. Such expenses will be paid by the City to the extent that such expenses are not reimbursed by the officer's medical insurance or worker's compensation insurance, subject to a maximum liability to the City of the amount of

non-reimbursed medical expenses that would have been incurred if the officer was on the City's medical insurance plan.

A police officer who is unable to perform his or her full duties due to temporary medical limitations documented by the officer's physician and provided to the Chief of Police as indicated herein, may be assigned to other duties in the Department, at the discretion of the Chief of Police or his/her designee, so long as the reassignment is consistent with the recommendation of the police officer's physician that such reassignment will not jeopardize the health, safety, and welfare of the police officer.

#### SECTION XVI. Layoffs

In the event that the City may find layoffs necessary they shall determine the number of sworn personnel to be laid off.

Sworn personnel with the least seniority will be laid off first and recalled last. Sworn personnel that have been laid off will be given the opportunity to return to duty before any new personnel will be hired.

Civilian personnel will not be hired as the result of a layoff to perform the duties of a police officer.

#### SECTION XVII. Duties of Police Officer

A police officer's duties shall be outlined in job descriptions maintained in the office of the Chief of Police and the City's Employee Services department. These files shall be accessible to the members of the bargaining unit during normal working hours of the Police Chief's Office and the City's Employee Services department.

SECTION XVIII. Strike Prohibition

The Union will not engage in nor sanction any strike during the life of this Agreement or any extension thereof.

SECTION XIX. Grievance Procedure

A grievance is defined to mean any difference that may arise between the parties or between the City and a police officer covered by this Agreement as to any matter involving interpretation, meaning, application or violation of the provisions of this contract. A grievant is defined as any police officer covered by this Agreement, or a group of police officers covered by this Agreement.

It shall first be the responsibility of the grievant to reduce the grievance into writing within fourteen (14) days after it arises and present it to the Chief.

If the grievance is not resolved after a period of fourteen (14) days after being presented to the Chief, the written grievance shall be presented to the Board of Public Safety. The Board of Public Safety shall recommend a remedy consistent with the terms of this Agreement.

If the matter is not resolved by the Board of Public Safety within fourteen (14) days to the satisfaction of the grievant, the matter may be submitted to the Mayor.

The Mayor shall meet with the grievant within fourteen (14) days of presentation of the grievance. The decision of the Mayor shall be final.

SECTION XX. Basic Salary Ordinance

Effective January 1, 2007, the City (Employer) shall contribute four percent (4%) of the salary of a fully paid officer first class to the Public Employees Retirement Fund on behalf of each fund member (Employee) throughout the term of this contract. These contributions are permitted under the authority of Indiana Code § 36-8-8-8.

Effective January 1, 2007, the base salary rate of all police officers subject to this agreement shall increase three percent (3.0%) and shall be as follows:

Officer 1 <sup>st</sup> Class	\$42,372
Senior Police Officer	\$44,446

Effective January 1, 2008, the base salary rate of all police officers subject to this agreement shall increase three percent (3.0%) and shall be as follows:

Officer 1 <sup>st</sup> Class	\$43,643
Senior Police Officer	\$45,779

Effective January 1, 2009, the base salary rate of all police officers subject to this agreement shall increase three percent (3.0%) and shall be as follows:

Officer 1 <sup>st</sup> Class	\$44,952
Senior Police Officer	\$47,152

Effective January 1, 2010, the base salary rate of all police officers subject to this agreement shall increase three percent (3.0%) and shall be as follows:

Officer 1 <sup>st</sup> Class	\$46,300
Senior Police Officer	\$48,566

## SECTION XXI. Overtime Pay

Throughout the term of this Agreement, employees who work in excess of their regularly assigned work week or regularly assigned work day schedule shall receive overtime pay at a rate as follows:

2007 through 2008 – Thirty-one dollars (\$31.00) per hour.

2009 through 2010 – Thirty-three dollars (\$33.00) per hour.

When an employee is called in to work overtime or has mandatory extra duty, the employee shall be paid a minimum of one and one half (1.5) hours overtime pay.

