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What was the process?

- Stakeholders Meetings
 - Revisit Chapter 8
 - › Goals
 - › Objectives
- Two workshops
 - Map based exercises
 - Keypad polling
- Technical Advisory Group
 - Trends
 - Alternatives
 - Policy direction

\$22,000



What did we do?

- Defining Issues
- Trends Snapshot
- Plan Diagnostic
- Plan Vision
- Draft Scenarios
- Regional Forecasting



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*What is a
Travel
Demand
Model?*

THIS IS THE FIRST PROJECT
IN THE UNITED STATES

ON WHICH ACTUAL CONSTRUCTION WAS STARTED
UNDER PROVISIONS OF THE NEW

FEDERAL AID HIGHWAY ACT OF 1956

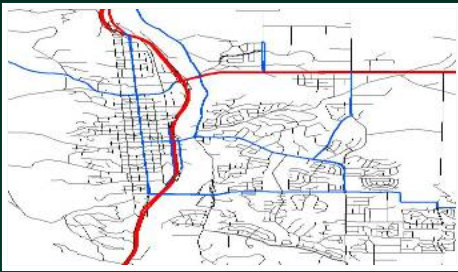
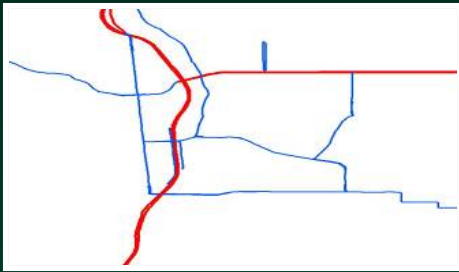


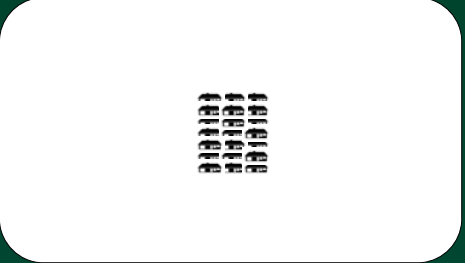
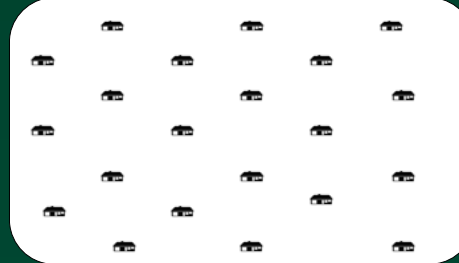
MISSOURI STATE HIGHWAY COMMISSION

CAMERON JOYCE & COMPANY
CONTRACTOR





Typical Model “Blind Spots”

	Reality	Model's View
Circulation Network		
Walking Environment		
Density, Clustering		

•Density

- of population and employment

•Diversity

- jobs/housing relative to regional balance
- balance of commercial, office, and public

•Design

- intersections per square mile

•Destination Accessibility

- jobs within 1 mile
- jobs within a 30 min by transit

•Distance to Transit

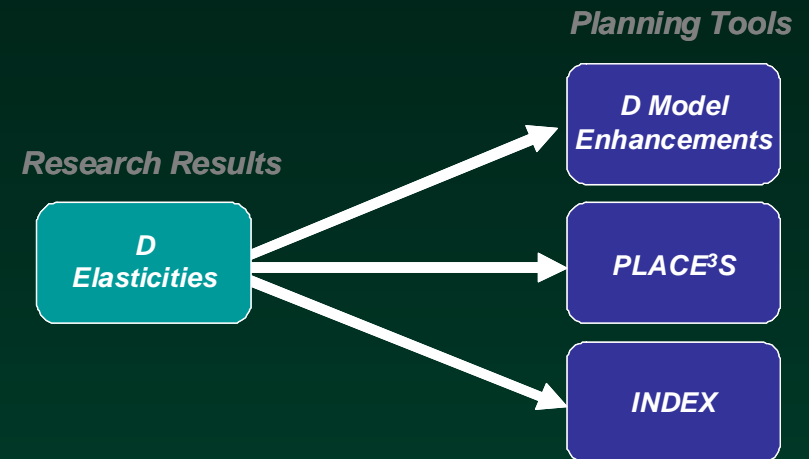
- bus stops within ¼ mile of residences

•Development Scale

- MXD population and employment

•Demographics:

- household size, vehicle ownership





What general analysis tools did we use?

