Alternative Regional Land Use and Transportation Plans

Environmental Justice Task Force

September 29, 2015

Introduction

- Alternatives are presented in Volume II, Chapter III of the VISION 2050 Report
  - Part I: Description of Alternatives
  - Part II: Evaluation of Alternatives
  - Part III: Public Feedback on Alternatives
  - Appendix F (Detailed Evaluation Results)

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Introduction

- Each alternative includes a detailed land use development pattern and transportation system
  - Input from public, Advisory Committees, and EJTF used to refine sketch scenarios into alternatives
  - Preliminary recommended plan will be prepared based on evaluation of the alternatives and public input

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Introduction

- The Trend is a projection to the year 2050 of trends from 1990 to 2010
- Alternative Plans I and II have more compact development patterns and changes in transportation investments

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Alternatives – Land Use Component

- Trend (Maps III-4 and III-5)
  - More new development in lower density land use categories than Alternative Plans I and II

- Fewer households and businesses served by public transit
- Fewer households with public sewer and water
- Very little TOD
- Fewer people living in walkable areas
- More agricultural land converted to urban development

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Alternatives – Land Use Component

- Alternative Plan I (Maps III-6 and III-7)
  - Most new development in higher density land use categories

- More households and businesses served by public transit than the Trend
- More households with public sewer and water than the Trend
- Significant TOD development
- More people living in walkable areas than the Trend
- Less agricultural land converted to urban development than the Trend

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Alternatives – Land Use Component

- Alternative Plan II (Maps III-8 and III-9)
  - Similar development pattern to Alternative I
    - More than twice as many fixed-guideway transit stations than Alternative Plan I
    - Results in more high-density, mixed-use development than Alternative Plan I

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Alternatives – Transportation Component

- Trend: continuation of recent trends in transportation investment levels and priorities
  - Decline in transit service
  - Expansion of bicycle facilities (on- and off-street)
  - Additional capacity on arterials to address congestion
- Alternatives I and II
  - Varying levels of expanded transit service
  - Expansion of bicycle facilities plus enhanced bicycle facilities in key regional corridors
  - Varying levels of capacity expansion on arterials to address congestion (also evaluated with and without any capacity expansion)

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Alternatives – Transportation Component

- Transit (Maps III-10 thru III-13)
  - Trend: nearly 25 percent decline in transit service beyond today's already reduced levels

- Alt I: significant expansion of transit service, including one commuter rail and three rapid transit corridors
- Alt II: similar expansion of transit service as Alt I, but with two commuter rail and 10 rapid transit corridors

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Alternatives – Transportation Component

- Bicycle (Maps III-14 thru III-16)
  - Trend: bicycle facilities added to arterials as they are reconstructed and expanded off-street paths
  - Alts I and II: bicycle facilities expanded as in Trend, but enhanced bicycle facilities in key regional corridors

Example of an enhanced bicycle facility

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Alternatives – Transportation Component

- Arterial streets/highways (Maps III-16 thru III-19)
  - Expected congestion levels without highway expansion used to identify congested highway segments
  - Trend: arterials reconstructed with additional traffic lanes and new facilities added to address congestion

  - Alts I and II: arterial reconstruction evaluated both with and without capacity expansions
    - Alt II: expansions generally limited to rural and low-density suburban areas not served by fixed-guideway transit lines

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Alternatives – Evaluation Overview

- Introduction to Evaluation Results
  - About 50 evaluation criteria, measuring extent to which each alternative meets each plan objective
  - Four themes:
    - Healthy Communities (Appendix F-1)
    - Equitable Access (Appendix F-2)
    - Costs and Financial Sustainability (Appendix F-3)
    - Mobility (Appendix F-4)

