



DIRECTIONS

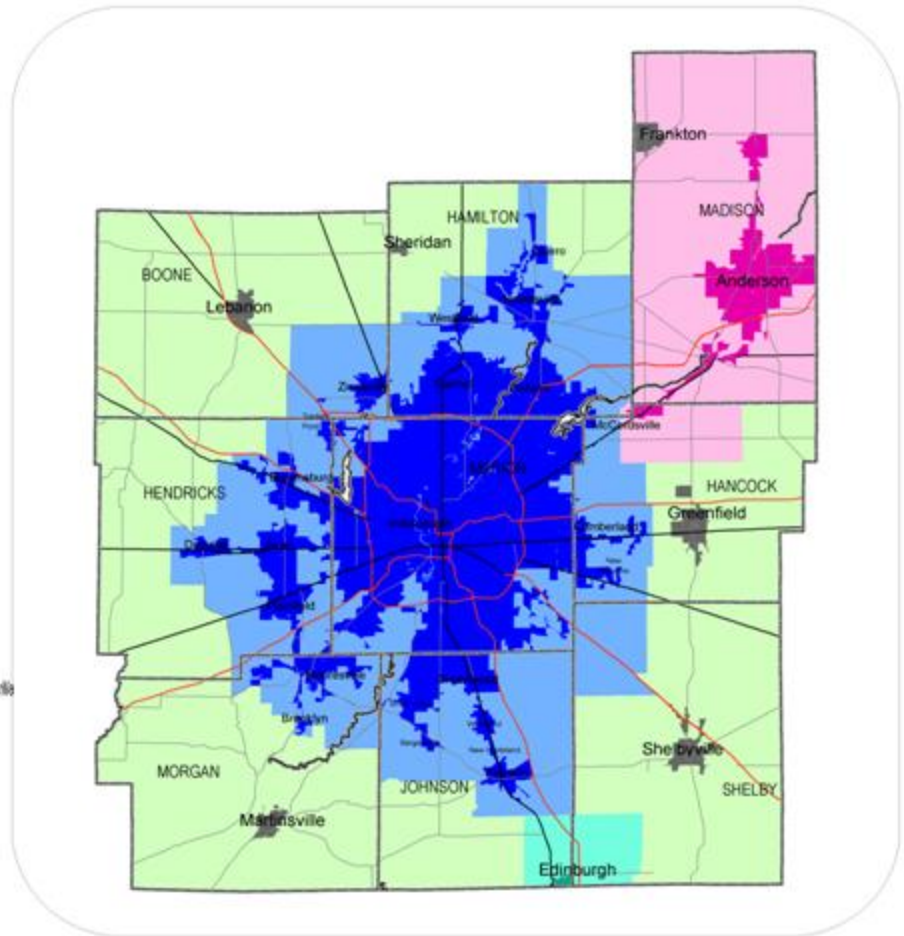
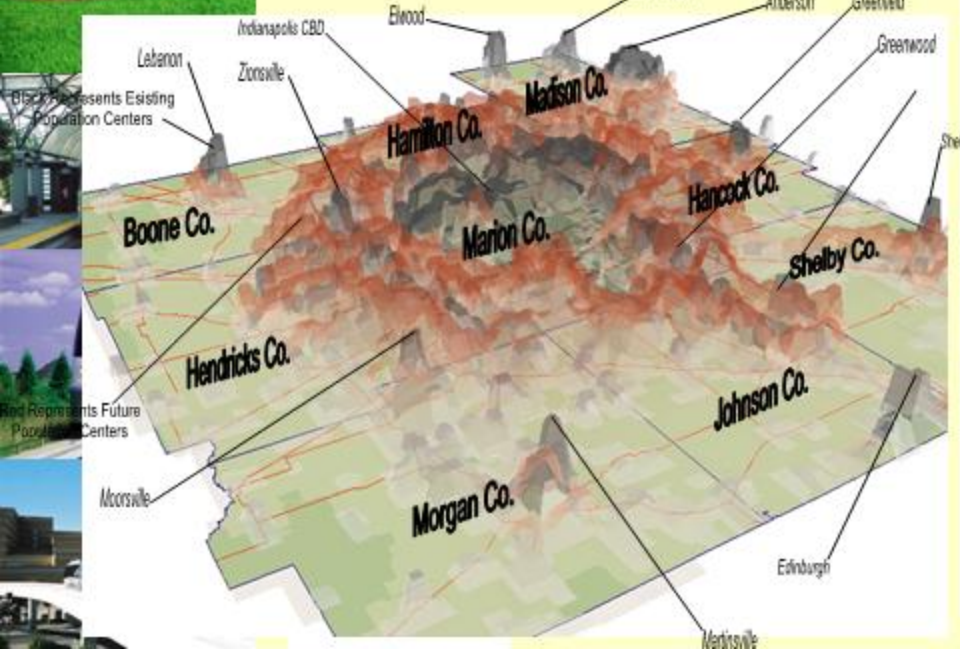
A Rapid Transit Study To Improve Regional Mobility