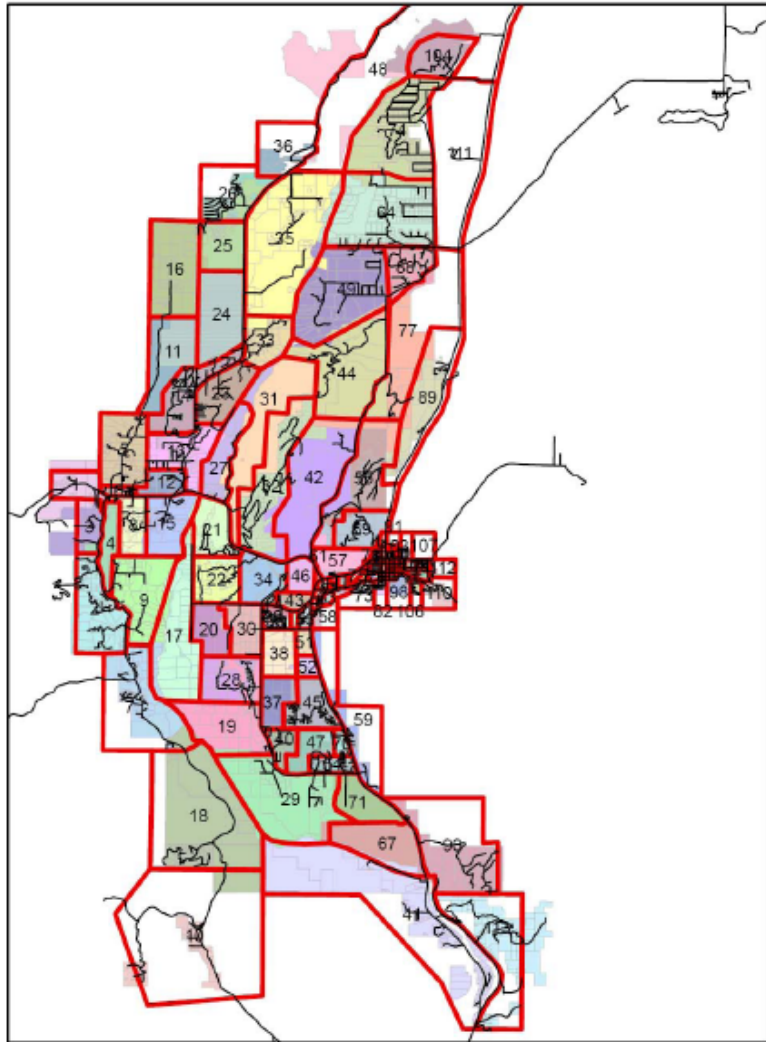
WYDOT Travel Demand Model

Pros

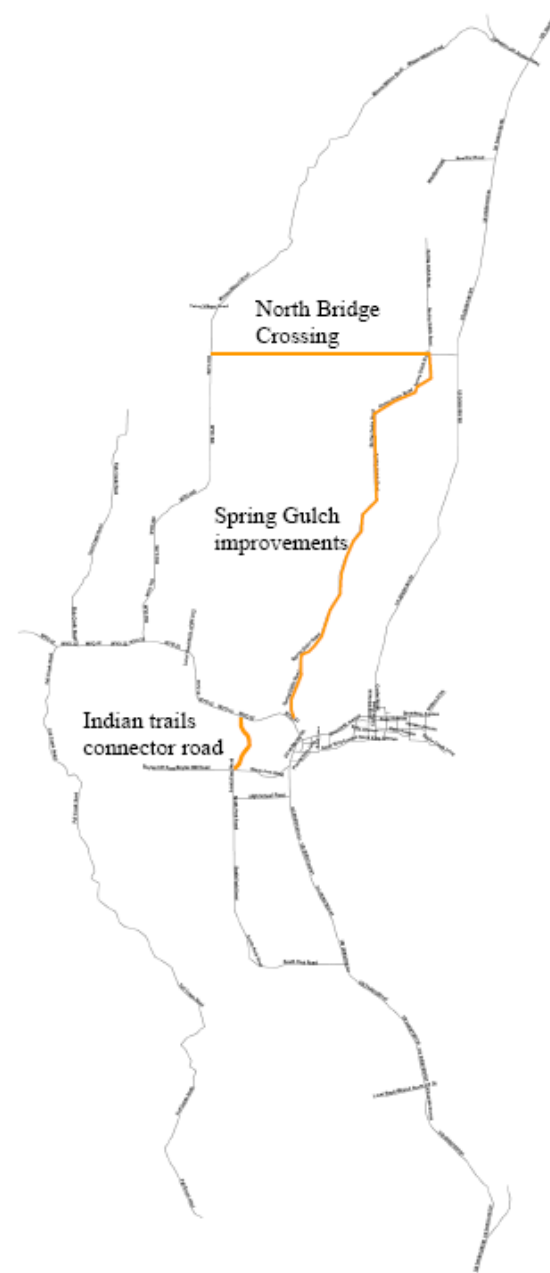
- › Distributes traffic based on shortest path to destination
- › Inputs are land use data and roadway network
- › Informative to the Comprehensive Plan goals & policies
- › Required for some FHWA funded projects

