# Chicago Metropolitan Agency for Planning 

## MEMORANDUM

To: CMAQ Project Selection Committee<br>From: Regional Transportation Operations Committee<br>Date: June 30, 2011<br>Re: Project Packages

"GO TO 2040 recommends that the region prioritize investments toward strategic enhancements and modernization of the transportation system. If carefully targeted, these types of projects will improve access, mobility, and the overall experience for all users." GO TO 2040 P 272

The MPO Policy Committee and CMAQ Project Selection Committee requested that the Regional Transportation Operations Coalition identify projects of particular significance in advancing the goals, objectives and action areas of the GO TO 2040 Comprehensive Regional Plan. Most of these projects were identified from among improvements submitted during the regular call for projects for the Congestion Mitigation and Air Quality Improvement (CMAQ) Program. In addition, a program of operational improvements for broad implementation is suggested. It is anticipated that one or more regional indicators would be improved by the projects. The recommended projects will provide a coherent, identifiable achievement over the five-year time frame, i.e. a focused program.

The Regional Transportation Operations Coalition identified 4 key groups of projects:
System Modernization and Intelligent Transportation Systems (ITS) are projects which will improve the information available to highway system managers and to travelers. These projects advance the development of the region's Intelligent Transportation System (ITS) by adopting best practices in new technologies. GO TO 2040 supports advancing ITS projects of all types.

Corridor Recommendations are multiple projects which should be implemented together in specific arterial corridors to provide more focused and discernable benefits to specific roadways.

Special Projects are unique projects which the region's system operators identified as important for a variety of operational reasons.

The Operations Program consists of strategies and projects which the RTOC believes should be undertaken by the region, and supported by CMAQ or other funding, but which were not yet put forward as project applications.

## System Modernization and Intelligent Transportation Systems (ITS)

> "Improvements related to Intelligent Transportation Systems (ITS) are also considered strategic enhancements and modernization. These include the use of real-time traveler information for both highway and transit, signal improvements such as interconnects or Transit Signal Priority (TSP) systems, traffic management centers, and many others. (...) GO TO 2040 supports continuing to advance ITS projects of all types, and recommends a continued role for CMAP in coordinating these efforts regionally. "GO TO 2040 p 272

This package of projects provides congestion relief by improving the system through better information and modernized operations. Better information allows better management of incidents, reducing incident delay, and allows the dissemination of better traveler information. Except for RTA's implementation of a regional system of Transit Signal Priority corridors, the projects in this package were selected from among traffic flow improvement proposals submitted through the call for CMAQ projects. This list of projects can be expanded by implementing more of the packages included in the region's ITS Plan and in the Regional ITS Architecture.

A few technologies deserve special mention.

1. Implementation of the roadside equipment needed for development of a regional Transit Signal Priority network results in a clear reduction in traffic congestion on the system's roadways.
2. Adaptive signal control proposals will improve the real-time capability of signal systems to be resilient in various traffic conditions. Adaptive control technologies typically include improved detection of traffic conditions and improved algorithms for managing traffic in congested conditions.
3. Several improvements in this package involve variable message signs (VMS) on arterial highways. Such VMS systems, often seen on the expressway system in the past, are now being deployed to provide better en-route travel information, often at key decision points.
4. Finally, the package includes better information systems for arterial roadways. Such systems can provide information to central traffic management centers; which can then coordinate traffic and incident response with other agencies and distribute information via web services or the Gateway Traveler Information System.

The following package includes 24 projects and totals approximately $\$ 65,000,000$ in federal funds.

