Fiscal Year 2015 Budget
Engineering Department

www.cityofdubuque.org/engineering
FY2015 Sanitary Sewer Budget

CIP Projects totaling $4,272,700

www.cityofdubuque.org/engineering
- Inspected 1,570 properties in Sewershed 5;
- Worked with 23 property owners to disconnect sump pumps from the Sanitary Sewer System.

RESULT:

Reduced I&I by an estimated 115,000 gallons per day.
Notable FY2014 Accomplishments
Finding I&I Sources

Property Inspections

- Sewershed 5: 1,570 (97.5%)
- Sewershed 7: 917 (100%)

Direct Inflow

www.cityofdubuque.org/ii
In FY 2015 the focus remains on Sewershed 10 to locate and correct sources of I&I.
Private Sanitary Sewer Manhole used as a GreaseInterceptor

A private SSO was reported downstream of this location.
<table>
<thead>
<tr>
<th></th>
<th>FY2015</th>
<th>FY2016</th>
<th>FY2017</th>
<th>FY2018</th>
<th>FY2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stormwater I&amp;I Elimination</td>
<td>$75,000</td>
<td>$100,000</td>
<td>$100,000</td>
<td>$100,000</td>
<td>$100,000</td>
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<tr>
<td>Stormwater I&amp;I Prevention Program</td>
<td>$70,000</td>
<td>$200,000</td>
<td>$200,000</td>
<td>$200,000</td>
<td>$200,000</td>
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<tr>
<td>I&amp;I Reduction Program</td>
<td>$415,000</td>
<td>$380,000</td>
<td>$253,000</td>
<td>$253,000</td>
<td>$253,000</td>
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<tr>
<td>Sanitary Sewer Manhole Replacement</td>
<td>$180,000</td>
<td>$175,000</td>
<td>$175,000</td>
<td>$175,000</td>
<td>$175,000</td>
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<tr>
<td>Sanitary Sewer Lining Program</td>
<td>$300,000</td>
<td>$225,000</td>
<td>$225,000</td>
<td>$225,000</td>
<td>$225,000</td>
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<tr>
<td>Lateral Replacement Assistance to LMI for I&amp;I Reduction</td>
<td>$35,000</td>
<td>$40,000</td>
<td>$45,000</td>
<td>$50,000</td>
<td>$55,000</td>
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<tr>
<td><strong>TOTALS</strong></td>
<td>$1,075,000</td>
<td>$1,120,000</td>
<td>$998,000</td>
<td>$1,003,000</td>
<td>$1,008,000</td>
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</tbody>
</table>
# Notable FY2015 Initiatives

## Sanitary Sewer Improvements

<table>
<thead>
<tr>
<th>Description</th>
<th>Est. Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 Inch Force Main Relocation Project</td>
<td>$330,000</td>
</tr>
<tr>
<td>Washington Street Sanitary Sewer - 7th to 9th Street</td>
<td>$125,000</td>
</tr>
<tr>
<td>Sanitary Sewer Replacement Associated with Street Work</td>
<td>$215,000</td>
</tr>
<tr>
<td>General Sanitary Sewer Repairs</td>
<td>$200,000</td>
</tr>
<tr>
<td>Environmental Professional Services</td>
<td>$50,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$920,000</strong></td>
</tr>
</tbody>
</table>
Notable FY2015 Initiatives
Sanitary Sewer Improvements

Granger Creek Extension

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>$391,700</td>
</tr>
<tr>
<td>2014</td>
<td>$2,446,722</td>
</tr>
<tr>
<td>2015</td>
<td>$1,405,000</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$4,243,422</td>
</tr>
</tbody>
</table>

www.cityofdubuque.org/engineering
Recommended FY2015 Improvements

- I&I Inspector New Workstation: $2,700
- I&I Inspector Fats, Oils, and Grease (FOG) Training: $3,375
FY2015 Stormwater Management Budget

www.cityofdubuque.org/engineering
Notable FY2014 Accomplishments
Drainage Basin Master Plan Update