Cons

- › Does not model walking, bicycle, or transit usage
 - Volumes in the model are calibrated to 2006 traffic counts
- › Is not the best available tool determine roadway designs
 - Intersection delay is not accounted for in the modeling



What would happen if?





WYDOT Modeling Results

- **North Bridge Crossing**
 - 43% less traffic on WY 390
 - 24% more traffic on US 26 (north of Jackson)
- **Indian Trails Connection**
 - 28% less traffic at the “Y” intersection
- **Spring Gulch Improvement**
 - 20% less traffic on Broadway Ave
 - 6% more traffic on WY 22 (just west of “Y”)

Can we reach the previous plan's objectives?

F. Achieving Plan Goals (without increased transit)

	So. HWY @ Rafter J	WY 22 @ S.R. bridge	WY 390 @ Nethercott	WY 390 North of Aspens	Broadway @ Maple Way	Broadway @ Flat Creek	Broadway @ Town Sq	Milward TRK Route	Pearl Ave
WYDOT MODELING RESULTS - ADJUSTED LAND USE									
Existing Roadway Network	500	14,700	(2,100)	2,000	5,400	1,700	1,000	(6,300)	(6,000)
w/Spring Gulch Connection	(7,100)	14,700	(5,000)	2,000	8,200	(9,700)	(4,800)	(7,600)	(7,900)
w/North Bridge Connection	(7,100)	2,700	(9,400)	(3,100)	8,000	6,000	7,000	(5,600)	400
w/Indian Trails Connection	(7,300)	14,700	(2,000)	2,000	(8,300)	8,400	200	(6,300)	(5,800)

F. Achieving Plan Goals (10% Transit Reduction)

	So. HWY @ Rafter J	WY 22 @ S.R. bridge	WY 390 @ Nethercott	WY 390 North of Aspens	Broadway @ Maple Way	Broadway @ Flat Creek	Broadway @ Town Sq	Milward TRK Route	Pearl Ave
WYDOT MODELING RESULTS - ADJUSTED LAND USE									
Existing Roadway Network	(2,450)	10,130	(3,890)	900	560	(4,070)	(1,500)	(6,970)	(6,800)
w/Spring Gulch Connection	(9,290)	10,130	(6,500)	900	3,080	(14,330)	(6,720)	(8,140)	(8,510)
w/North Bridge Connection	(9,290)	(670)	(10,460)	(3,690)	2,900	(200)	3,900	(6,340)	(1,040)
w/Indian Trails Connection	(9,470)	10,130	(3,800)	900	(11,770)	1,960	(2,220)	(6,970)	(6,620)



What detailed analysis tools did we use?