- Metropolitan Statistical Area (MSA) for air quality, transit, and other regional planning purposes
- Redefined by 2000 Census Data
- 1.6 million people
- 700,000 households
- Indianapolis MSA is 29th largest in the US



IndyGo



Metropolitan Planning Area 2004



State of the Region: Congestion



Urban Area	Total System Daily Vehicle-Miles of Travel (000)
85 Urban Area Average	40,024
Large Urban Area Average	40,051
San Diego CA	68,000
Seattle WA	66,885
Minneapolis-St. Paul MN	62,850
St. Louis MO-IL	62,450
Tampa-St. Petersburg FL	58,240
Baltimore MD	51,760
Denver-Aurora CO	47,560
Kansas City MO-KS	42,545
Orlando FL	41,525
Cleveland OH	40,200
San Jose CA	39,600
Cincinnati OH-KY-IN	39,225
Pittsburgh PA	39,075
Riverside-San Bernardino CA	36,320
Virginia Beach VA	36,000
Milwaukee WI	33,645
Portland OR-WA	32,475
Sacramento CA	32,435
San Antonio TX	31,400
Indianapolis IN	30,635
Columbus OH	29,655
Las Vegas NV	27,490
Oklahoma City OK	27,000
Providence RI-MA	26,325
Buffalo NY	22,060
New Orleans LA	15,970

Urban Area	Congested Travel (% of Peak VMT)
85 Urban Area Average	67
Large Urban Area Average	63
Sacramento CA	82
San Diego CA	81
Riverside-San Bernardino CA	79
Las Vegas NV	78
Portland OR-WA	77
Seattle WA	76
Denver-Aurora CO	74
San Jose CA	73
Minneapolis-St. Paul MN	72
Tampa-St. Petersburg FL	71
Baltimore MD	70
Indianapolis IN	67
Orlando FL	65
St. Louis MO-IL	63
Columbus OH	59
Virginia Beach VA	56
San Antonio TX	56
Cincinnati OH-KY-IN	55
Milwaukee WI	53
New Orleans LA	50
Providence RI-MA	43
Kansas City MO-KS	35
Oklahoma City OK	34
Cleveland OH	32
Pittsburgh PA	27
Buffalo NY	25

Urban Area	Congested System (% of lane-miles)
85 Urban Area Average	60
Large Urban Area Average	57
San Diego CA	70
Denver-Aurora CO	70
Sacramento CA	68
Las Vegas NV	68
Tampa-St. Petersburg FL	68
Portland OR-WA	67
Indianapolis IN	67
Minneapolis-St. Paul MN	65
Seattle WA	64
San Jose CA	63
Riverside-San Bernardino CA	62
Baltimore MD	62
Orlando FL	62
St. Louis MO-IL	55
Columbus OH	55
Virginia Beach VA	53
Providence RI-MA	48
San Antonio TX	45
Cincinnati OH-KY-IN	45
New Orleans LA	45
Milwaukee WI	43
Kansas City MO-KS	42
Pittsburgh PA	40
Oklahoma City OK	39
Buffalo NY	36
Cleveland OH	32



Source: Texas Transportation Institute, 2005 Urban Mobility Report

State of the Region: Congestion



Peer Group Rank	Urban Area	Annual Hours of Delay Total Delay (000)
	85 Urban Area Average	43,802
	Large Urban Area Average	33,647
1	San Diego CA	81,756
2	Seattle WA	72,461
3	Denver-Aurora CO	64,506
4	Baltimore MD	62,436
5	Minneapolis-St. Paul MN	57,538
6	Tampa-St. Petersburg FL	51,359
7	Riverside-San Bernardino CA	50,155
8	San Jose CA	48,134
9	St. Louis MO-IL	39,936
10	Orlando FL	38,156
11	Sacramento CA	35,929
12	Portland OR-WA	33,387
13	Cincinnati OH-KY-IN	27,288
14	San Antonio TX	23,789
15	Las Vegas NV	22,245
16	Virginia Beach VA	21,746
17	Providence RI-MA	21,668
18	Indianapolis IN	21,358
19	Columbus OH	18,550
20	Milwaukee WI	18,249
21	Pittsburgh PA	14,530
22	Kansas City MO-KS	13,874
23	New Orleans LA	10,853
24	Cleveland OH	10,710
25	Oklahoma City OK	7,218
26	Buffalo NY	6,980