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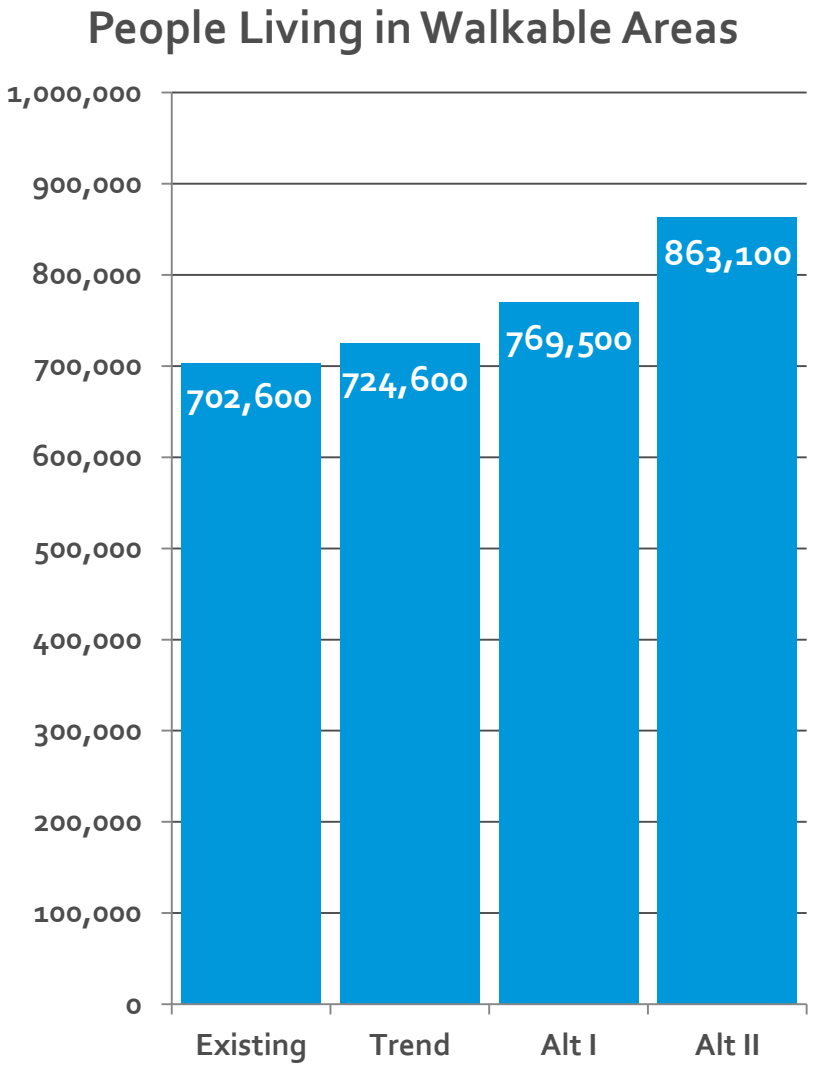
Achieving Walkable Neighborhoods

- More compact development pattern tends to be more walkable and have better sidewalk connectivity
- Overall population density would decline by 10% under Trend, not change under Alt I, and increase by 2% under Alt II



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Improving Public Health

- Encouraging active transportation can have considerable health benefits
- Alternatives include improved connections via bike lanes, off-street paths, and sidewalks and access to various destinations and amenities
- Bike level of service (BLOS) was measured under each alternative to determine how comfortable and safe bicyclists would feel on each facility
  - While Trend would improve on existing bike conditions, Alts I and II would perform better: overall BLOS grade of B compared to C for Trend

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Preserving Natural Resources and Farmland

- Open Space and Farmland Impacts
  - Trend would consume 2-3 times more farmland (77 sq. mi.) than Alternative I (32 sq. mi.) and Alternative II (26 sq. mi.)
  - National Prime Farmlands impacted similarly
- Greater impacts to natural resource areas under Trend due to arterial capacity expansion
  - However, only 0.1 percent or less of each resource type's existing total area would be impacted regardless of alternative

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Accommodating Demographic Shifts

- Number of residents in Region age 65 and older projected to double by 2050
  - Access to community amenities and accessible housing is becoming increasingly important, and would be improved by more compact, mixed-use development under Alts I and II
- Variety of housing and transportation options under Alts I and II would meet needs of a diverse population, and may appeal to young workers needed to replenish workforce