WYDOT June 2006 Intersection Traffic Counts

Pros

- › Provides detailed traffic movements at key intersections
- › Accurate tool to forecast traffic based on new land uses
- › Informative tool to explore “complete street” concepts

Cons

- › Does not model walking, bicycle, or transit usage
- › Not an indicator of Comprehensive Plan success or failure



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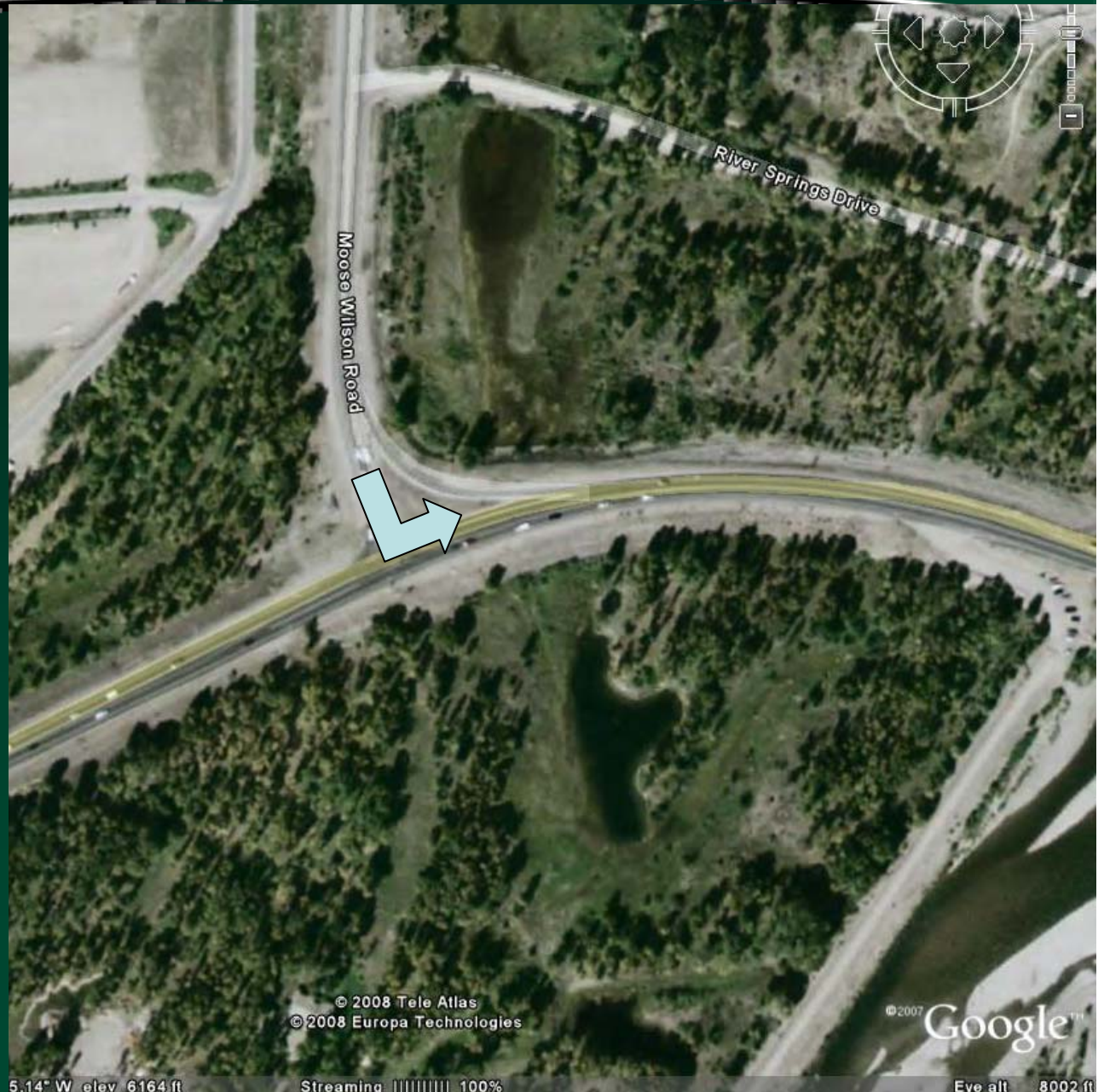
Unchanged WY22/WY390 intersection

- April 2008*
- LOS B (15 sec)
- 10-15 vehicle cue

- April 2025**
- LOS D (40 sec)
- 25-30 vehicle cue
- 2 min (east bound left)