When an officer testifies pursuant to a subpoena issued on a duty-related matter, the officer shall be compensated at the above-stated rate for a minimum of one and one-half (1.5) hours. In the event the officer's court appearance is canceled, the officer shall be compensated by one and one half (1.5) hours of overtime pay, unless the officer received at least two (2) hours advance notice of the cancellation.

In the event a police officer is held over his regular work shift to work overtime, such officer shall receive regular overtime pay in increments of one-quarter (1/4) hour, which shall not be guaranteed a minimum of one and one-half (1.5) hours pay.

One-quarter (1/4) hour payments shall be paid in the following increments: two to fifteen (2-15) minutes equals one quarter (1/4) hour; sixteen to thirty (16-30) minutes equals one half (1/2) hour; thirty-one to forty-five (31-45) minutes equals three-quarter (3/4) hour; and forty-six to sixty (46-60) minutes equals one (1) hour.



Professional and Command Classifications:

Professional pay is divided into two (2) levels.

**Category 1** = School Liaison Officer, Training Instructor, CIRT Officer, Hostage Negotiator, Breath Analyzer, Canine Officer, Bike Patrol, Dive Team, Narcotics Officer, Motorcycle Patrol, Civil Disturbance Unit, Accident Reconstructionist, Honor Guard, and Drug Recognition Expert (DRE).

**Category 2** = Detective, Field Training Officer (FTO)

Category 1 - 5 units

Category 2 - 7 units

An officer may hold and be compensated for multiple certifications:

Employee must maintain and/or hold classification to keep units and associated pay.

Education:

Education pay divided into three (3) levels.

2 year degree = 6 units

4 year degree = 12 units

Masters, Law, or Doctorate degree = 16 units

Employee will be paid for a maximum number of units as follows:

2007 – forty-five (45) units.

2008 – forty-six (46) units.

2009 – forty-seven (47) units.

2010 – forty-eight (48) units

PERF pay is based on the salary of an Officer First Class + 20 units.

#### SECTION XXIV. Life Insurance

Effective January 1, 2007, the City will pay the total premium for life insurance on each employee in the amount equal to \$50,000 or \$100,000 in the event of accidental death. In addition, employees may purchase additional life insurance, utilizing the group rate, at their own expense.

#### SECTION XXV. Health Insurance

Throughout the term of this Agreement the City shall offer a group medical insurance plan. Each officer shall have the option to enroll in any plan offered by the City during open enrollment season. The final decision as to scope of coverage and choice of carrier shall rest with the City.

Each officer who elects to participate in the City's group medical insurance plan shall receive a monthly contribution from the City in accordance with the group medical insurance plan provision for City employees. The amount contributed by the City shall not be reduced during the term of this agreement below the level established for the year immediately preceding the effective date of this agreement. Such contribution will be credited to the officer's insurance premium monthly, with the balance being deducted from the officer's bi-weekly pay checks. At no time during the term of this agreement shall an officer be charged a higher employee contribution than the contribution paid by other City employees.

Employees who retire during the term of this Agreement shall be allowed to participate in the City's group insurance plan in accordance with relevant State and

Federal laws. The employee shall bear the entire cost of such participation, and the premium may be in excess of basic premium for employed members.

Should an officer die accidentally, any survivors who had been enrolled in the City's group health insurance plan at the time of death may elect COBRA coverage for a period of up to eighteen (18) months. If such coverage is chosen, the City will pay the premium(s) for up to six (6) months after the officer's death.

#### SECTION XXVI. FOP Negotiation Time Off

During the term of this Agreement, subject to the approval of the Chief of Police, time away from duty when scheduled for duty will be extended to union members for participation in meetings or negotiation sessions with the City, attendance at collective bargaining or negotiation workshops, or other legitimate union business. Requests for time away from duty shall be submitted to the Chief of Police, and approval shall not be unreasonably withheld, up to a maximum of one hundred twenty five (125) hours during the term of this Agreement. No more than two (2) union members will be extended time away from duty simultaneously.

