

Welcome

WHAT'S HAPPENING

The Missouri Department of Transportation (MoDOT) is going to improve the I-435/Front Street Interchange as an innovative **Diverging Diamond Interchange (DDI)**. To better manage traffic during construction, MoDOT intends to work with area employers and partners to implement **Transportation Demand Management (TDM)** strategies as a way of reducing traffic demands at the Interchange.

COORDINATION & EDUCATION

MoDOT has coordinated with area stakeholders and partners to determine potential TDM strategies and to educate and spread the word about the new DDI in advance of construction. MoDOT:

- Met with **stakeholders and partners** to learn more about the traffic generated in the vicinity of the interchange.
- Held **training sessions** to explain the purpose of TDM and its available strategies.
- Conducted **hands-on workshops** to help employers determine the TDM strategies that may work best for them.
- Will invite the general public to an **open house public meeting** during which information about the DDI and TDM will be available.



QUESTIONS?

Look for people with pre-printed name tags

Additional questions, comments, or concerns:

Call Steve Porter, MoDOT Senior Public Relations Specialist at 1-800-ASK-MODOT

E-mail Steve at Stephen.Porter@modot.mo.gov

You can also write:

I-435/Front Street Interchange Improvement Project

Missouri Department of Transportation

600 NE Colbern Road

Lee's Summit, MO 64086

Visit the website at www.435DDI.com



I-435 AND FRONT STREET
DIVERGING DIAMOND
INTERCHANGE

DDI

The Diverging Diamond Interchange (DDI) is a unique type of diamond interchange. Where the local street crosses to the opposite side of the freeway bridge twice. As a result, motorists briefly drive their vehicles on the opposite side of the road from where they would normally drive.

AN INNOVATIVE DESIGN

The conventional diamond interchange at I-435 and Front Street has been redesigned and will be reconstructed as a Diverging Diamond Interchange (DDI). The new DDI will accommodate more traffic and move it faster, decrease congestion, and increase safety. The most noticeable difference between the new interchange and the old is that Front Street will be improved as a pair of one-way streets that cross at two signalized intersections. This revolutionary design is one of only a few planned for the Kansas City Metro. Construction is anticipated to begin in the spring of 2011.

BENEFITS

MoDOT reviewed other design options before deciding to move forward with the DDI. Other designs had limited lifespans, low service levels, more conflict points, issues managing peak hour truck traffic, and more.

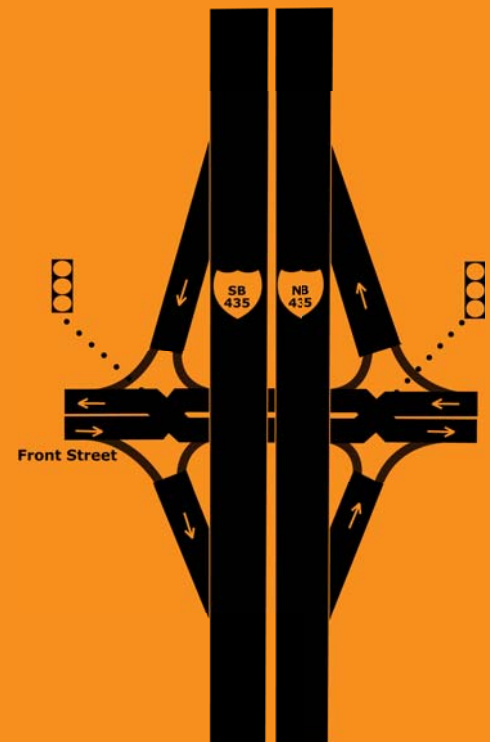
In contrast, the DDI offers a number of benefits including:

- Improved safety
- Higher capacity
- Fewer conflict points
- Better sight distance
- Reduced speeds
- U-turn accommodation
- Simpler signal timing and geometry
- Traffic-calming features
- Almost no wrong way entry onto freeway ramps
- Less infrastructure to construct, maintain, and replace
- 50% lower overall project costs compared to other design options
- More room for trucks to maneuver
- A shorter construction schedule

DRAWBACKS

Despite its multiple advantages, the DDI has a few drawbacks:

- Driver expectations
- Pedestrian ramp crossings need to be signalized
- Additional signing, lighting, and pavement markings will be necessary



Diverging Diamond

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TDM

Transportation Demand Management (TDM) is a term used to describe a method of reducing traffic congestion, managing system demands, and providing travel options. TDM choices are demand- or supply-based. Demand-based opportunities concentrate on employers and employees while those that are supply-based focus on traffic operation and movement.