- *3.5% per year '02-'08
- **2.0% per year '08-'25
-

Data from 2002 WYDOT turn counts



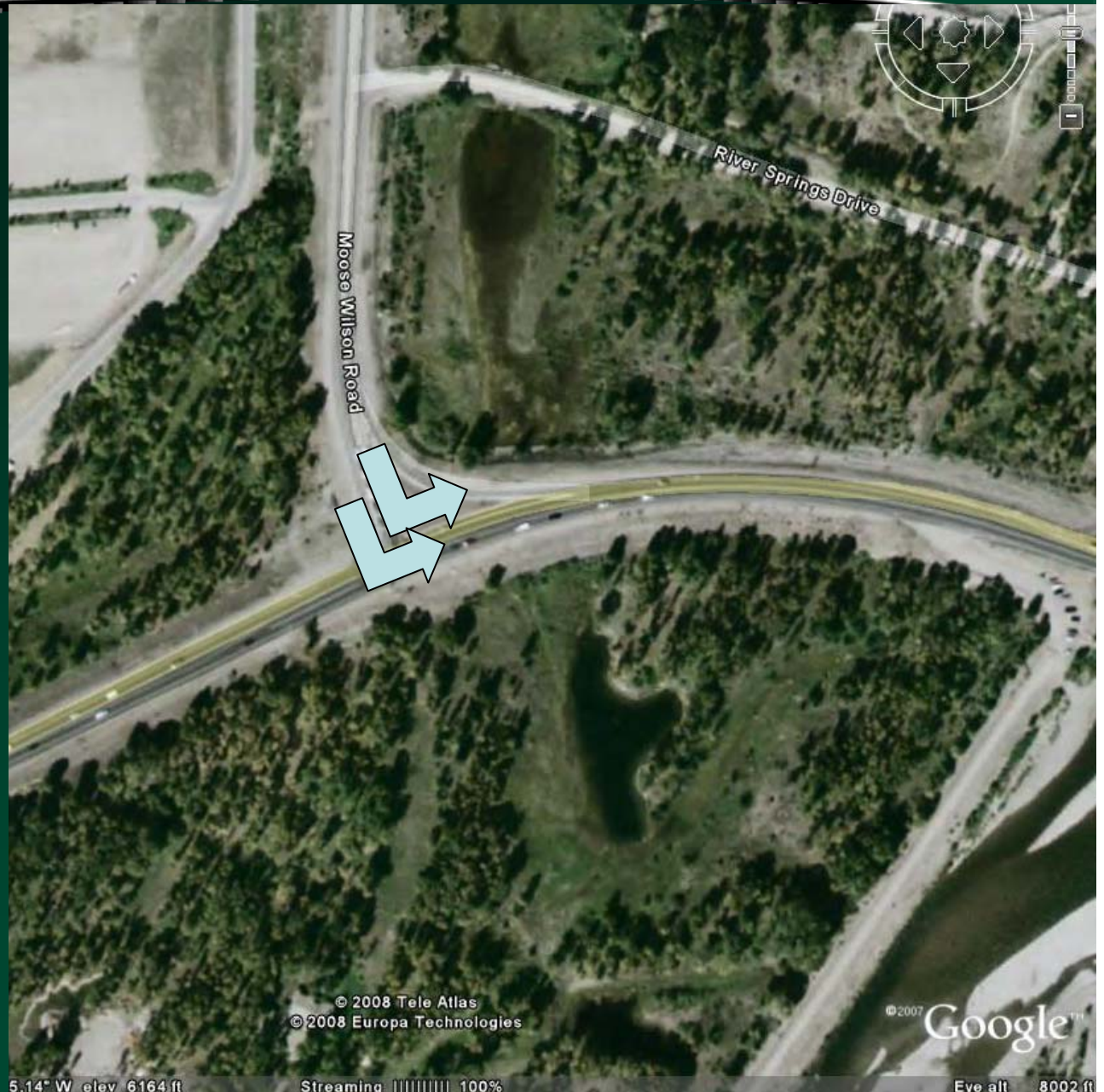
Modified WY22/WY390 intersection

- April 2008*
- LOS B (15 sec)
- 10-15 vehicle cue

- 1 left turn April 2025**
- LOS D (40 sec)
- 25-30 vehicle cue
- 2 min (east bound left)

- 2 left turn April 2025**
- LOS B (10 sec)
- 5-10 vehicle cue
- Requires 2 lanes on 22