Peer Group Rank	Urban Area	Annual Congestion Cost per Peak Traveler (dollars)
	85 Urban Area Average	794
	Large Urban Area Average	620
1	Riverside-San Bernardino CA	947
2	Orlando FL	935
3	San Diego CA	900
3	San Jose CA	900
5	Denver-Aurora CO	865
6	Baltimore MD	838
7	Seattle WA	792
8	Tampa-St. Petersburg FL	772
9	Minneapolis-St. Paul MN	722
10	Sacramento CA	685
11	Portland OR-WA	670
12	Indianapolis IN	641
13	St. Louis MO-IL	596
14	San Antonio TX	552
15	Providence RI-MA	546
16	Cincinnati OH-KY-IN	513
17	Las Vegas NV	511
18	Columbus OH	483
19	Virginia Beach VA	438
20	Milwaukee WI	397
21	New Orleans LA	306
22	Kansas City MO-KS	286
23	Pittsburgh PA	241
24	Buffalo NY	221
25	Oklahoma City OK	205
26	Cleveland OH	177



Source: Texas Transportation Institute, 2005 Urban Mobility Report

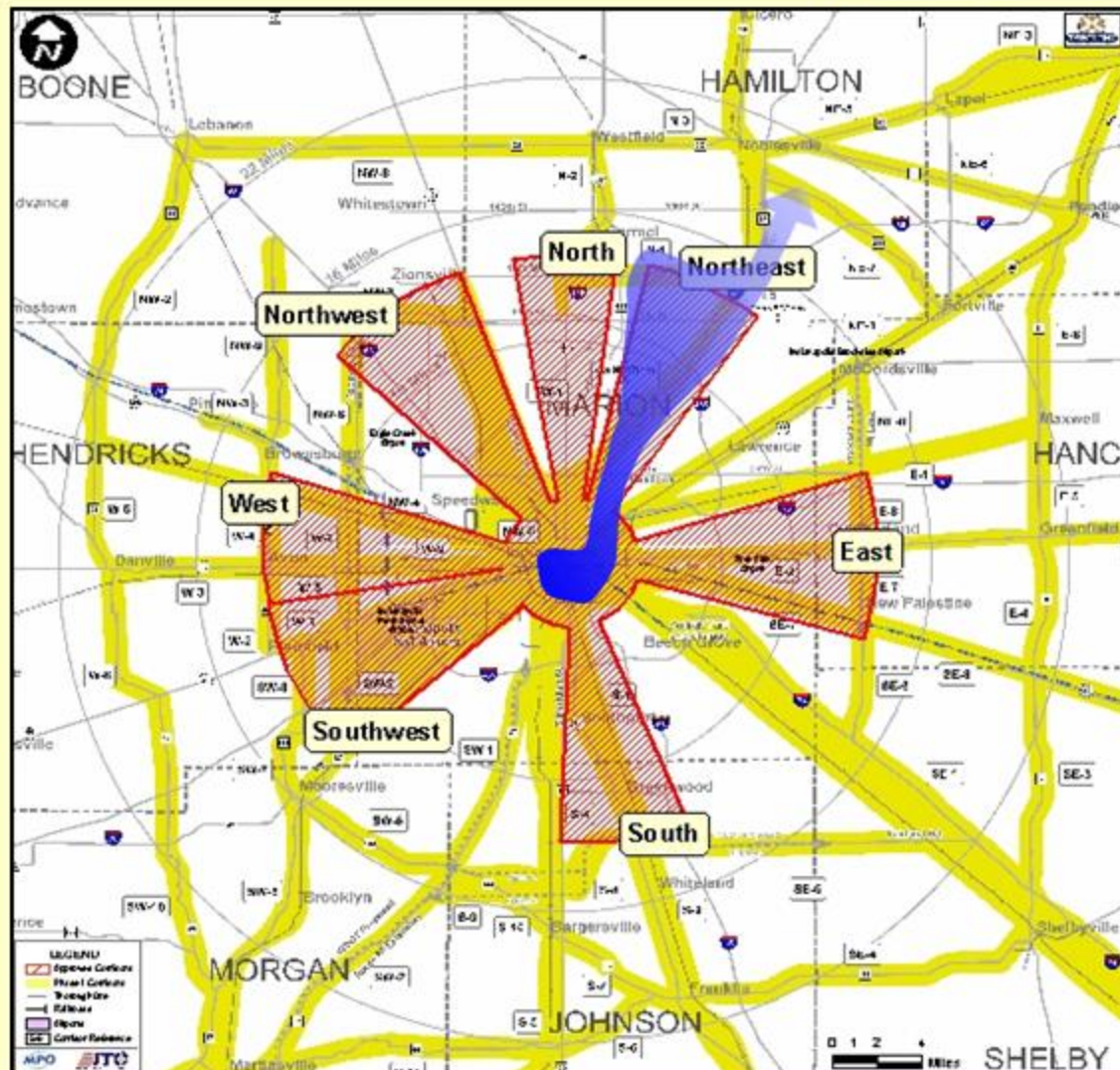
Regional Evaluation and Selection of Locally Preferred Corridor