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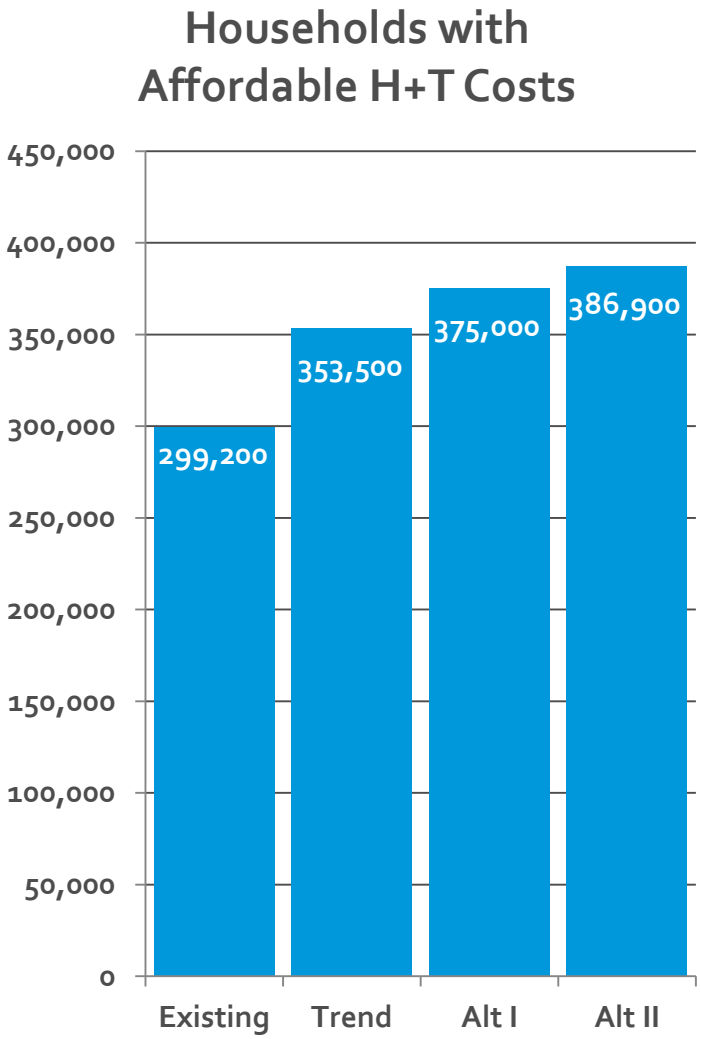
Providing Affordable Housing and Transportation

- Alts I and II would have a better match of workers in proximity to jobs than Trend
- They would also have more areas where combined housing + transportation cost would be affordable (45% or less of median household income)