- *3.5% per year '02-'08
- ***2.0% per year '08-'25
-

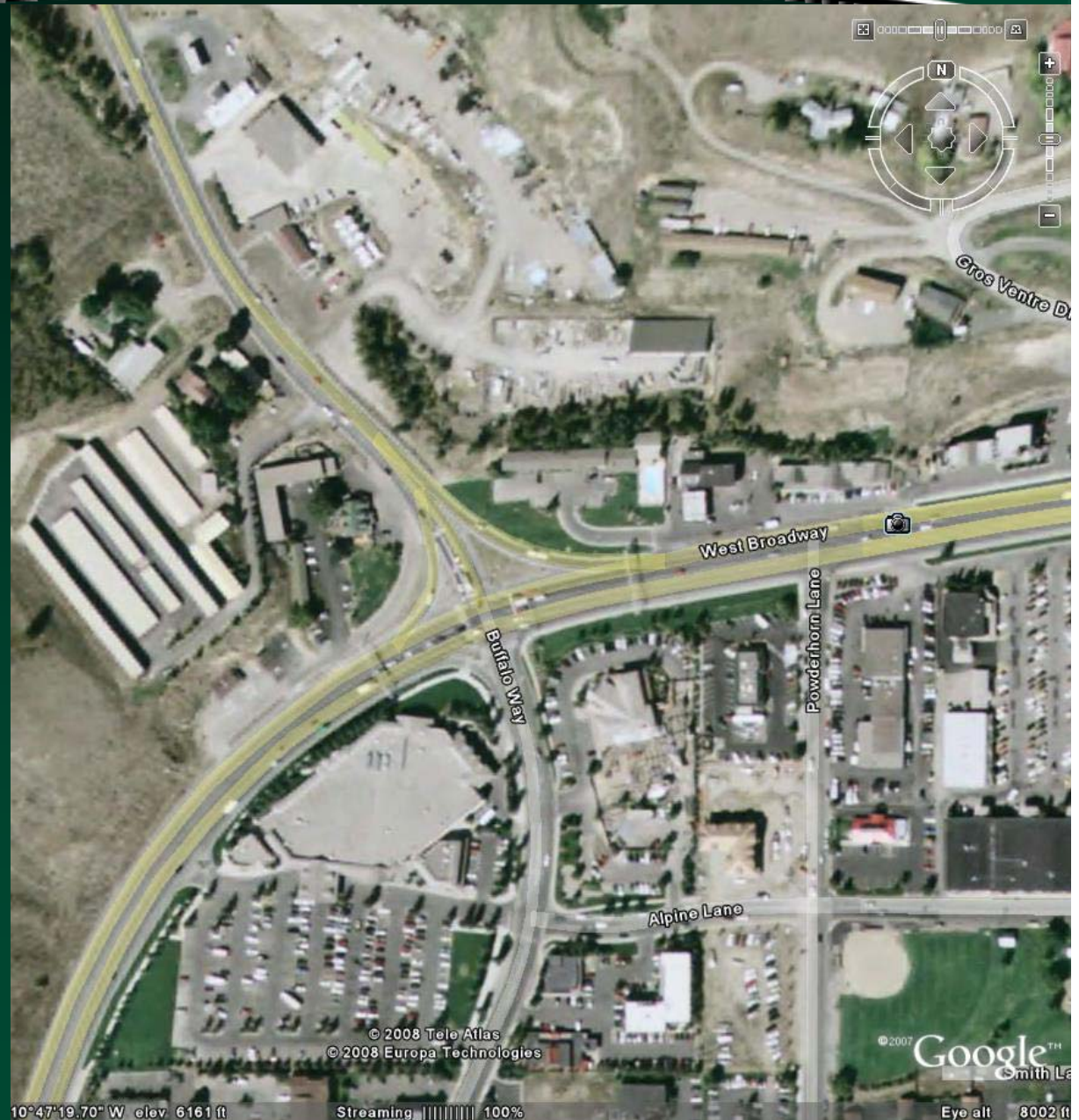


Unchanged "Y" intersection

- June 2008*
- LOS E (30 sec)
- 10-15 vehicle cue

- June 2025**
- LOS F (+60 sec)
- 20-25 vehicle cue

- *3.5% per year '02-'08
- **2.0% per year '08-'25



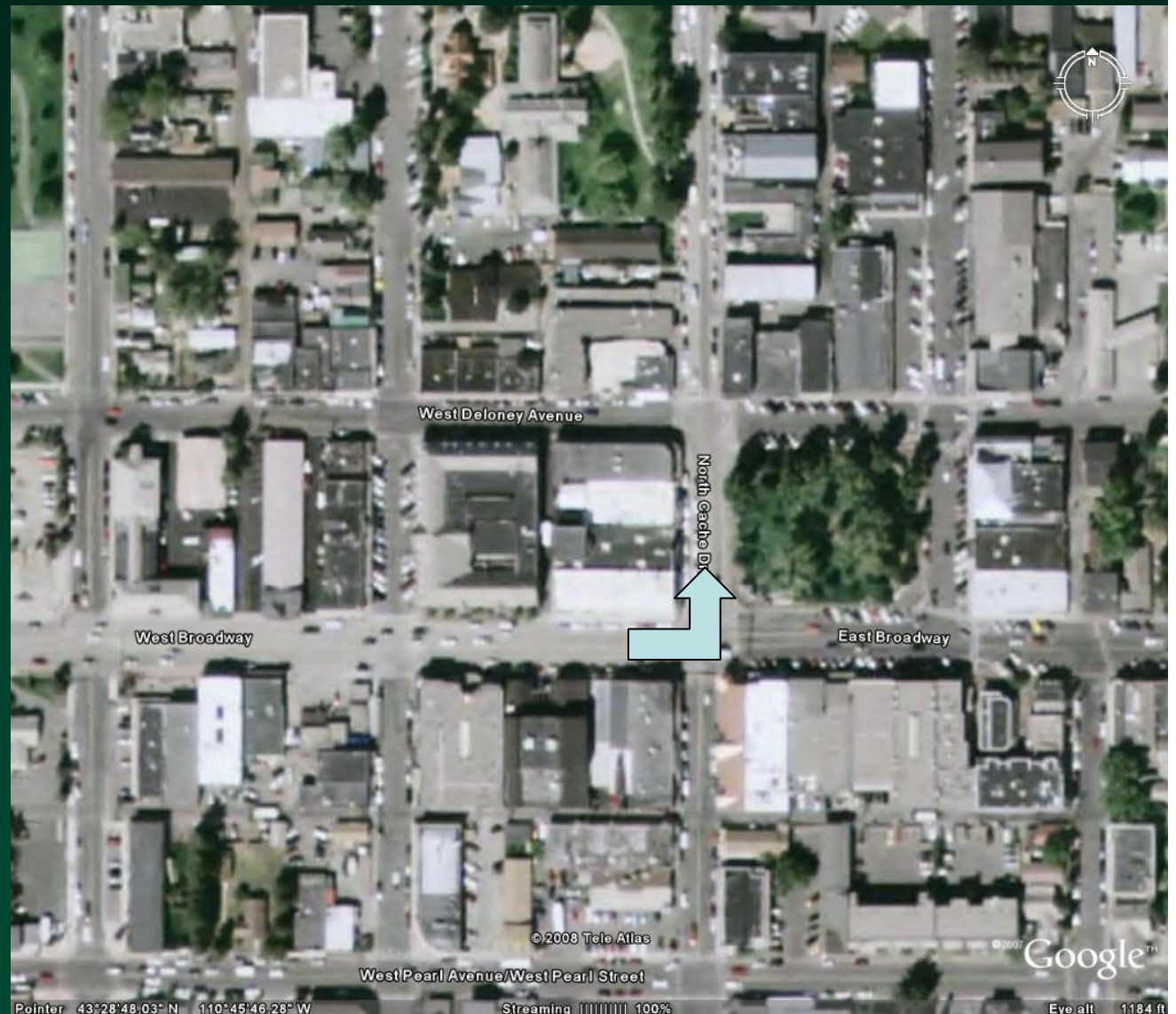
Data from 2002 WYDOT turn counts

- June 2008*
- LOS B (15 sec)
- 10-15 vehicle cue

- June 2025**
- LOS C (20 sec)
- 15-20 vehicle cue

- *3.5% per year '06-'08
- **2.0% per year '08-'25

Data from 2006 WYDOT turn counts





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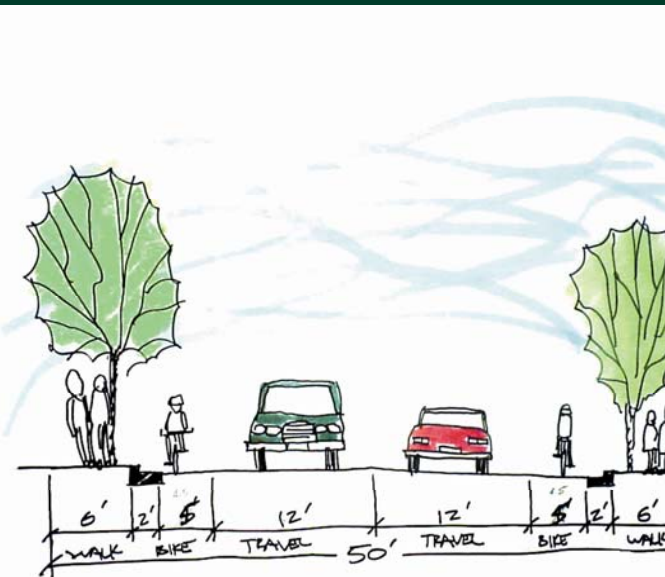
Where is travel headed in Teton County?



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Here is the new transportation vision.....

1. Annual traffic growth slows but remains @ 2%
2. “Complete Streets” are built via joint partnerships
3. A transportation tax funds roadways, transit & pathways
4. START expands with new buses and service
5. A Regional Transportation Authority (RTA) is formed





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1. Annual traffic growth will slow...but maintain @ 2%

- Under any land use scenario traffic increases
 - Non-development traffic is a major contributor to increase
 - Delay at major intersections will decrease with improvements