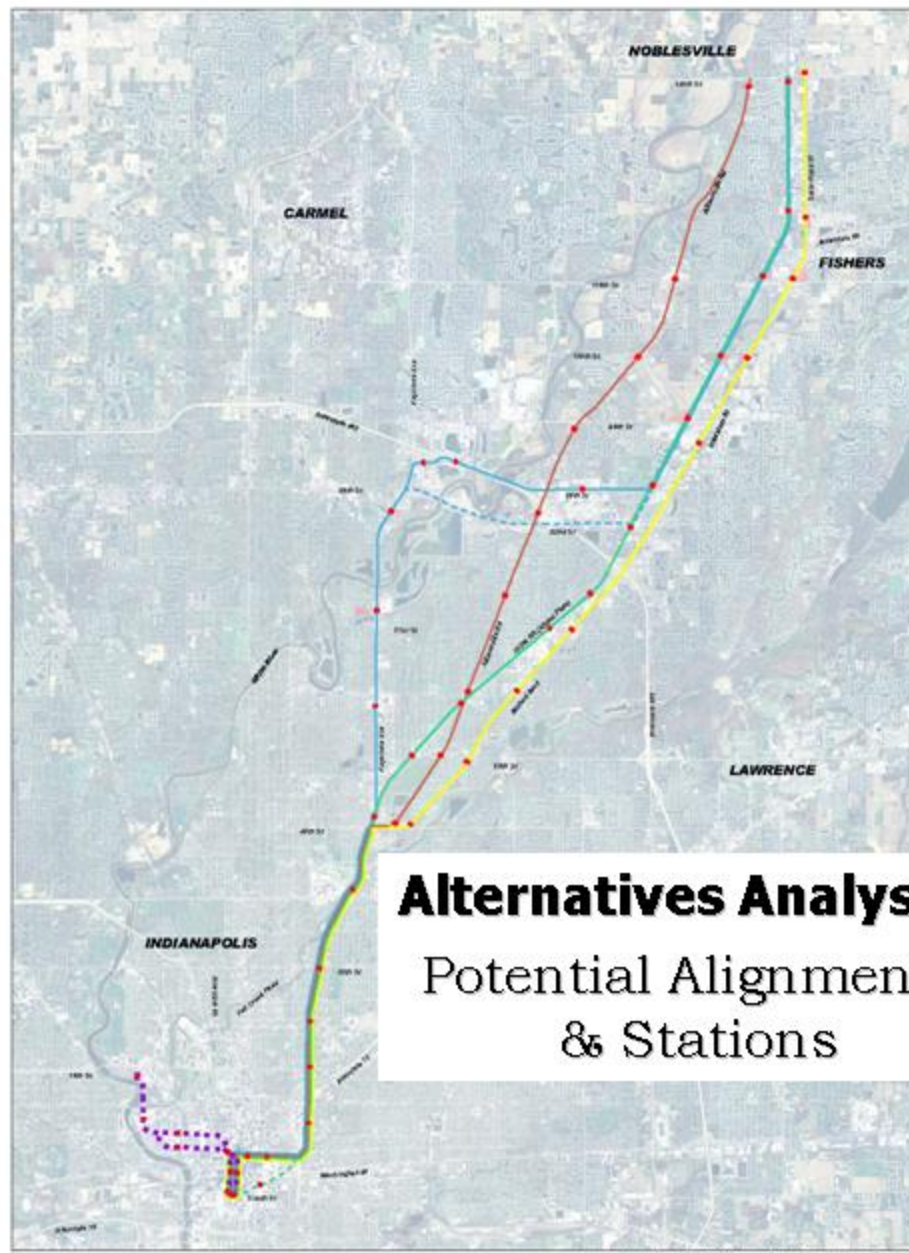


Corridors were determined and evaluated based on:

- Employment and population densities
- Special generators or destinations
- Land-use patterns
- Travel desires

NOTE: Federal 5309 "New Starts" money currently utilized for DiReCTIONS





Alternatives Analysis

Potential Alignments, & Stations

INDIANAPOLIS REGIONAL RAPID TRANSIT STUDY PHASE III - NORTHEAST CORRIDOR ALTERNATIVES ANALYSIS Overview Map
 Map Date: July 2007