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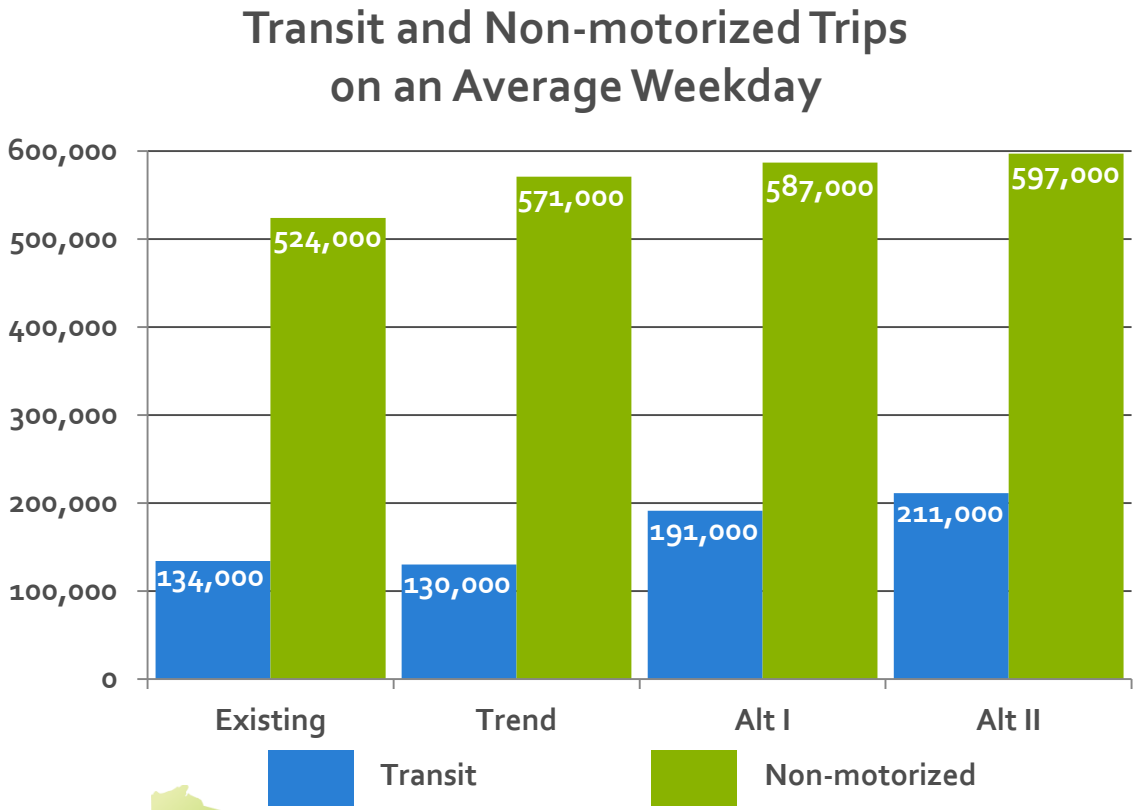
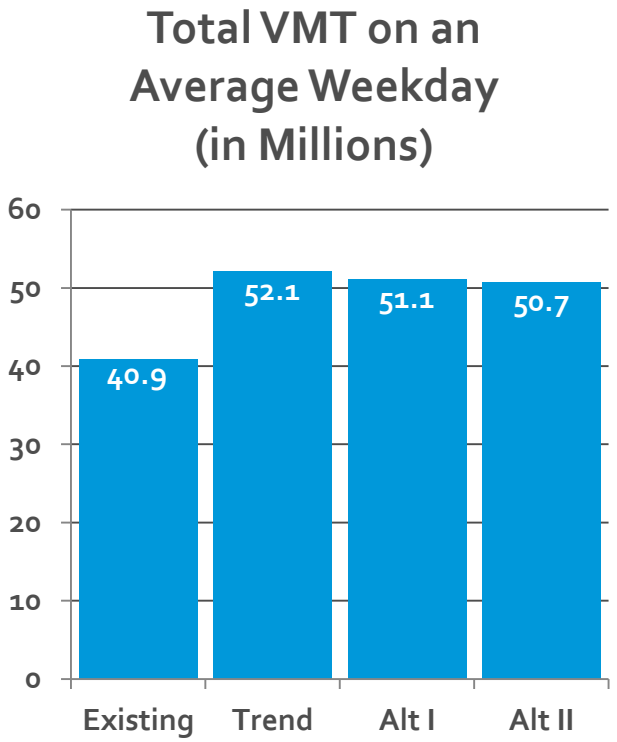
Balanced Transportation System Providing Mode Choice

- Alts I and II would have less VMT and more transit, biking, and walking trips than Trend