MoDOT's GOALS

Often supply-based TDM strategies result in the creation of additional transportation infrastructure, such as traffic signals and turn lanes. However, with increased gas prices and environmental concerns, MoDOT wants to promote demand-based TDM's geared to:

- Encourage **employers and employees to use alternative modes of transportation** (transit, carpools, and vanpools) during the construction of the new I-435/Front Street Diverging Diamond Interchange (DDI).
- **Reduce the number of single-occupancy vehicles** entering the Interchange during construction to reduce traffic demand during rush hours.

EFFECTIVE PARTNERSHIPS

MoDOT can reach its goals if the right information is shared at the right time among the right people and if effective coordination is achieved between MoDOT, employers, and partners like the **Mid-America Regional Council (MARC)** and the **Kansas City Area Transportation Authority (KCATA)**.

Strong relationships with other organizations are also important including those with:

- Railroads
- Employee Unions
- Large Employers
- City of Kansas City, Missouri
- Industrial, Freight, and Independent Drivers Organizations
- Business and Professional Associations
- Law Enforcement Agencies
- Emergency Service Providers

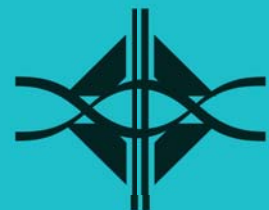
IT'S GOING TO REQUIRE TEAMWORK

MoDOT's TDM Plan will blend information gathered from area partners and stakeholders with the most appropriate TDM strategies and available incentives for the I-435/Front Street Interchange Study Area. However, planning can only go so far. Employers, employees, and partners must work together to put the recommended TDM strategies into practice. It will require teamwork to make the reconstruction of the I-435/Front Street Interchange happen smoothly.



Transportation Demand Management

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Work Together

TDM Strategies

Potential demand-based strategies can be organized into four categories: **regional, employer, employee, and operational.**

REGIONAL STRATEGIES

The **Mid-America Regional Council (MARC)** and the **Kansas City Area Transportation Authority (KCATA)** offer motorists the chance to take advantage of opportunities to ride with co-workers, neighbors, and friends to similar destinations via:

MARC RideShare Programs

- **Carpool Connection**, AdVANtage and VPSI Commuter Vanpools, **Guaranteed Ride Home**, Midwest Commuters Choice

The Metro Bus Services

- Bike-N-Bus, Swing Shift, Night Stop, **Park-and-Ride**, MetroFlex: Service Upon Request

Informational Services for Commuters (congestion related)

- MARC Ozone Alerts, **KC Scout** Updates, I-435/Front Street Interchange **7-Day Outlook**



EMPLOYER STRATEGIES

Employers may present opportunities and/or incentives to their employees that encourage them to use alternative modes of transportation for travel between home and work. Employers may:

- Support a **Guaranteed Ride Home** to promote transit use, carpooling, vanpooling, and bicycling
- Provide Preferential **Carpool Parking**
- Participate in KCATA's **Employee Bus Pass Program**
- Offer Flexible, Alternative, or **Compressed Work Schedules**
- Encourage **Telecommuting**
- Supply bike racks, lockers, and showers for non-drivers



EMPLOYEE AND OPERATIONAL STRATEGIES

Employee and operational strategies are necessary when few employer-supported programs are available and where alternative transportation options are limited.