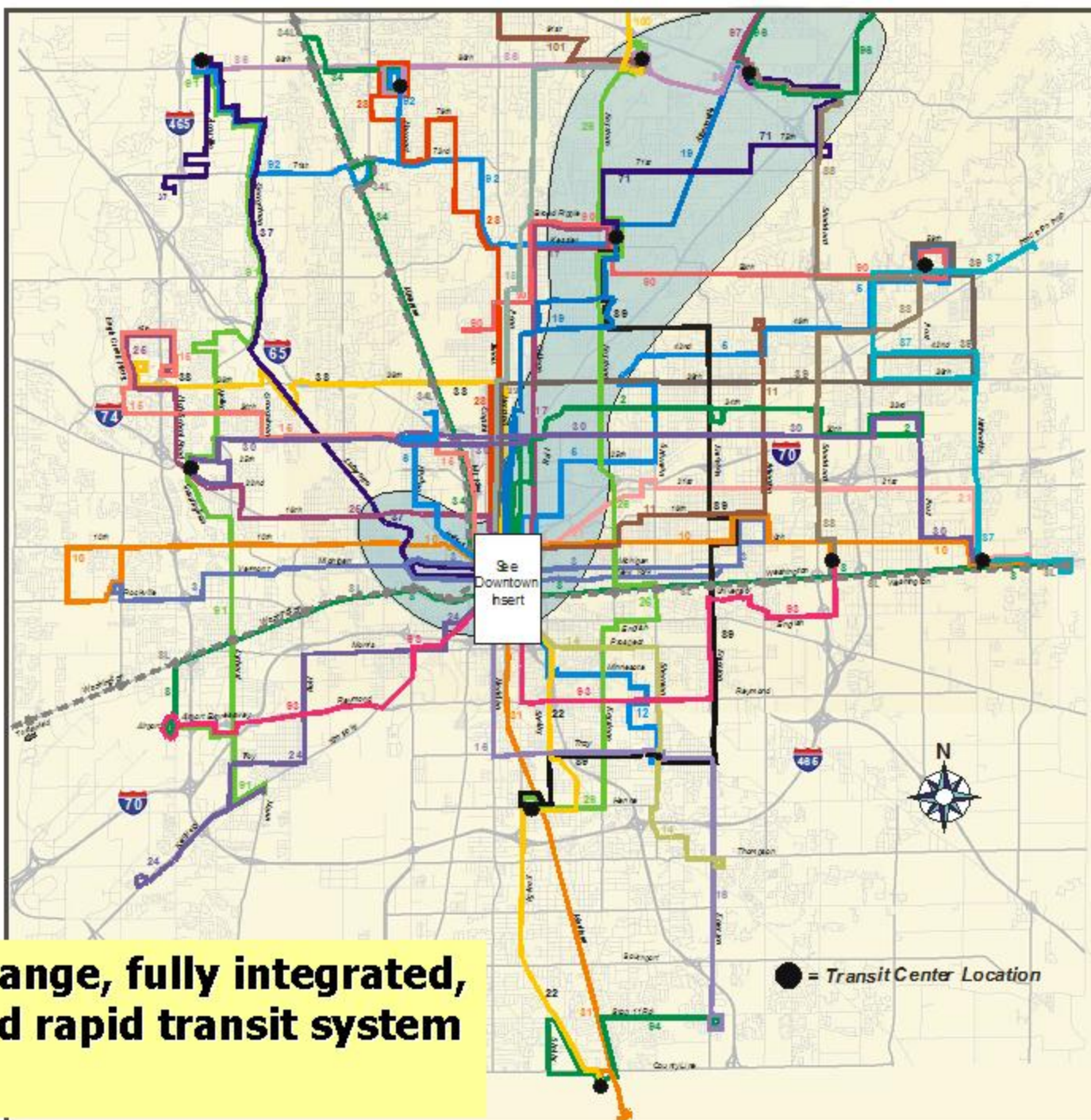
LEGEND

- I-69/Birford Route
- HHPA RR Route
- Allisonville Route
- RR/Keystone Route
- Station Locations
- Park & Ride Locations
- IUPUI-Biocrossroads Circulator
- HHPA RR Potential Alternate Route
- RR/Keystone Potential Alternate Route

MPO

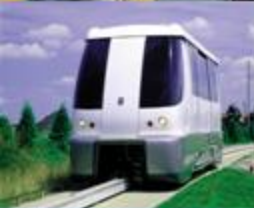
Scale: 0 0.5 1 2 3 4 Miles

Source: Photographs from KRC, 2005; Statewide Light Orthophotography Program



**Long-range, fully integrated,
bus and rapid transit system**

Candidate Rapid Transit Technologies



Source: New Flyer



Source: NABI

Bus Rapid Transit (BRT)

typically diesel



Source: Bombardier



Source: Colorado Railcar

Light Rail Transit (LRT)

electric or diesel



Source: Siemens



Source: Bombardier

Automated Guideway Transit (AGT)

typically electric



Bus Rapid Transit (BRT)



- **Technology Classification:**
Conventional Line Haul
Transit
- **Average System Capacity:**
20,000 to 25,000 P/H/D
- **Power:** Diesel, Electric or
Hybrid Traction Motor
- **Operating Environment:**
Exclusive Guideway

• **Average Operating Speed:** 20 - 50
MPH

• **Typical Station Spacing:** 3 - 5
Miles



Light Rail Transit (LRT)



- **Technology Classification:** Rail w/ Steel Wheel & Track
- **Average System Capacity:** 30,000 to 35,000 P/H/D
- **Power:** Overhead Electric or Diesel
- **Operating Environment:** Street Running or Separate R/W

- **Average Operating Speed:** 25 - 55 mph
- **Typical Station Spacing:** 1/2 - 1 Mile



Automated Guideway Transit (AGT)



- **Technology Classification:**
Advanced Elevated Line
- **Average System Capacity:**
60,000 to 80,000 P/H/D
- **Power:** Electric
- **Operating Environment:**
Total Grade Separation

- **Average Operating Speed:**