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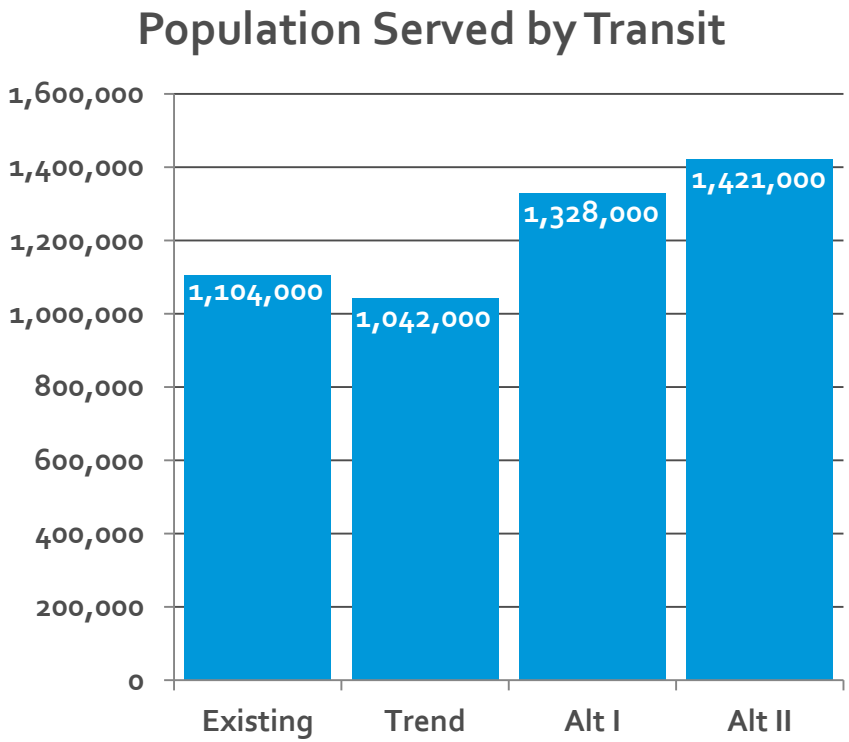
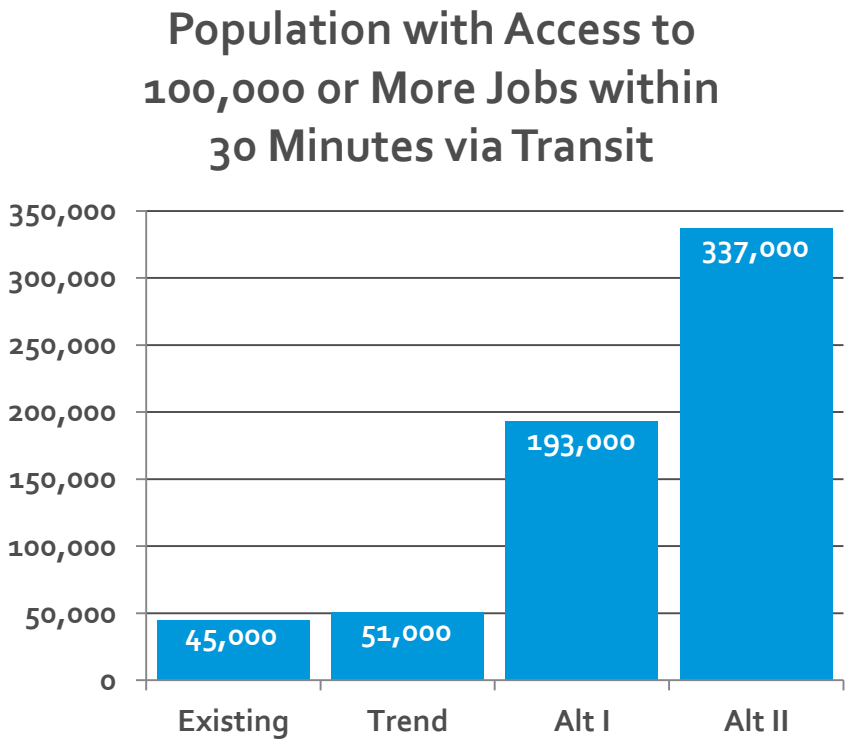
Providing High-Quality Transit to Jobs

- Alts I and II increase population served by transit, transit quality, and jobs accessible by transit





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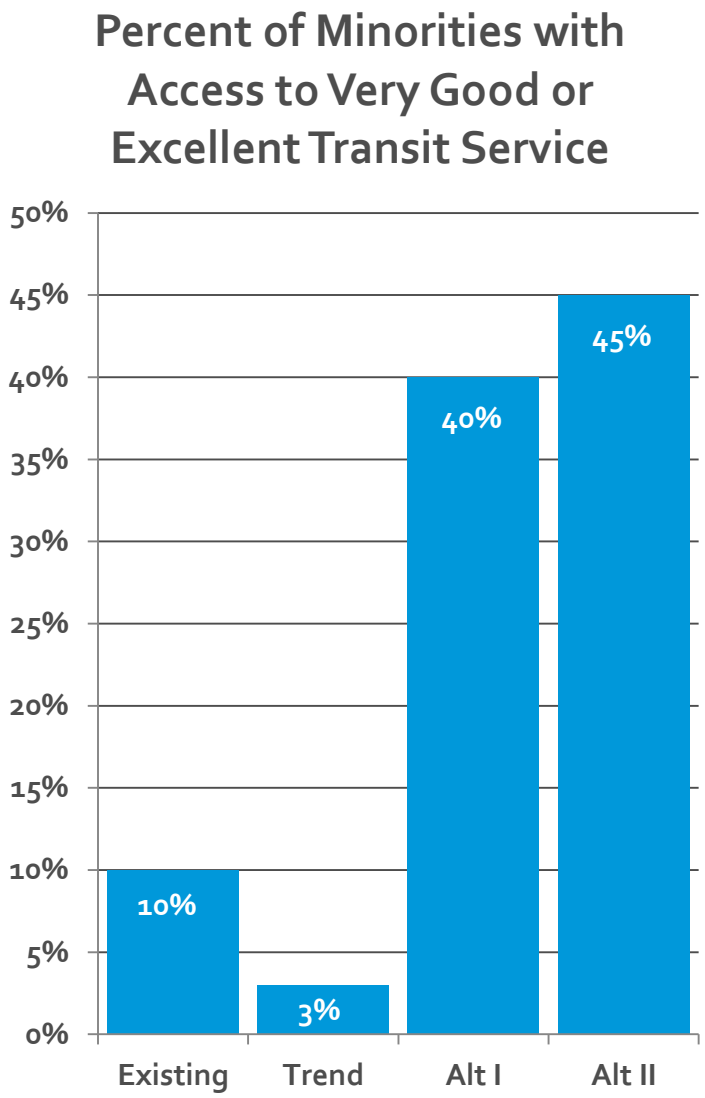
Improving Transit Quality for Minority/Low-Income