| CMAQ ID | Sponsor | Facility | Total | Federal | Description | Program <br> Year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SI09123545 | Aurora | Eola Rd from E New York St to Wolf's Crossing Rd | \$1,834,500 | \$1,467,600 | Signal interconnect and modernization of 9 signals | 2013-2014 |
| SI01123520 | CDOT | Ashland Av from Roosevelt Rd to Cermak Rd/Blue Island Av | \$2,300,000 | \$1,880,000 | 7 signals on Ashland; cameras, 1 VMS | 2013-2015 |
| SI01123522 | CDOT | IL 19/Irving Park Rd from Western Av to US 41/Lake Shore Dr | \$1,160,000 | \$948,000 | Upgrade signal interconnect to Adaptive Signal Control 13 intersections | 2012-2014 |
| SI01123523 | CDOT | US 41/Lakeshore Dr and Columbus Dr from Monroe Dr to US 41/Waldron Dr ( 1600 S) | \$1,180,000 | \$944,000 | Upgrade signal interconnect to Adaptive Signal Control 11 intersections | 2012 |
| SI01123519 | CDOT | Cermak Rd from Ashland Av to MLK Jr Dr | \$3,275,000 | \$2,080,000 | 15 signals on Cermak; cameras | 2012-2013 |
| SI01123521 | CDOT | Ashland Av from <br> Devon Av/Clark St to <br> Fullerton <br> Av/Ashland Av | \$5,225,000 | \$3,920,000 | 29 signals on Ashland. Includes cameras and VMS | 2012-2014 |
| OT01123611 | CDOT | Arterial VMS Traveler Information System, Phase I | \$1,641,000 | \$1,313,200 | Up to 15 permanent and 15 portable variable message signs. | 2012-2014 |
| OT01123612 | CDOT | Arterial Detection System Improvements | \$1,219,000 | \$975,200 | Installation of various technologies to collect real-time travel performance data at 130 Chicago arterial street locations. The data will be integrated with the Gateway and provided to the public. | 2012-2016 |
| SI08123515 | DuPage County DOT | DuPage Co Central Signal System - Phase I | \$895,000 | \$716,000 | Phase 1 North <br> DuPage area. 55 intersections. Includes video | 2012-2013 |
| SI08123516 | DuPage County DOT | DuPage Co Central Signal System - Phase II | \$846,000 | \$676,800 | Phase 2 North <br> DuPage area. <br> Expand to 77 signals. <br> Includes video. | 2013-2014 |


| SI08123517 | DuPage <br> County <br> DOT | DuPage County <br> Central Signal <br> System - Phase III | $\$ 1,325,000$ | $\$ 980,000$ | Phase 3 North <br> DuPage area. <br> Expand to 108 <br> signals. Includes <br> video | $2014-2015$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| SI10123560 | Grayslake | Lake St from <br> Washington St to <br> Belvidere Rd | $\$ 675,180$ | $\$ 540,140$ | Interconnect to other <br> signal systems and <br> connect to <br> PASSAGE; VIDEO | $2014-2015$ |
| SI09123533 | Kane <br> County <br> DOT | CH 37/Stearns Rd <br> from Randall Rd to <br> Kane/DuPage <br> County Line | $\$ 2,235,750$ | $\$ 1,788,600$ | Adaptive signal <br> control, road <br> weather information <br> system, dms, cctv, <br> and traffic data <br> collectors | 2 2013-2014 |


| SI10123528 | Lake <br> County <br> DOT | Waukegan Rd from Casimir Pulaski Dr to Norman Dr South | \$2,096,120 | \$1,676,900 | Inconnect to other signal systems along IL 43 and be connected to PASSAGE. 3 signals modernized. VIDEO | 2013-2014 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SI10123818 | Lake <br> County <br> DOT | Sunset Av, Glen <br> Flora Av, Jackson St, <br> 10th St and 14th St | \$2,953,970 | \$2,363,180 | Signal interconnect for 5 roads and signal modernization at two intersections. <br> Also connect to PASSAGE; VIDEO | 2014-2015 |
| SI04123542 | Oak Park | Village of Oak Par <br> Traffic Signal <br> Management System | \$130,400 | \$104,320 | replacement of system software and network server for Traffic management system; includes E-2, so C in 2012 is unlikely | 2012 |
| TI13123796 | RTA | Regional Transit <br> Signal Priority <br> Integration Plan, Five <br> Year Implementation: <br> Priority Corridors | \$40,000,000 | 32,000,000 | Eng and construction requested FFY 2012 | 2012-2016 |
| Total |  |  | \$82,295,750 | \$65,017,010 |  | 24 Projects |

## Corridor Recommendations

"GO TO 2040 recommends that the region prioritize investments toward strategic enhancements and modernization of the transportation system. If carefully targeted, these types of projects will improve access, mobility, and the overall experience for all users." GO TO 2040 p. 272

GO TO 2040 specifically recommends implementing roadway improvements, including projects that add lanes to arterials or other streets, addition of turn lanes, access management programs, intersection improvements, new or improved interchanges, and new or improved bridges. The following package of projects consists of targeted arterial improvements where a number of investments in a specific corridor are under consideration, often by different jurisdictions. When taken together, a group of projects can substantially improve the operation of an entire corridor, as Strategic Regional Arterial (SRA) improvements were initially intended. Several such packages were identified.
The RTOC further recommends that if these corridor improvements are recommended by the CMAQ project selection committee (PSC), the PSC will consider a policy of requesting that implementers specifically consider accommodations for intersection far-side bus stops to improve both transit and intersection operations.

