Key Findings and Messages—Flying Blind, Exposed and Slipping

• Ohio’s transportation policy priorities need to better serve the needs of the state’s people, communities and regions
• Rising energy prices are draining billions from each region’s economy
• The state can no longer afford just accommodate growth in traffic
• Transportation now costs working families more than shelter

• The state can partner with local governments and private sector to leverage its scarce resources
• Increased travel efficiency can boost disposable income by 10 to 20 percent tax free
• The marketplace will reward this with increased investment and
• These solutions also get Ohio on track to address climate change
Need to Increase Income AND Reduce Cost of Living

- Ohio 2000-2008 Gas Prices Grew 11 Times Faster than Income
- 2000-2008 Gas Price Increase Bled Extra $13.6 Billion Annually from Ohio
- Transport Grew 23-27% of Income
- Total Statewide Tab >>$100B
- ODOT Annual Budget Flat @$3b
- Total Government Resources <<$10B

Ohio Income 5% Below National Median
How Does Ohio as a Whole Measure Up—Moody’s Economy.com Feb & July 2008 Exposed and Slipping

Strengths

- Healthcare hubs
- Lower business costs than IL & MI
- Inc. diversification in several metros

Weaknesses

- Poor population trends
- Reliance on declining manufacturing
- Continued auto industry restructuring
- Growth not enough to absorb all entrants
- Columbus barely treading water

Forecast Upside

- Emerging tech centers will attract capital, gain momentum

Forecast Downside Risk

- Credit crunch undermines household finances and demand for durable goods
- Continued auto industry plant closings in Ohio
- Rising cost of living & loss of relative cost advantage
- Exposure to high gas prices
Significant Trends We Cannot Avoid

- **Energy prices**—peak oil within 5 and possibly 2 years; today’s $100 oil will rise to between $177 and 504/barrel as early as 2012

- **Climate change**—increased electricity demand, crop cycle disruption, limits on water supplies and shipping season, possible limits on aviation

- **Demographics**—aging population, smaller households, immigration

1960 – 2000
Avg. HH Size in Red
Avg. New Home Size in Black

Smaller Households, Larger Homes
Range of Daily VMT/Capita in Ohio Metro Areas—From 15 in Sandusky to 30 in Wheeling—Average is 24—FHWA 2006

Traditional Revenues Depend on Increased Driving, Flying, Shipping, Traditional Fuels, High Gasoline Consumption—but High Prices Put and End to That

Movements of Chicago Gasoline Prices and VMT/HH Seem to Move in Opposite Directions

Gasoline Prices
VMT/Per Household

VMT per HH vs. Chicago Gas Prices 1980-2006

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Gasoline Prices
VMT/Per Household

VMT per HH vs. Chicago Gas Prices 1980-2006
States are trying:

- **New partnerships**—Shifting responsibilities to other levels of government—cities, MPOs, special service, charging impact fees, marginal prices, and TIFs, SSAs, BIDs; also shifting responsibilities by creating new partnerships with passenger and freight rail operators and by privatizing operations

- **Managing assets more efficiently**—life extension, rightsizing, reducing dependence on most expensive system elements

- **Reducing the level of travel demand**—Coordination between land use and infrastructure planning—NJ ties to city planning to preserve capacity, CA increased sub-allocation to MPOs who tie investment to housing, PA rightsizing cuts road costs in half, use CSS to build faster, better & cheaper;

- **Use transit to reduce VMT**—make use of federal tax credits ($100/month), MD adds state tax credit, MTC and NJ provide housing incentives near transit

- **Enhancement of traditional and/or tax-based strategies** to increase revenue (gas taxes, truck-weight fees, vehicle fees, or shifts to local sales and property taxes)

- **Innovative financing**—tolls and road-pricing strategies—existing v new capacity, price congestion, charge mileage; debt financing—federal & state credit enhancement; asset leases—P3 and concessions; MA, CA, NJ using bond proceeds to support transit oriented development

- **Flexible use of highway funds**—many states are experimenting with flexibility to directly support streetcar, light rail, bus rapid transit or commuter rail initiatives

- **Leverage federal highway and transit block grants**—use of revenue anticipation bonds (also known as GARVEE bonds) and similar mechanisms.
Ohio’s Metro and Micropolitan Areas and Cities’ Core Assets