- Transit Service Access and Quality
  - All three alternative transit systems would serve principal concentrations of minority and low-income populations
  - Under Alts I and II, greater proportion would be served and service quality would be significantly improved



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Improving Access for Minority/Low-Income

- Access to Jobs and Activity Centers
  - Decline in transit under Trend would result in reduced transit access to jobs and activity centers—less than 3% of minorities would be within 30 minutes of 100,000 or more jobs
  - Significant improvement in transit access to jobs and activity centers under Alts I and II—14% and 19%, respectively, within 30 minutes of at least 100,000 jobs
  - Similar results for families in poverty

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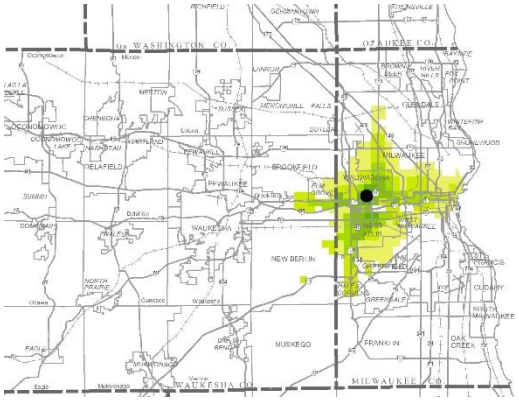
Improving Travel Time to Important Places

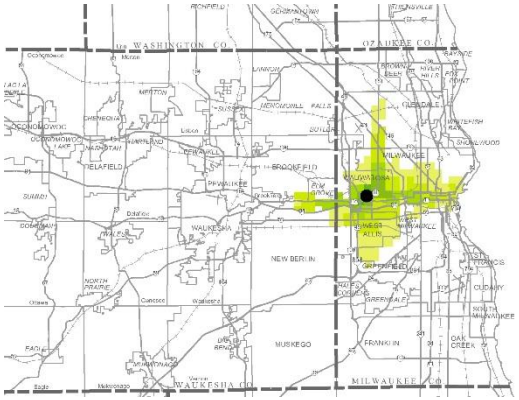
- Alts I and II would significantly increase proportion of residents within reasonable travel time by transit to important places
- For auto, it would remain about the same under each alternative

EXAMPLE COMPARISON: AVERAGE PEAK TRAVEL TIME TO MILWAUKEE REGIONAL MEDICAL CENTER VIA TRANSIT

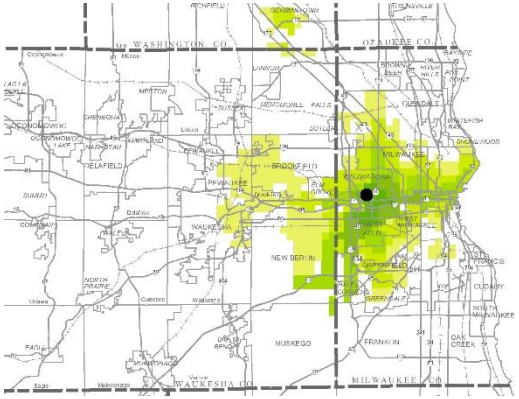
Existing



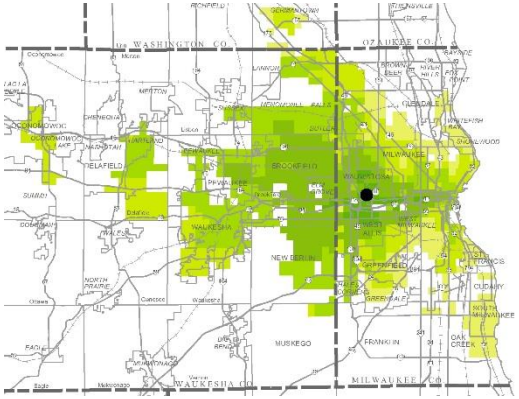
Trend



Alternative I



Alternative II



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Addressing Traffic Congestion and Moving Goods