Updated in 2013
Based on a 2009 Federal Emergency Management Agency (FEMA) study, 1,373 homes and businesses in the watershed are prone to flooding, including 70 businesses that employ over 1,400 people and have over $500 million in annual sales.
Flood disasters have repeatedly impacted residents and employees of the businesses within the watershed. Between 1999 and 2011, six Presidential Disasters were issued with total damage estimates of almost $70 million.
Based on a 2009 Federal Emergency Management Agency (FEMA) study, 1,373 homes and businesses in the watershed are prone to flooding, including 70 businesses that employ over 1,400 people and have over $500 million in annual sales.

Flood disasters have repeatedly impacted residents and employees of the businesses within the watershed. Between 1999 and 2011, six Presidential Disasters were issued with total damage estimates of almost $70 million.

The Bee Branch Watershed Flood Mitigation Construction Project will prevent an estimated $582 million in damages over the 100-year design life of the project and create an incentive for individuals and businesses to reinvest in a vital area of the community.
Notable FY2014 Accomplishments

Bee Branch Watershed Flood Mitigation Funding

$98.5 million*

*Spread over 20 years

When combined with other state and federal grants and local donations, the City has received over $127 million to help fund the flood mitigation improvements.

Like most grants, local matching funds are required.
Notable FY2014 Accomplishments
Bee Branch Watershed Flood Mitigation Funding

In order to construct the improvements per the schedule, borrowing is required.

The debt is retired, in part, using the annual disbursement of the state funding.

www.cityofdubuque.org/beebranch
### Bee Branch Watershed Flood Mitigation Project Phases

<table>
<thead>
<tr>
<th>Phase</th>
<th>Status</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1: Carter Road Detention Basin</td>
<td>Completed in 2003</td>
<td>$1,076,315</td>
</tr>
<tr>
<td>Phase 2: West 32nd Street Detention Basin</td>
<td>Completed in 2009</td>
<td>$4,158,589</td>
</tr>
<tr>
<td>Phase 3: Historic Millwork District Complete Streets</td>
<td>Completed in 2012</td>
<td>$7,977,311</td>
</tr>
<tr>
<td>Phase 4: Lower Bee Branch Creek Restoration</td>
<td>Est. Completion - 2014</td>
<td>$21,274,685</td>
</tr>
<tr>
<td>Phase 5: Flood Mitigation Gate Replacement</td>
<td>Est. Completion - 2015</td>
<td>$2,099,000</td>
</tr>
<tr>
<td>Phase 6: Impervious Surface Reduction (Alley Reconstruction)</td>
<td>Est. Completion - 2033</td>
<td>$57,420,000</td>
</tr>
<tr>
<td>Phase 7: Upper Bee Branch Creek Restoration</td>
<td>Est. Completion - 2016</td>
<td>$64,823,636</td>
</tr>
<tr>
<td>Phase 8: 22nd St. Storm Sewer Capacity Improvements</td>
<td>Est. Completion - 2020</td>
<td>$3,380,000</td>
</tr>
<tr>
<td>Phase 9: Flood Mitigation Maintenance Facility</td>
<td>Est. Completion - 2020</td>
<td>$4,360,000</td>
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<tr>
<td>Phase 10: North End Storm Sewer Capacity Improvements</td>
<td>Est. Completion - 2019</td>
<td>$1,160,000</td>
</tr>
<tr>
<td>Phase 11: Water Plant Flood Protection</td>
<td>Est. Completion - 2020</td>
<td>$3,800,000</td>
</tr>
<tr>
<td>Phase 12: 17th St. Storm Sewer Capacity Improvements</td>
<td>Est. Completion - 2020</td>
<td>$7,520,000</td>
</tr>
</tbody>
</table>