Union members will not be compensated by the City for time spent on union business during an officer's off-duty time, except that union members may be compensated, subject to the approval of the Chief of Police, for off-duty attendance at training or seminars regarding collective bargaining and/or negotiation strategy. Such time shall be counted toward the one hundred twenty five (125) hour maximum established in the previous paragraph. Such compensation shall be compensatory time

at straight time, unless the Chief of Police approves a union member's request for contractual overtime pay in lieu of compensatory time off.

#### SECTION XXVII. Hours of Employment

Current non-supervisory sergeants and officers assigned to the Detective Division shall work five (5) eight (8) hour days, Monday through Friday, with two (2) days off, Saturday and Sunday, without regard to recognized holidays, and will not be assigned to be "on-call" more than one (1) Saturday and Sunday per month. Such non-supervisory sergeants and officers may choose either to work assigned special details as overtime, or to work assigned special details in lieu of regularly assigned hours.

Any non-supervisory sergeants and officers assigned as a Detective after the effective date of January 1, 1997 may be assigned a shift as determined by the Chief. Such non-supervisory sergeants and officers assigned to the detective division at the effective date of this contract may continue said assignment, subject to their right to elect to return to the patrol division pursuant to Section XIV of this Agreement.

Detective Officers may be assigned to weekend "on-call" status. Officers assigned "on-call" may choose to be compensated with two (2) hours of overtime pay for a single day of "on-call" duty, in addition to overtime pay for the actual hours called in. Half weekend of "on-call" shall mean from the time the last regularly assigned detective goes off-duty on Friday to Saturday midnight, or from Saturday midnight until the first regularly assigned detective goes on-duty Monday. In the alternative, officers may choose to receive a compensatory day off in lieu of "on-call" overtime pay. Such

compensatory day must be scheduled and taken within two (2) weeks after the "on-call" assignment, subject to the scheduling approval of the Captain of Detective Division. Such approval shall not be unreasonably withheld. No officer shall be assigned on-call duty in excess of eight (8) weekends per calendar year.

Officers assigned to shift duty shall work six (6) consecutive eight and a half (8.5) hour days with three (3) consecutive days off, without regard to recognized holidays.

These shifts shall be (morning shift) 5:30 A.M. to 2:00 P.M.; (afternoon shift) 1:30 P.M. to 10:00 P.M.; and (night shift) 9:30 P.M. to 6:00 A.M. Any change in shift hours will be announced by the Chief of Police no less than one (1) month prior to the beginning of the "bidding season" as referenced by Section XIV. Exceptions to shift hours as set in this contract will be high intensity patrol, bike patrol and motorcycle patrol. Every effort will be made to ensure that shifts manned exclusively by volunteers other than those that currently exist (i.e., high intensity patrol, motorcycle patrol and bike patrol) will be staffed in such a manner that shift bids by seniority will not be compromised. In the event any additional shifts are deemed necessary by the Chief of Police, said shifts shall not be added without consultation with and approval by the Labor Management Committee. In the event that no consensus can be reached by the Labor Management Committee on the addition of said shift(s), the issue will be forwarded to the Board of Public Safety for final resolution

#### SECTION XXVIII. Rights of Employees

The rights of an officer during an internal investigation will be governed by the penalty if the charge is sustained. Rights will be on two (2) levels to allow administrative latitude during minor or shift level discipline.

For purposes of clarification officer's rights will be specified as follows: Level I for procedural or rules violations which would carry if sustained a penalty of no greater severity than loss of five (5) days pay, or a longer period if so specified by the Board of Public Safety Standards in effect at the time of the alleged violation.

Level II for any violation rules, procedures or law which could individually or collectively result in a penalty greater than the loss of five (5) days pay, or a longer period if so specified by the Board of Public Safety Standards in effect at the time of the alleged violation.

It shall be the responsibility of any officer herein referred to as "investigator" to inform any officer herein referred to as "accused" of each and all of the following rights prior to any interrogation of that officer.