- Slight differences in level of service on arterial streets and highways
  - Trend: 6.7% of system at moderate, sever, or extreme congestion (244.5 miles)
  - Alt I: 6.6% (242.3 miles)
  - Alt II: 7.3% (264.7 miles)
- Alt I would result in lowest level of congestion on regional freight network and highest level of reliability, followed by Trend, then Alt II

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Benefits to Minority/Low-Income from Highway Improvements

- Arterial Street and Highway Benefits to Minority and Low-Income Populations
  - Automobile is dominant mode of travel in Region for all population groups
    - Minority populations in Milwaukee County use car for 81 to 88 percent of their travel to and from work (depending on race and ethnicity), compared to 88 percent of the white population
  - Freeway widenings under alternatives would directly serve areas with concentrations of minorities and families in poverty, with majority experiencing benefits:
    - Improved auto accessibility to jobs and activity centers
    - Reduced traffic congestion
    - Improved safety through crash reduction

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Impacts to Minority/Low-Income from Highway Improvements

- Arterial Street and Highway Impacts on Minority and Low-Income Populations
  - Slightly more minorities reside near a freeway (20%) than non-minorities (15%)
    - Vast majority of freeway system and widenings under alternatives not located adjacent to existing minority and low-income concentrations
    - Fewer minorities and families in poverty reside near widening under Alt II (27,000 people and 2,800 families) than Trend and Alt I (81,800 people and 7,500 families)

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Reducing Air Pollution

- Modest differences in transportation air pollutant emissions between alternatives
  - Generally not more than 2% lower under Alts I and II than Trend
- However, transportation emissions are projected to significantly decline from current levels under all three alternatives, even with forecast increases in regional travel and traffic
  - Due to Federal standards on fuel, vehicle fuel economy, and vehicle emissions
  - Would result in significant decline in transportation air pollutant impacts on minorities and families in poverty

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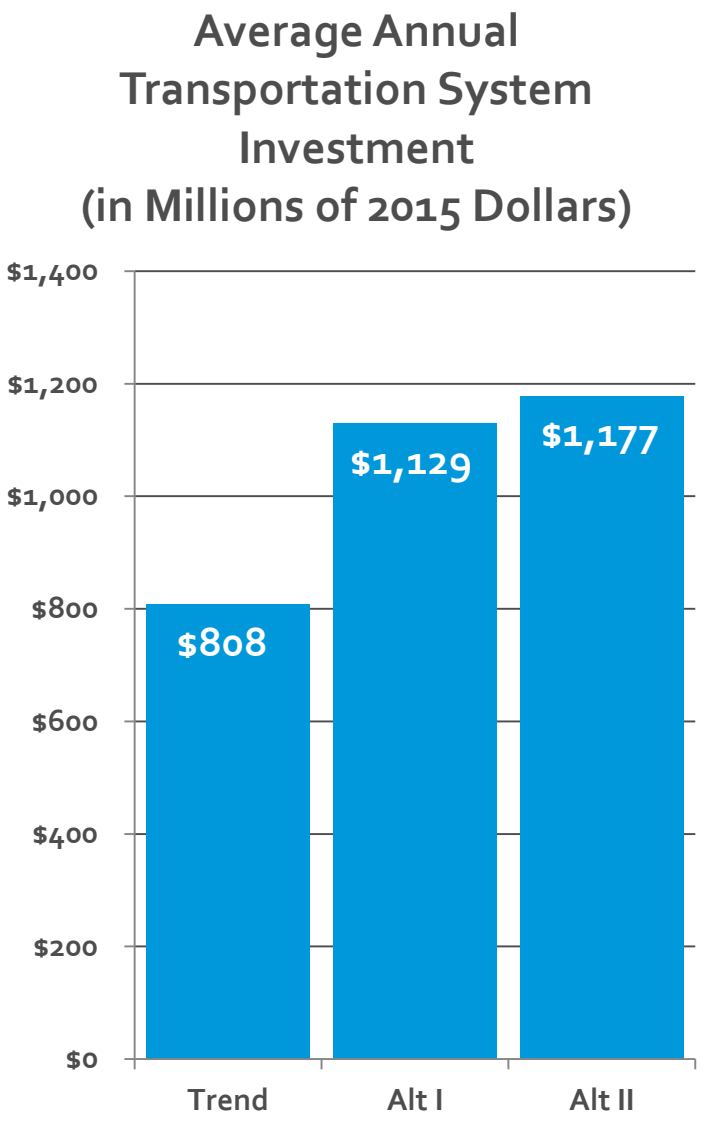
Minimizing Public Dollars Spent on Transportation