The following package includes 39 projects and totals approximately \$65,000,000 in federal funds.

## Recommended Arterial Corridors

| Identified Corridors | Project Cost | Federal Request | \# of Projects |
| :--- | ---: | ---: | :---: |
| Lake-Cook/Dundee Corridor | $\$ 24,103,000$ | $\$ 18,328,000$ | 10 |
| Fabyan Parkway/IL 38 Corridor | $\$ 20,185,000$ | $\$ 15,273,300$ | 6 |
| US 14/Barrington Road Corridor | $\$ 20,031,200$ | $\$ 11,865,000$ | 5 |
| IL 47 Corridor | $\$ 6,600,000$ | $\$ 5,280,000$ | 3 |
| US 6 Corridor | $\$ 4,400,000$ | $\$ 3,520,000$ | 2 |
| IL 59/US 20 Corridor | $\$ 4,280,000$ | $\$ 3,424,000$ | 5 |
| 55th Street Corridor | $\$ 3,885,000$ | $\$ 3,108,000$ | 3 |
| Butterfield/Roosevelt Corridor | $\$ 4,368,900$ | $\$ 2,452,220$ | 3 |
| Harlem Avenue Corridor | $\$ 1,700,000$ | $\$ 1,360,000$ | 2 |
| Total Corridor Recommendations | $\$ 89,553,100$ | $\$ 64,610,520$ | 39 |

## Lake-Cook/ Dundee Corridor

|  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CMAQ ID | Sponsor | Location | Total | Federal | Description | Program Year |
| II03123449 | IDOT | IL 68/Dundee Rd at North Wilke Rd | \$480,000 | \$384,000 | Additional turn lanes. | 2015-2016 |
| I03123493 | IDOT | IL 68/Dundee Rd at Kennicott Av | \$420,000 | \$336,000 | Additional turn lanes. | 2014-2015 |
| I103123453 | IDOT | IL 68/Dundee Rd at Buffalo Grove Rd | \$2,700,000 | \$2,160,000 | Additional turn lanes and signal modernization | 2014-2015 |
| I103123512 | IDOT | IL 68/Dundee Rd at IL 83 | \$1,050,000 | \$840,000 | Additional turn lanes and signal modernization | 2014-2015 |
| I03123497 | IDOT | IL 68/Dundee Rd at McHenry Rd/Wheeling Rd | \$1,200,000 | \$960,000 | Additional turn lanes and signal modernization. | 2014-2015 |

## Lake-Cook/ Dundee Corridor (Continued)

| CMAQ ID | Sponsor | Location | Total | Federal | Description | Program Year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| II02123454 | IDOT | IL 68/Dundee Rd at Landwehr Rd | \$720,000 | \$576,000 | Additional turn lanes. | 2015-2016 |
| II02123470 | IDOT | IL68/Dundee Rd at Pfingsten Rd | \$1,000,000 | \$800,000 | Additional turn lanes. | 2015-2016 |
| II10123783 | Cook County <br> Highway Department | Lake Cook Rd at Buffalo Grove Rd | \$7,030,000 | \$5,113,000 | Additional turn lanes and widening.Traffic signal modernization and integration into Lake County Passage.Funding for construction only. | 2016 |
| II10123765 | Cook County Highway Department | Lake Cook Rd at Weiland Rd | \$5,231,000 | \$4,185,000 | Additional turn lanes and widening.Traffic signal modernization and integration into Lake County Passage.Funding for construction only. | 2015 |
| II10123764 | Cook County <br> Highway Department | Lake Cook Rd at IL 83/McHenry Rd | \$4,272,000 | \$2,974,000 | Additional turn lanes and widening.Traffic signal modernization and integration into Lake County Passage.Funding for construction only. | 2016 |
| Corridor Total |  |  | \$24,103,000 | \$18,328,000 |  | 10 Projects |