**Total cost, excluding interest on debt:** $179,049,536
Notable FY2014 Accomplishments

Bee Branch Watershed Flood Mitigation Funding

Carter Rd. Detention Basin

www.cityofdubuque.org/beebranch
Notable FY2014 Accomplishments

Bee Branch Watershed Flood Mitigation Funding

W. 32nd Street Detention Basin

Phase 2

www.cityofdubuque.org/beebranch
Notable FY2014 Accomplishments

Bee Branch Watershed Flood Mitigation Funding

Phase 3

Millwork District Street Detention/Conveyance System

www.cityofdubuque.org/beebranch
Notable FY2014 Accomplishments

Bee Branch Watershed Flood Mitigation Funding

Lower Bee Branch Creek Restoration

www.cityofdubuque.org/beebranch
Notable FY2014 Accomplishments

Bee Branch Watershed Flood Mitigation Funding

Flood Mitigation Gate Replacement

Phase 5

www.cityofdubuque.org/beebranch
Notable FY2014 Accomplishments

Bee Branch Watershed Flood Mitigation Funding

Pervious Surface Reduction (Green Alleys)

Phase 6

www.cityofdubuque.org/beebranch
Notable FY2014 Accomplishments

Bee Branch Watershed Flood Mitigation Funding

Upper Bee Branch Creek Restoration

www.cityofdubuque.org/beebranch
Notable FY2014 Accomplishments

Bee Branch Watershed Flood Mitigation Funding

22nd Street Conveyance Improvements

www.cityofdubuque.org/beebranch
Notable FY2014 Accomplishments

Bee Branch Watershed Flood Mitigation Funding

Flood Mitigation Maintenance Facility

www.cityofdubuque.org/beebranch
Notable FY2014 Accomplishments

Bee Branch Watershed Flood Mitigation Funding

North End Storm Sewer Improvements

www.cityofdubuque.org/beebranch
Notable FY2014 Accomplishments
Bee Branch Watershed Flood Mitigation Funding

Potable Water Treatment Plant Flood Protection

Phase 11

www.cityofdubuque.org/beebranch
Notable FY2014 Accomplishments

Bee Branch Watershed Flood Mitigation Funding

17th Street Conveyance Improvements

Phase 12

www.cityofdubuque.org/beebranch
Notable FY2014 Accomplishments

Bee Branch Watershed Flood Mitigation Funding
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Carter Road Detention Basin</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>West 32nd Street Detention Basin</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Historic Millwork District Complete Streets</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
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<tr>
<td>Lower Bee Branch Creek Restoration</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Flood Mitigation Gate Replacement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2015</td>
<td>2016</td>
<td></td>
</tr>
<tr>
<td>Impervious Surface Reduction (Green Alleys)</td>
<td></td>
<td>2015</td>
<td>2016</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Bee Branch Creek Restoration</td>
<td></td>
<td></td>
<td>2017</td>
<td>2018</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22nd St. Storm Sewer Capacity Improvements</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Flood Mitigation Maintenance Facility</td>
<td></td>
<td></td>
<td></td>
<td>2019</td>
<td>2020</td>
<td></td>
<td></td>
</tr>
<tr>
<td>North End Storm Sewer Improvements</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Water Plant Flood Protection</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17th St. Storm Sewer Capacity Improvements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
FY2015 Stormwater Management Budget

Green Alley Construction

Approximately 75 alleys to be done in the next two years

www.cityofdubuque.org/engineering
FY2015 Stormwater Management Budget

Upper Bee Branch Creek Restoration Part 1

Construction to start in 2014 and be complete in 2015

www.cityofdubuque.org/beebranch
FY2015 Stormwater Management Budget

Upper Bee Branch Creek Restoration
Part 2

Construction to start in 2015 and be complete in 2016

www.cityofdubuque.org/beebranch
The Stormwater Utility was established in February of 2003. The current rate is $5.60. The table below shows the adopted and proposed fees for each fiscal year from FY15 to FY19.