A. Rights of Employees During Level II Investigation

1. Accused shall only be required to respond in written or verbal form when a signed written complaint has been filed against him and he has been notified thereof.

A. The formal complaint shall be in writing and signed by the person making the allegation. It shall set forth a concise statement of facts known at the time of the complaint. It shall include the date, time and location of the occurrence as well as a physical description of the accused when possible.

B. A copy of the entire complaint shall be presented to the accused at least eight (8) hours prior to any required statement from or interrogation of the accused.

2. If prior to or at any time during the interrogation it is determined that the accused will be or possibly could be charged with a criminal offense he will immediately be advised of that possibility and advised of his rights under the Miranda decision.

3. Interrogation will be conducted in the training room of the Bloomington Police Department or at any other mutually agreed upon location.

4. Interrogation shall begin within twenty-four (24) hours of the accused's receipt of written complaint unless mutually agreed upon. When possible interrogation shall be conducted when the accused is on duty.

5. Each session of interrogation will be limited to two (2) hours duration and there shall be at least six (6) hours between the sessions of interrogation. Two (2) sessions in twenty-four (24) hours will not be exceeded unless mutually agreed upon.

6. The accused shall not be subjected to offensive language or abuse during the interrogation and shall be allowed to attend to his physical necessities.

7. All interrogations shall be recorded by the investigator and a transcript furnished to the accused prior to subsequent interrogation.

8. During the interrogation the accused shall be entitled to an FOP representative of his choice present and shall be entitled to record the interrogation. Additionally, if the investigator chooses to have an attorney present the accused may be entitled to have an FOP attorney or attorney of his choice.

- A. At no time will the number of interrogators exceed three (3), the identity of which will be known to the accused a minimum of four (4) hours prior to interrogation.
- B. At no time will the accused be allowed more than one (1) advisor present, the identity of whom will be known to the investigator a minimum of four (4) hours prior to interrogation. In the event of unavailability of either the requested FOP representative or FOP attorney a delay of no more than twenty-four (24) hours will be allowed.
- C. An FOP representative or attorney who impedes or disrupts the interrogation will receive two (2) warnings. Any further disruption shall forfeit the position of representation. Accused shall be entitled to choose another representative or attorney prior to his next interrogation session, again with four (4) hours minimum notice to interrogators.

9. It shall not be mandatory for any member of the immediate family of the accused to give a statement to the investigator. Prior to requesting any member of the immediate family of the accused to give a statement the accused shall be given eight (8) hours notice.

10. The accused shall not be ordered to submit to a lie detector test, psychological stress evaluation or any other mechanical or physical device or test for the purpose of determining veracity or innocence unless:

- A. All other avenues of investigation have been utilized; and
- B. Examiner is not an investigator in the allegation under investigation.

11. Blood, breath and urine tests for controlled substances are mandatory for an accused who is suspected of being under the influence of alcohol or any drug while on duty or acting in his official capacity as a police officer.

12. It shall not be mandatory for the accused to appear in a police line-up on any administrative investigation.

13. Complaints investigated and then found to be unfounded, proper conduct, policy failure, or insufficient evidence, may be destroyed immediately or at a later time after the fact finding process, as the officer wishes, with no Police Department record maintained. Accused may be present for destruction if he desired. Sustained complaints will be retained in accordance with the procedures required by the Indiana Code, and subject to inspection by the public as contained therein.

14. A police officer shall have an opportunity at a reasonable time during office hours to review his active personnel file and any closed investigative files in which he was the accused. In the event there is any comment adverse to his interest in any file, the police officer shall have the right to file a written response thereto, which written response will be attached to said adverse comment.

15. During his off-duty hours and while not in uniform a law enforcement officer shall be permitted to engage in such political activities as are not prohibited by law.

16. Unfounded, proper conduct, or policy failure, or insufficient evidence complaint resolution will result in the accused being reimbursed at the current contractual overtime or unscheduled duty pay rate for any time he had mandatory appearance before boards or investigators.