35 - 75 MPH
- **Typical Station Spacing:**
1/2 - 1 Mile



Current NE Corridor Rapid Transit Study



- Refining definition of alternatives
- Updating capital, operating, and maintenance costs
- Traffic Impact Analysis (microsimulation modeling)
- Assessing existing land use





Benefits of Rapid Transit in Central Indiana



- Daily Ridership ~ preliminary estimates
 - ~120,000 average daily riders with full system build-out
- Predicted Savings*
 - 3 million person hours daily
 - 5 hours of delay per person per year
 - \$70M per year in savings in travel time
- Congestion Relief and Reverse Commute
 - Relieve peak period congestion in Northeast Corridor (I-69, SR 37, I-465) and anticipated congestion throughout Central Indiana
 - Ability to effectively move people from downtown Indianapolis to outlying areas

* 2005 Texas Transportation Institute Urban Mobility Study





Benefits of Rapid Transit in Central Indiana, Continued



- Economic Development & Land Use
 - 25% increase in property value within 1/4 mile of transit station, decreasing out to 1 mile
 - Smart Growth land-use policy encourage dense, mixed-use, development around transit stations and corridors
 - Creates livable communities that are attractive to major employers and highly educated individuals
- Air Quality Benefits:
 - Relief of congested roadways lead to improved air quality
 - Improved air quality provides healthier environment for those at risk (I.e. children, elderly, those with asthma)



* 2005 Texas Transportation Institute Urban Mobility Study

Thank You!!

Please stay in touch:

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www.cleardirections.info

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