## Fabyan Parkway / IL 38 Corridor


## US 14 / Barrington Road Corridor



## IL 47 Corridor



## US 6 Corridor



## IL 59 / US 20 Corridor


## 55th ${ }^{\text {th }}$ Street Corridor

|  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CMAQ ID | Sponsor | Location | Total | Federal | Description | Prog | ram Year |
| II08123821 | DuPage County DOT | 55th St. at Main St. | \$1,780,000 | \$1,424,000 | Additional turn lanes and signal modernization | 2012 | 2015 |
| II08123822 | DuPage County DOT | 55th St. at Fairview Ave. | \$1,175,000 | \$940,000 | Additional turn lanes and signal modernization | 2012 | 2015 |
| SI08123514 | DuPage County DOT | CH35/55th St from Dunham Rd to Clarendon Hills Rd | \$930,000 | \$744,000 | run fiber and upgrade 5 signals | 2014 | 2015 |
| Corridor Tota |  |  | \$3,885,000 | \$3,108,000 |  | 3 Pr | jects |

## Butterfield / Roosevelt Corridor

|  |  | d. / 22nd Street |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CMAQ ID | Sponsor | Location | Total | Federal | Description | Program Year |
| II08123475 | IDOT | IL 38/Roosevelt Rd at Ardmore Ave | \$700,000 | \$560,000 | Additional turn lanes. | 2015-2016 |
| II08123808 | Elmhurst | IL 56/Butterfield Rd at Commonwealth Ln | \$1,649,100 | \$377,180 | Additional turn lanes and signal modernization. CMAQ for constr. | 2012 |
| II08123642 | Elmhurst | IL 56/Butterfield Rd. at York St. | \$2,019,800 | \$1,515,040 | Additional turn lanes | 2012-2016 |
| Corridor Total |  |  | \$4,368,900 | \$2,452,220 |  | 3 Projects |

## Harlem Avenue Corridor



## Special Projects

Special projects were recommended by the RTOC for a variety of reasons, noted for each project. There are 9 special projects totaling approximately $\$ 48$ million.

| CMAQ ID | Sponsor | Location | Total | Federal | Description | Program Year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BP09123715 | City of Elgin | Fox River Trail over Fox River | \$2,377,000 | \$1,902,000 | Construction of a bike path and bicycle/pedestrian bridge. May include a biosolids transfer line. | 2012-2015 |
| Reason: This project has is expected to include a biosolids pipeline that will reduce the need for truck trips between two separate facilities of the Fox River Water Reclamation District |  |  |  |  |  |  |
| II08123820 | DuPage County DOT | 75th St. at Cass Ave and Plainfield Rd. | \$15,045,000 | \$10,100,000 | Additional turn lanes and signal modernization | 2012-2013 |

Reason: DuPage County has invested significant resources in $75^{\text {th }}$ Street because it is an SRA and provides access to I-355, IL59, IL 53, and IL 83. A review of the corridor indicates that $75^{\text {th }}$ at Cass, and $75^{\text {th }}$ at Plainfield are "bottleneck intersections" where throughput of the corridor can be greatly improved by providing turn lanes and extending access management treatments.

| II07123506 | IDOT | IL 394 at Sauk Trail | $\$ 810,000$ | A648,000 | Additional turn lanes. $2012-2013$ |
| :--- | :--- | :--- | :--- | :--- | :--- |

Reason: This location is at the end of the limited access system and is a dangerous location. Sauk Trail east of IL 394 connects to US 30, which goes into Indiana. Both routes are regionally significant.

| II12123489 | IDOT | US 30/Lincoln Hwy at I-55 Ramps | \$1,000,000 | \$800,000 | Additional turn lanes on ramps. Construction only | 2014 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Reason: Ramps back up onto mainline expressway. Both routes are regionally significant. IDOT recognizes multiple cycle waits, and queuing that affects both marked US highway and Interstate route.

| CMAQ ID | Sponsor | Location | Total | Federal | Description | Program Year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| II11123459 | IDOT | IL 173 at Wilmot Rd | \$3,200,000 | \$2,560,000 | Roundabout | 2013-2014 |