17. Any or all of the items of a Level II investigation may be waived by mutual agreement of the accused and investigator.

B. Rights of Employees During Level I Investigation

1. Level I Investigations will be conducted when the accused is on regular duty, when possible.

2. Accused shall be interviewed if deemed necessary regarding Level I violations by no more than two (2) staff officers. Staff officers are those officers of the ranks of Sergeant and above.

3. No less than two (2) hours prior to the interview the officer will be advised of the charge or allegation, the interviewing supervisors, the potential penalty and given an opportunity to request witnesses felt pertinent to the investigation to be present.

4. If during the interrogation the supervisor feels the charge may be of Level II importance, the accused will be at that time advised, the interrogation ceased and all Level II rights will be advised of at that period.

5. The officer being investigated will be given the opportunity to have an FOP Representative present during the interrogation(s). An FOP Representative who impedes or disrupts the interrogation will receive one (1) warning, and any subsequent warning shall result in the forfeiting of the position of representation. Accused shall be entitled to choose another representative prior to his/her next interrogation session.

6. The investigating staff officer will forward a report to the Chief of Police. The Chief will either furnish the officer with a status report, or a disposition, within three days after the interrogation. Upon completion of investigation, the Chief will then determine the matter as one of the following dispositions:

- a. Proper Conduct
- b. Unfounded
- c. Policy Failure
- d. Insufficient Evidence
- e. Improper Conduct

7. Complaints investigated and then found to be unfounded, proper conduct, policy failure, or insufficient evidence may be destroyed immediately after the fact finding process, as the officer wishes, with no Police Department record maintained. Accused may be present for destruction desired. Sustained complaints will be retained in accordance with the procedures required by the Indiana Code, and subject to inspection by the public as contained therein.

8. An officer disciplined under the authority of the Chief of Police shall have the right to appeal the action to the Board of Public Safety in writing if such discipline consisted of a written reprimand, forfeiture of leave time, extra duty, or suspension without pay. Such appeal and request for review to the Board of Public Safety must be made by the officer within forty-eight (48) hours after receiving notice of the reprimand or suspension.

### C. Additional Employee Rights

An officer will not be compelled to speak or testify before, or be questioned by any non-governmental agency or individual. This right shall in no way limit the authority of the Department, Board of Public Safety, or other City official to conduct an investigation or hearing.

## SECTION XXIX. Interdepartmental Transfer

The City of Bloomington values the public service provided by employees. Transfer from the Police Department to a civilian position or the Fire Department shall be as follows:

Any accumulated benefit time shall be taken before transfer from the department or paid to the employee.

The employee will receive and accumulate vacation days based on one-half of the employee's respective years of service, as applied to either the Fire Department's or Civil City's vacation schedule. As an example, if the employee has 20 years of service with the Police Department, he or she will receive the same number of vacation days as an employee with 10 years of service with the Fire Department or Civil City.

If the transfer is to the Fire Department, no vacation time shall be taken in the first year of service. If the transfer is to a civilian position, no vacation time may be taken during the first six months of employment in the new position.

The employee shall enjoy the same rights as any new employee on probationary status upon transferring to a new position.

The employee shall receive no other benefit from transfer (including, but not limited to longevity or training steps) and must start at the step required for all new employees, including completion of the probationary period.

SECTION XXX. Negotiation Schedule

In accordance with Bloomington Municipal Code Section 2.32, the parties shall meet at mutually agreeable times in 2010 in order to negotiate a collective bargaining agreement to take effect January 1, 2011.

This Collective Bargaining Agreement constitutes a complete agreement as to all bargainable issues, effective January 1, 2007, through December 31, 2010.

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Mark Kruzan, Mayor  
City of Bloomington

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John Kovach, President  
Fraternal Order of Police, Lodge 88

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Chris Sturbaum, President  
Bloomington Common Council

Reviewed and approved.

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Kevin R. Robling  
Corporation Counsel  
City of Bloomington