 - Traffic on collector roads will help manage arterial traffic
 - Thresholds set in the 2000 plan could be maintained
-
- In the April Draft
 - Principles 6.1 and 6.2
 - Strategy 6.3
 - Indicators 6.2, 6.4





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2. ***“Complete Streets” are built via joint partnerships***

- **Street projects accommodate all modes of transportation**
 - **Public and private partnerships build and maintain projects**
 - **Walking and bicycling is 5% of all travel**
 - **Partnerships with WYDOT and local agencies are reached**
 - **Funding priorities are given to projects that serve all modes**
-
- **In the April Draft**
 - **Policies 6.2.b, 6.2.c, 6.3.a, 6.3.b**
 - **Strategies 6.4, 6.5, 6.6**
 - **Indicators 6.3, 6.7**





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3. A transportation tax funds roadways, transit & pathways

- 2003 objectives are unachievable without a new funding source
 - Tax proceeds would supplement intersection reconstruction
 - Tax would be a funding source for “complete street” projects
 - Tax proceeds would fund START capital and operations costs
 - Reallocation of general funds to other programs
-
- In the April Draft
 - Policy 6.1.a
 - Strategy 6.1
 - Indicator 6.1





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4. *START expands with new buses and service*

- 2,000 new daily START riders are need by 2025
 - Major roadway corridors have 10% transit mode share
 - Regional transit service is expanded in Teton County, ID
 - Transportation tax funds service and capital improvements
 - All of this is required to maintain 2% per year traffic growth
-
- In the April Draft
 - Policy 6.1.a
 - Strategy 6.2
 - Indicator 6.5



5. A Regional Transportation Authority (RTA) is formed

- Communities in Teton County (WY&ID) & Star Valley in the RTA
 - Transportation funding is collected and shared within RTA
 - Roadway, bus, and trail projects are completed by RTA
 - RTA has members from each community collecting tax
-
- In the April Draft
 - Policy 6.1.c
 - Strategy 6.7





How do we measure the progress of the new vision?

- **Monitor travel behavior and report every 2 years**
 - Use “screenlines” to calculate travel between destinations
 - Calculate Vehicle Miles Traveled (VMT) per capita
 - Report intersection volumes for all modes of travel
 - On-board START surveys
 - Wide reach travel behavior study
 - Wildlife & motor vehicle incident reporting
 - Follow up travel studies “before & after” development
- **Create a master traffic study for all new development**
 - Trip rates and reductions are standardized
 - Minimizes debate over traffic assumptions and implications