Reason: is an existing all-way stop control which backs up significantly in peak hours. Both routes are regionally significant and Wilmot goes into Wisconsin.

| II06123451 | IDOT | Pulaski Rd at 115th St | \$1,050,000 | \$840,000 | Additional turn lanes and signal modernization | 2015-2016 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reason: Turning traffic on $115^{\text {th }}$ Street backs up, interfering with CTA bus 53A South Pulaski which must also make the left turn.. |  |  |  |  |  |  |
| BE10123791 | Lake County DOT | CH A22/Washington | \$21,174,000 | \$16,939,000 | Construct a grade | 2013 |
|  |  | St at CN/Metra |  |  | separation between |  |
|  |  | Crossing |  |  | Washington St. and the |  |
|  |  |  |  |  | CN/Metra railroad tracks. |  |
|  |  |  |  |  | Phase 1 and 2 engineering |  |
|  |  |  |  |  | and right-of-way |  |
|  |  |  |  |  | acquisition complete. |  |

Reason: The project involves depressing Washington Street at the CN Railroad. Washington Street has an ADT of approximately 16,300 vehicles (18,000 is estimated for 2030). The CN RR carries approximately 50 trains per day, both freight and commuter. The at-grade railroad crossing results in a traffic bottleneck that affects emergency vehicles and creates severe traffic delays.

| BP03123695 | Village of Elk Grove Village | Overpass at IL 72 Higgins Road in Busse Woods (Elk Grove Village). | \$4,925,000 | \$3,495,000 | Bicycle overpass at IL 72 | 2011-2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Reason: Substantial conflicts exist between pedestrians and bicyclists and motorists at this location. Delay from this conflict backs up onto I-290 mainline. Therefore a grade separation here would reduce danger for all users.

| II12123794 | Will County | CH 16/Bell Rd at CH | \$12,980,000 | \$10,384,000 | Additional through and | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Department of | 37/143rd St |  |  | turn lanes. Construction |  |
|  | Highways |  |  |  | only |  |

Reason: This location ranks at the top of Will County's list of high crash locations. This location is consistently ranked as one of Will County's most congested intersections, and with the new interchange with the I-355 extension just over 4 miles to the west, this area has seen a substantial increase in traffic volumes. This project is the first of four projects that will improve the Bell Road Corridor (an SRA Route) to SRA standards.

## Operations Program

The region's CMAQ program did not receive project submittals addressing freeway congestion. The following four priority areas should be used as a basis for operations program development over the next several years. Note that if the I-55 Bus on Shoulders Demonstration Project ${ }^{1}$ is successfully completed, the Regional Bus on Shoulders program may also be included as a priority.

## Top Priority: FY 2012 CMAQ Program Development:

## Data Integration: Public Safety Answering Point (PSAP)/ Traffic Management Center (TMC) Integration

"The PSAP often serves as the point of origin for Traffic Incident Management (TIM)-related information exchange and communication since it receives and processes 911 calls and other requests for assistance, and serves as the main dispatch center for law enforcement, fire, and emergency medical services. Computer Aided Dispatch (CAD) is the PSAP's primary information system and most common means used to manage and dispatch multiple response vehicles from the PSAP. When a PSAP operator/dispatcher receives a call for service, the information is entered into the CAD system.

A growing number of jurisdictions are integrating PSAP CAD systems into Traffic Management Center operations to facilitate the real-time exchange of incident data."
http://ops.fhwa.dot.gov/eto_tim_pse/publications/timhandbook/chap4.htm
Our region's response to incidents and the resulting congestion and safety hazards will be improved with a better flow of information to traffic management centers about incidents as they occur. This is a complicated undertaking which will require significant investments in building relationships with the PSAP operators and system operators, detailed study of how the desired information flow can be accomplished, and actual implementation of the information system.

## Project Tasks

Identify key stakeholders, (PSAPS that cover the majority of the calls in the region and the TMCs), evaluate data systems used in the each of the PSAP and TM centers, identify appropriate data items to share, identify desired data flows and data formats to implement integration, develop an implementation plan, implement the data flows.