Employee Strategies

- Carpooling, Bicycling, and Using Transit

Operational Strategies

- Shifting Shipping Times, Changing Delivery Times for goods and/or services, Varying Employee Shift Begin/End Times, Reducing Less-Than-Full Shipments, Constructing Site Traffic Controls, and Shipment/Mobilization Timing

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Transportation Demand Management

Something to Think About



Employers have said that implementing the range of TDM strategies varies with business size, type, location, and customer vs. company needs. Some strategies will involve the development of partnerships between area businesses and organizations. Others will require government coordination.

One Size Doesn't Fit All

Strategies for All Businesses

- Provide satellite parking areas with shuttle service (carpool junctions)
- Offer park-and-ride carpools
- Plan on-site or staggered lunch options
- Offer flexible work options
- Share information
- Establish partnership with other businesses/organizations
- Shift employee begin/end times

Strategies for Businesses East of the Interchange

- Offer more efficient, accessible bus services
- Provide temporary emergency access/evacuation

Strategies for Major-Large Companies

- Offer work at home options
- Promote RideSharing (with incentives)
- Promote Metro bus services (with incentives)

Strategies for Small-Medium Companies

- Promote RideSharing (without incentives)
- Promote Metro bus services (without incentives)
- Plan selective work at home days

Strategies for Delivery Companies

- Communicate with non-local shipper/delivery drivers
- Encourage alternate truck fueling times
- Provide alternate route for trucks, e.g. via Gardner Avenue
- Shift freight shipment timing
- Reduce less than full shipments

Strategies for Corrington Avenue Businesses

- Stop staging trucks on Front Street
- Acquire security and traffic enforcement

Strategies for Government (MoDOT and City)

- Provide construction site traffic control
- Manage construction shipment timing and mobilization
- Monitor/modify signal timing for construction-related traffic shifts
- Monitor/modify signal timing at Chouteau/Front and at I-435/210 Highway
- Install temporary traffic signal at Chouteau/Deramus
- Sign and direct alternate routes
- Provide traffic count information by ramp by hour and post online
- Encourage use of Riverfront Road as alternate route for cars
- Handle street maintenance during non-peak hours
- Improve coordination among projects
- Maintain communication with area stakeholders and general public
- Maintain existing partnerships and build new relationships
- Keep key decision-makers involved

Other Strategies

- Limit the impact of train crossings at Front/Kansas

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Why change the way you drive?

Congestion is only going to get worse before it gets better...

- Expect your business, your employees, and your customers to be significantly impacted.
- Count on backups that will lengthen your drive time between home and work, and slow moving traffic that is guaranteed to upset your delivery and shipment schedules.
- Your company's normal operating hours may also be disrupted.

You could be part of the solution. Consider this...

- 7 out of every 10 vehicles that pass through the interchange are cars and vans. The rest are trucks.
- There are an estimated 435 employers, representing 13,162 employees in the Northeast Industrial District. Over 250 are located east of Chouteau Trafficway (2007 survey).
- If the number of vehicles using the interchange daily during construction were cut by as little as one vehicle per business, there would be a noticeable difference in traffic flow.

Incentives

- Changing driving habits is never easy but providing incentives to employees can help, especially if they are not already ridesharing or riding the Metro to and from lunch and meetings or between home and work!

Subsidies

Awards

Equipment

Commuter Benefits (MARC RideShare)

For bus pass purchases	Gift cards/ coupons	Showers and Lockers	Less demand for parking spaces, which reduces leasing and maintenance costs
	Money	Kitchen Supplies (microwaves, refrigerators, tables/chairs)	Reduced payroll taxes if vanpool or transit benefit programs are established
	Certificates of Acknowledgement	Lap Tops	Good corporate community standing
	Prime parking spots that are close to the door for carpoolers	Off-site (VPNs – Virtual Private Network) internet connections	Higher employee productivity and lower stress levels
			Enhanced employee benefit packages, which help improve recruitment and retention
			Employee cost savings – People who drive alone for 20-60 mile roundtrip commutes spend \$3,000 - \$10,000 per year. Giving up solo driving just one day a week can save between \$600 and \$1,800 each year (MARC).



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