• 32 regions with core cities
• Each has an institution of higher education
• Most are regional health care centers
• Most have designated historic districts
• Most have newer industrial districts
• Each originally served by streetcars, inter-urban electric railways and steam railways
• Location efficiency still reflected in basic street patterns and land uses and state wide ROW
• All have significant plans to improve local transportation choices and are looking for investment partners
To Catalyze Transformative Infrastructure Initiatives, State Government Should

• Place state transportation programs and policies in the service of regional economic growth and prosperity, and
• Create a 21st Century Transportation Investment Bank to fund transformative, market-shaping investments
What a Nourishing Economy Does—Reduces Risk, Increases Gain
Past Policies Bypassed the Local Economy—Portion of Daily Traffic Traveling Freeways
Only TX and CA Metros Higher

Chicago

Columbus

Cincinnati

Cleveland
Historical Precedent for Rapid Change—From 1885 to 1902

- America went from 1 electric street railway to 1 in every city of 5,000
- Rate of growth = to the Internet
- Demand boosted by important social movements—e.g. home economics
- Ohio had the best electric street railway coverage nationally
- Columbus, Cleveland, Cincinnati, Dayton, Toledo, Akron, Youngstown...
- Alliance, Ashtabula, Chillicothe, Coshocton, E. Liverpool, Hamilton, Lima, Lorain, Mansfield, Norwalk, Sandusky, Springfield, Xenia, Zanesville...
- Thousands of miles of local and inter-urban connecting in turn to the national inter-city rail networks

Getting to scale through network economies—when a large number of connected small investments are worth more than a few big ones
Most Places Abandoned Their Transit Systems

And Public Policy Favored A Different Vision
How the Market Views Ohio—PWC/ULI 2008
Commercial/MF Development Prospects Ratings

Cinci, Cleveland, Columbus

Chicago, San Antonio

1 = Abysmal
5 = Fair
9 = Excellent

New York, DC, Seattle, LA,
Declining Importance of Journey to Work
Most Passenger Trips are Short Trips for Non-Work But Policy is Mostly About Commuting
Limits Support for Bringing Jobs to People

18% Work-Related
Drive Until You Qualify Market Means
Where We Build Matters:
Poor Locations Drive Up Emissions and Costs
Working Families in Ohio Spend 2/3 Income on Housing + Transportation
Cleveland MSA Showing Impact of 2000 versus 2008 Gas Prices

$533-$2205/year at $1.66/gallon

$1341-$5304/year at $4.03/gallon
Where is the Affordable Housing in Cleveland: Showing Break at 30 Percent of AMI for Housing, 48 for H+T

Housing Costs at 30% of Income

Housing+ Trans Costs at 48%

Htaiindex.cnt.org
Same View, Columbus

- Housing at 30% of Income
- Housing + Transportation at 48%

Htaindex.cnt.org
It’s Not Over Yet—

-Gas Costs Keep Climbing,
-12 month’s foreclosures
Up 5% in Cook County II
-Up 70% in surrounding collar counties
-Worst where income is low & VMT exposure is high
No Time to Waste

- Climate protection is a very heavy lift
- Will require both technical and social ingenuity
- “No Ton Left Behind”
- Done right, it’s not a cost, it’s an investment that pays permanently
This Place Has the Disappearing Carbon Blues...♫

Location Efficiency & the Transect Reveals Carbon Benefits of Good Urban Form
Making Transport Costs Count in Foreclosure Prevention

- LEM’s in Seattle, Chicago, San Francisco, and Los Angeles (Fannie Mae and local lenders)
- Smart Commute Mortgages in several dozen cities (Fannie Mae plus local lenders)—Columbus
- Targeted Counseling in Oakland, Chicago and Seattle
- *Tie foreclosure prevention to travel reduction in new State initiatives*
Smart Grid + Electric Traction Corridors could change market for electric transportation

- PHEVs in 2010
- Micro-grids soon
- Wind-electric now
- New shared infrastructure arrangements with utilities
- Customers and communities paid for demand shaping-now
- Federal interest declared in supporting
Works in Small Areas: Freiburg Germany—Modest Density + Good Coverage + Ease of Use
=Low Car Use + Affordability

Dresden Freight Trams
Make All Downtown and Activity Center Investment Transit-Based Sample Larger Scale Mission Bay SF