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## Second Priority:

Incident Management Programs, including arterial incident management

- "Incidents are estimated to cause more than 50 percent of total delay experienced by motorists in all urban areas. Of this, 25 percent is caused by traffic incidents such as crashes, stalled vehicles, roadway debris, and spilled cargo.
- Secondary crashes are estimated to cause 18 percent of all fatalities on freeways.
- In 2002, approximately 50 percent of all police, Emergency Medical Services (EMS) personnel, and firefighter fatalities occurred as a result of transportation incidents (either accidental or "struck-by" incidents or crashes in pursuit or other line-of-duty activities).
- Between 1997 and 2006, 17 percent of the accidental law enforcement deaths were the result of "struck-by" motor vehicle incidents occurring during activities such as traffic stops, roadblocks, directing traffic and assisting motorists."
http://ops.fhwa.dot.gov/eto_tim_pse/publications/timhandbook/chap1.htm\#sec1-4

This project includes further integrating incident data, and coordination among responding agencies. Best practices have been developed and may be a resource for highway operations and incident response personnel. Many of these practices are focused on preventing secondary incidents in the course of daily highway operations.

Among the areas of most concern are those related to handling highway fatalities. These tragedies require a response by a medical examiner or coroner (depending on the jurisdiction), in support of a death investigation. These may take hours and result in further incidents, including additional fatalities. RTOC wishes to pursue resolution of the interests of all stakeholders in these situations. This may require closer coordination or even new legislation regarding facility closures.

## Project Tasks

Identify stakeholders, both system operators and responding agencies. Analyze incident data to help describe the problem using measurable criteria. Elicit stakeholder input to identify specific incident practice issues which should be addressed within this process. Develop solutions to the identified issues. Develop implementation plan and begin implementation.

## Third Priority:

Traveler Information (Variable Message Signs (VMS), Web sites, Highway Advisory Radio (HAR), etc.)
System Monitoring (Signal-Based Detectors, Closed Circuit Television CCTV, Mid-block Detection, Third Party Sources) Traffic Management

Investing in additional traffic monitoring equipment and information distribution technologies allows the region to collect more and betterquality data to provide timely and accurate information to roadway users. Drivers can use it to make better travel decisions and the same data supports better decisions by transportation system managers.

Following are the FHWA Research and Innovative Technology Administration 2007 ITS Deployment Statistics for our region:

|  | Centerline <br> Miles | VMS | Miles <br> Covered by <br> HAR | Miles <br> Covered by <br> CCTV | Miles Covered <br> by Incident <br> Detection <br> Algorithms | Miles under <br> Electronic <br> Surveillance | Intersections <br> under <br> Electronic <br> Surveillance |
| :--- | :--- | :---: | :--- | :--- | :--- | :--- | :--- |
| Freeway | 676 | 86 | $24 \%$ | $30 \%$ | $59 \%$ | $55 \%$ |  |
| Arterial | 4,696 | 25 | $18 \%$ | $8 \%$ | $11 \%$ |  | $42 \%$ |

ITS Deployment Tracking Database
http://www.itsdeployment.its.dot.gov/summarymetro.asp?MetroArea=Chicago,\ Gary,\ Lake\ County\&Year=2007

## Project Tasks

Inventory locations of existing VMS equipment and identify gaps where additional equipment should be installed. Identify locations on parallel highways or arterials that approach freeways where VMS should be installed to provide expressway information. Develop requirements and an implementation plan for installing equipment at these locations. Facilitate the process for system operators to identify key arterials that should be monitored and provide traveler information. Longer corridors will be multi-jurisdictional. Develop requirements and implementation plans for monitoring and providing information for the arterial corridors.

## Fourth Priority:

## Arterial On-Street Parking Management

On street parking has a significant impact on capacity and traffic flow, contributing to slower speeds and congestion. A balance must be maintained between the need for on-street parking to serve local land uses and the need of system operators to keep traffic flowing efficiently and smoothly. The region's roadway operators have identified on-street parking locations and policies as an issue that should be addressed in a more consistent manner regionwide.

## Project Tasks

Develop accurate datasets of information about on-street parking to support analysis. Assemble system operators to identify locations where on-street parking and traffic operations are in significant conflict. Assemble a group of stakeholders including operators, municipalities and private interests to develop strategies for alleviating the conflict. Conduct analysis to measure the traffic impacts and economic impacts of adjusted or new on-street parking strategies. Pursue implementation of the strategies.