- Trend would result in lowest funding needed for the transportation system
  - Alts I and II would require $320-$370 million more annually by 2050 in public money



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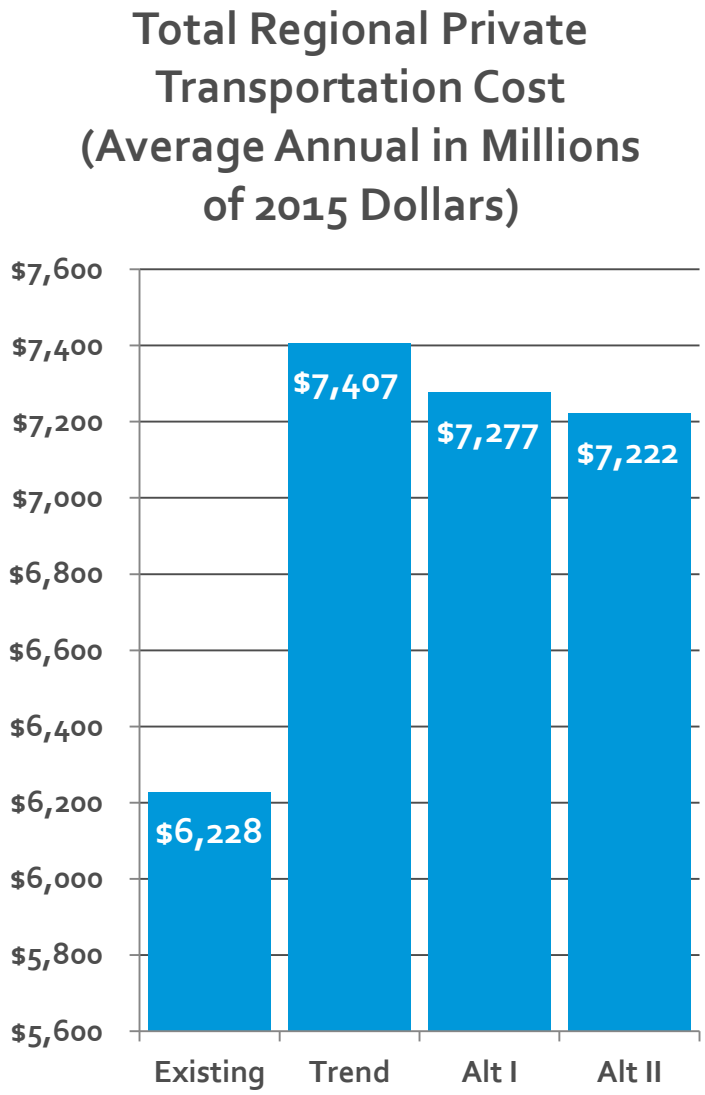
Minimizing Dollars Residents Spend on Transportation

- Alts I and II would reduce out-of-pocket transportation costs for Region's residents
  - Less VMT (i.e. driving) than Trend
  - More residents would shift from using a car to using transit, biking, or walking



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Efficiently Providing Public Services

- More compact development pattern in Alts I and II would result in:
  - Lower per capita costs to local governments of maintaining local infrastructure and providing services to residents
- Building sewer systems, water mains, and local roads to serve new development over the next 35 years would cost:
  - $1.9 billion less under Alt II than under Trend
  - $1.4 billion less under Alt I than under Trend

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Next Steps

- Fourth round of workshops
- Document feedback on evaluation of alternatives
- Preliminary recommended year 2050 regional land use and transportation system plan

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