- Note 3d Street F Line Streetcar runs down the center 2008
- Grid-connected, mixed use
- 32% Affordable Hsg
- Allows 1 car or less zoning
- Minimizes unnecessary parking
Filling In Missing Links by Adding Streetcar Circulation—Mixed Use/Mixed Income Reduced Portland VMT & Transport Carbon 67% Part of Portland Climate Plan (From Street Smart, CTOD 2006)

STREETCARS ARE DEVELOPMENT-ORIENTED TRANSIT

DEVELOPERS SAY THAT the permanence of the fixed guideway helps mitigate the risk, and the higher densities and lower parking ratios typically permitted in downtowns make projects more profitable. These densities would not be possible, however, if there was no streetcar. Before the alignment was selected for the Portland streetcar land in the Pearl only captured 19 percent of all development in the CBD; after it was chosen the land captured 55 percent.

<table>
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<tr>
<th></th>
<th>Start of Service</th>
<th>Initial Track Miles</th>
<th>Initial System Cost Per Track Mile</th>
<th>Initial System Cost</th>
<th>Development Investment</th>
<th>Return on Investment</th>
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<td>2000</td>
<td>2.0</td>
<td>3.10</td>
<td>6.20</td>
<td>150</td>
<td>2319.35%</td>
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<tr>
<td>Little Rock</td>
<td>2004</td>
<td>2.5</td>
<td>7.84</td>
<td>19.60</td>
<td>200</td>
<td>920.41%</td>
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<tr>
<td>Tampa</td>
<td>2003</td>
<td>2.4</td>
<td>20.13</td>
<td>48.30</td>
<td>1000</td>
<td>1970.39%</td>
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<td>Portland (1)</td>
<td>2001</td>
<td>4.8</td>
<td>11.30</td>
<td>55.20</td>
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<td>Portland (Ext.)</td>
<td>2005</td>
<td>1.2</td>
<td>14.83</td>
<td>17.80</td>
<td>1353</td>
<td>7501.12%</td>
</tr>
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</table>

TABLE 1: Private Returns on the Public Investment

Kenosha WI—State DOT Paying for Expansion

Oregon Governor Kulongonski At Recent Streetcar Opening
Reconnecting = Accelerated Value from Urbanizing Limited Access Roads

- Milwaukee Lakefront Highway Teardown Increased Property Value Twice Downtown Rate
- Similar or Better Rates in Portland, NYC, SF & Planned Seattle, Buffalo, others
- Cleveland W. Shoreway, Akron, Columbus Expanded Lid
New kinds of services in Ohio
Partner to bring to large scale

- Car sharing
- Van pooling
- Transit benefit marketing
- Half of members sell a car
- Takes 17 cars off road for each one offered
- Pilot programs in place in Columbus and Cleveland
Inter-City Travel is Both Long Distance and Short Distance Between Metro Areas

- Under 100 Miles
- Under 200 Miles
- Under 300 Miles
- Under 400 Miles
- Under 500 Miles
- Under 600 Miles
- Under 700 Miles

Weekly Frequency:
- 8,200
- 4,100
- 820

Source: April 2002 Flight Schedules

Source: American Travel Survey - 1995

Note: One way person trips. Map shows only those Metropolitan Travel Corridors where more than 25 people were sampled and no one person represents more than 25% of the sampled population.

1. South CA to North CA
2. SW Vegas Express
3. TX-OK Zig Zag
4. Chicago Hub & Spoke
5. Midwest Hexagon
6. Atlanta Hub & Spoke
7. Florida Lightning
The Fences are Coming Down—Airports Become 2D Downtowns or Travelports
Capture The Benefits of Intercity Rail

Current 3 C’s Corridor
90% Motor Vehicle,
10% Aviation
Create Ohio Hub
12 Daily Rail Round-Trips
Changes to 50 to 60% by Rail
Ohio Could Be Leveraging:

- Current initiatives—Build Ohio Jobs, Energy-Jobs-Progress, Passenger Rail Initiative
- Experiment with flexibility—increase sub-allocation in exchange for new local revenue
- Encourage local ballot initiatives & other forms of participation
- Build better capacity at regional level

- Use 100 percent CMAQ shares, as opposed to the traditional 80 percent federal shares, to jump-start local transit investments—Cleveland, Dayton, Columbus, Cincinnati, a change that was specifically enabled in the Energy Policy Act of 2007, passed in December 2007
- Examine purchase of service agreements for provision of mass transportation, and explore using these to finance against revenues to be pledged revenues in inter-city and regional transit corridors by employers and cities
Thank You!

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