## Fifth Priority:

## Speed Harmonization

Variable speed limits might harmonize speed reductions for crashes, roadwork, and other congestion, improving traffic flow and safety. Having a steady, controlled reduction in speeds approaching congestion or an incident may maximize highway capacity, since highway capacity is reduced at very low speeds ( $<30 \mathrm{mph}$ ). Missouri is implementing speed harmonization through the use of advisory speeds in highway segments approaching congestion, construction, and other incidents.

## Example of implementation:

The Missouri Department of Transportation uses variable advisory speeds along I-270/I-255. When congestion starts building along stretches of I-270, MoDOT uses changeable speed signs to vary the advisory speed on the road. Variable Advisory Speeds along I-270/I255 could range from 60 mph during extremely light traffic, to as low as 10 mph during extreme congestion. This would also include congestion due to crashes, work zones or weather conditions. If the advisory speed posted is less than 60 mph , the speed will flash continuously.

- http://www.modot.mo.gov/stlouis/links/VariableSpeedLimits.htm


## Why it works:

If traffic slows down as it approaches a congested area and all the drivers stay at a constant speed, traffic will pass through the congested area faster. Imagine the highway as a funnel. Now, imagine the traffic which has to travel along the highway during a certain time as a container of rice. If you pour all the rice into the funnel at the same time, it gets congested at the bottom of the funnel and takes some time to work through the funnel. Now, if you slowly pour the rice into the funnel - keeping it at a steady pace - the rice moves through the funnel evenly and doesn't cause congestion. In fact, even though the rice is entering the funnel slower, all the rice gets through the funnel (to its destination) faster.

Note: this metaphor is posted at http:///www.modot.mo.gov/stlouis/links/VariableSpeedLimits.htm and explains the concept of variable speeds. It is based on an idea from Paul Haase of Sammamish, Washington, in response to a challenge by Washington State Department of Transportation Secretary Doug MacDonald.

## Project Tasks

Assemble stakeholders to guide this process. Develop priority list of corridors/locations where this technology should be implemented. Develop implementation plan and implement.

## MEMORANDUM

To: CMAQ Project Selection Committee<br>From: Regional Transportation Operations Committee<br>Date: June 30, 2011<br>Re: Projects which are Not Recommended

RTOC identified projects which they recommended not implementing, as opposed to being neutral.

| CMAQ ID | Sponsor | Facility | Description | Notes |
| :---: | :---: | :---: | :---: | :---: |
| II03123787 | Barrington | North Commuter <br> Parking Lot <br> Access Dr and US 14 | New signalized entrance to US Rte 14 from commuter lot | Implementation of this project results in substandard signal spacing. |
| II11123737 | Cary | Cary-Algonquin Rd at Silver Lake Rd | Need project to find best approach for intersection improvement. Initial analysis removing stop control and turning movements. | Implementing the CMAQ project would create a new problem at US 14 / CaryAlgonquin Road which does not have capacity for additional traffic. |
| II12123710 | Diamond | IL 131 and Will Rd. | Phase 1 and 2 engineering underway. CMAQ will be used for traffic signal controls. Only used for constr. | This project does not improve operations and IDOT has not approved a new traffic signal at this location. |
| II09123774 | Elgin | S McLean Blv at US 20 | Bigger Project: SPUI. This CMAQ project request: temp signals and signal modernization. | This project is already underway. |
| II09123779 | Elgin | Longcommon Pkwy at US 20 | Additional acceleration lane | Studies are underway at this location. Appropriate solution has not yet been identified. |
| II07123758 | Olympia <br> Fields | Vollmer Rd at Kedzie Av | single lane roundabout | This location contains a newly rebuilt signal. Three legs are under the jurisdiction of Cook County. |
| TI13123832 | Pace | Regional Bus on Shoulder Program | Location undefined | This should wait for completion of the demonstration project currently underway. |
| II03123696 | Schaumbu rg | IL 62/Algonquin Rd from Meacham Rd to Thoreau Dr | Additional through and turn lanes. Ped actuation signal and ADA requirements | Too near existing signals. |


[^0]:    ${ }^{1}$ Included in the transit focus group package, TI13123716