<table>
<thead>
<tr>
<th></th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>FY19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adopted</td>
<td>$8.00</td>
<td>$8.50</td>
<td>$9.00</td>
<td>$9.00</td>
<td>$9.00</td>
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<tr>
<td>Proposed</td>
<td>$5.98</td>
<td>$6.38</td>
<td>$6.81</td>
<td>$7.27</td>
<td>$7.76</td>
</tr>
</tbody>
</table>

1. The budget includes a subsidy (DRA Funds) for property tax exempt organizations, low-to-moderate income residents, and residential farms. They total $277,100 in FY2015.

2. Adopted in March of 2012 with the FY2013 Budget.
Stormwater Management Utility Fee Rate Comparison

FY2015 Rate Comparison*

Des Moines is 73% higher than Dubuque

Dubuque is 27% higher than the average

*Based on proposed rates
## Street Program

<table>
<thead>
<tr>
<th>FY2015 Summary</th>
<th>Budget</th>
<th>Federal / State Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southwest Arterial</td>
<td>$ 9,862,099</td>
<td>$ 9,862,099</td>
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<tr>
<td>Annual Street Construction Program</td>
<td>$ 2,035,000</td>
<td></td>
</tr>
<tr>
<td>Traffic Safety and Capacity Improvements</td>
<td>$1,148,050</td>
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</tbody>
</table>
### Calendar Year 2014 / 2015 Projects

<table>
<thead>
<tr>
<th>Project</th>
<th>Budget</th>
<th>Federal / State Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chavanelle Road Rehabilitation</td>
<td>$835,000</td>
<td></td>
</tr>
<tr>
<td>North Cascade Road</td>
<td>$1,277,020</td>
<td>$390,800</td>
</tr>
<tr>
<td>White Street Resurfacing</td>
<td>$1,080,000</td>
<td>$531,100</td>
</tr>
<tr>
<td>Washington Reconstruction (7th to 9th)</td>
<td>$680,000</td>
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</tr>
<tr>
<td>Asbury Road Rehabilitation</td>
<td>$420,000</td>
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</table>
## Calendar Year 2014 / 2015 Projects

<table>
<thead>
<tr>
<th>Project</th>
<th>Budget</th>
<th>Federal / State Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>9th and 11th RR Crossing</td>
<td>$300,000</td>
<td></td>
</tr>
<tr>
<td>East-West Corridor Study</td>
<td>$200,000</td>
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</tr>
<tr>
<td>North Grandview Estates</td>
<td>$44,000</td>
<td></td>
</tr>
</tbody>
</table>
# Historic Millwork District

## Street Improvements

9th, 10th, 11th, Elm and Pine Street One-way to Two-way Conversion

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Budget</th>
<th>Federal Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elm Street Reconstruction</td>
<td>$850,000</td>
<td>$600,000</td>
</tr>
<tr>
<td>9th, 10th, 11th, Pine 1-way to 2-way</td>
<td>$1,500,000</td>
<td></td>
</tr>
</tbody>
</table>
Southwest Arterial

www.cityofdubuque.org/southwestarterial
Military Road

- NEPA Clearance - Completed 2004
- Preliminary Engineering Design - Completed 2008
- Final Engineering Design
  - Underway
- Right-of-Way Property Acquisition
  - 50% Complete
- Archaeological & Cultural Resource Mitigation
  - 90% Complete
- Construction
  - N. Cascade Reconstruction Completed
- Signed Memorandum of Agreement (MOU)
Military Road Signing Ceremony
August 9, 2013

Transfer of Jurisdiction - MOU

Southwest Arterial

Signing Ceremony
August 9, 2013

www.cityofdubuque.org/southwestarterial
<table>
<thead>
<tr>
<th>City to Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final Engineering Design</td>
</tr>
<tr>
<td>Property Acquisition</td>
</tr>
<tr>
<td>Gas Pipeline Utility Relocation</td>
</tr>
</tbody>
</table>
Southwest Arterial
Property Acquisition Status

26 Properties Purchased
26 Properties Remaining
Southwest Arterial

Construction Schedule

- N. Cascade Road Grading - Stage 1: Completed
- N. Cascade Road Bridge: Completed
- N. Cascade Road Paving - Stage 2: Completed
- English Mill Road Utility Relocation: Summer 2014
- English Mill Road Grading & Bridge: Fall 2014
- Military Road Grading & Bridge: Fall 2014
- SW Arterial Grading, 4-Lane: To be Determined **
- SW Arterial Paving, 2-Lane: To be Determined **

** Schedules are subject to change, based on funding availability
Southwest Arterial
North Cascade Road Reconstruction
Southwest Arterial

Interchange Enhancement Concept
Southwest Arterial
Daytime Rendering

US 20 Interchange
Southwest Arterial
Nighttime Rendering

US 20 Interchange
Southwest Arterial

Cost Estimate & Funding

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interim Build Cost Estimate</td>
<td>$116.7M</td>
</tr>
<tr>
<td>• 2-Lane Highway</td>
<td></td>
</tr>
<tr>
<td>• Hwy 20 to Hwy 61/151</td>
<td></td>
</tr>
<tr>
<td>Federal Funding</td>
<td>$32.80M</td>
</tr>
<tr>
<td>State Funding</td>
<td>$45.00M</td>
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<tr>
<td>City / County Funding</td>
<td>$7.15M</td>
</tr>
<tr>
<td>Funding Gap</td>
<td>$32.00M</td>
</tr>
</tbody>
</table>

Complete 4-Lane Freeway Estimate $135M

[www.cityofdubuque.org/southwestarterial](http://www.cityofdubuque.org/southwestarterial)
FY2015 Traffic Operations Budget

www.cityofdubuque.org/engineering
Proposed FY 2015 Budget
Intersection Signal Upgrades

- N. Grandview & Loras
- N. Grandview & University

The City received a Traffic Safety Grant in the amount of $500,000 to upgrade both of these intersections.
Proposed FY 2015 Budget

White St Project
Proposed FY 2015 Budget

List of CIPS used to fund new mast arms and ITS components at White & 14\textsuperscript{th}, White & 20\textsuperscript{th} and new cabinet at White & 17\textsuperscript{th}.

- 300-1011 Signalization Program
- 300-1615 Traffic Signal Intersection Reconstruction
- 300-1274 Traffic Signal Controller Replacement
- 300-1549 Street Light Replacement/New City Owned
- 300-1631 Traffic Signal Fiber Optic Network
- 101-1023 Intersection Pre-Emption System
- 300-2253 ITS Traffic Control Equipment
- 300-2420 Surge and Grounding Improvements
Proposed FY 2015 Budget
Connectivity to the Airport Via Fiber

Charter to Grand View

Grandview to Twin Valley

Maquoketa to the Airport

Three part project to provide communications to the Airport over fiber.
Proposed FY 2015 Budget

Charter to Grandview

Existing Fiber

Grandview to Twin Valley

Existing Fiber

Maquoketa to the Airport
FY2015 Miscellaneous Budget

www.cityofdubuque.org/engineering
Miscellaneous FY15 Improvements

Stone Retaining Walls $200,000
Sidewalk Program - Curb & Catch Basin $160,000
Sidewalk Program - City Owned Property $120,000
## Miscellaneous FY15 Improvements

<table>
<thead>
<tr>
<th>Description</th>
<th>Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Building Renovation</td>
<td>$637,000</td>
</tr>
<tr>
<td>Riverfront Leaseholder Improvements</td>
<td>$163,000</td>
</tr>
<tr>
<td>Harbor Area Maintenance</td>
<td>$75,000</td>
</tr>
<tr>
<td>Port of Dubuque Marina – Navigational Lights</td>
<td>$15,000</td>
</tr>
</tbody>
</table>
Recommended FY2015 Improvements

Milestone Video Management Software System $ 13,400

www.cityofdubuque.org/engineering