Integrated Transportation Plan
TAC Meeting
October 10, 2014
Project Schedule

• October 10 (today) – TAC Meeting
• October 29 – Public Workshop
• December 9 – JIM Presentation – Plan Contents
• January 27 – JIM Presentation – Draft Plan
Agenda

• Review: Prior Work & TAC Guidance
• Deep Dive: Traffic Trends & VMT
• Transportation Demand Management
• Transit System Development
• Next Steps, Upcoming Events
Review –
Prior Work & TAC Guidance
TAC Guidance

• Base the ITP on adopted Comprehensive Plan
  – Policies are set
  – Strategic implementation

• Simplify analytical process

• Make information transparent and accessible

• Rely on a lean, focused public process
September TAC Meeting

• VMT Forecasting – First Look
• Proposed Prioritization Framework
Planning Horizons


IMPLEMENTATION

High Priority Actions

Immediate Actions

Technical Update of ITP

LONG RANGE PLANNING

Benchmarked Actions

Full Update of ITP

Planning horizon for 22/390 PEL Study
Strategic Approach to Major Projects

Benchmark

2014 2017 T - 10 T

project development
Traffic Forecasting Methodology

- Use 2008 modeling as a general framework
- Use WYDOT data where available
- Focus on permanent counter locations
- Use same base data for VMT & traffic
- Keep it simple
PMT* Model

**Land Use** -> **Trip Rates** -> **Person Trips** -> **Trip Lengths** -> **PMT – Person Miles of Travel** -> **Mode Share** -> **VMT – Vehicle Miles of Travel**

*person miles of travel

Update in 2019
Traffic Benchmarks Model

Current Traffic at 4 Indicator Count Stations

Effective Population Growth by TAZ

Forecast Traffic at 4 Indicator Count Stations

Update in 2019
Traffic Indicator County Locations

WYDOT Permanent Traffic Recorder Locations
September TAC Meeting

• Guidance:
  – Use average July day for Benchmarks rather than average annual daily traffic
  – Revise Bypass Benchmark to reflect Park planning
  – Provide more information about traffic trends as a way to frame the forecasts
  – Begin work on the plan scenario
  – Begin work on a transportation demand management program
  – Add a “START – Other Capital Needs” category to the capital project typology
Deep Dive: Traffic – More Detail
Traffic Trends – Indicator Count Sites*
(Average Annual Daily Traffic, 2000 – 2013*)

North Highway
PC #84

South Highway
PC #32

WY-22
PC #158

WY-390
PC #141

<table>
<thead>
<tr>
<th></th>
<th>'00</th>
<th>'06</th>
<th>'13</th>
</tr>
</thead>
<tbody>
<tr>
<td>North</td>
<td>6,800</td>
<td>7,200</td>
<td>7,325</td>
</tr>
<tr>
<td>South</td>
<td>6,600</td>
<td>8,110</td>
<td>7,677</td>
</tr>
<tr>
<td>WY-22</td>
<td>14,40</td>
<td>15,58</td>
<td>15,608</td>
</tr>
<tr>
<td>WY-390</td>
<td>10,40</td>
<td>10,87</td>
<td>10,522</td>
</tr>
</tbody>
</table>

+ 0.6%/yr  
+ 1.2%/yr  
+ 0.6%/yr  
+ 0.1%/yr  

*Permanent Count Locations

Source: WYDOT
Traffic Trends – In Town
(Average Annual Daily Traffic, 2000 - 2013)

<table>
<thead>
<tr>
<th>Road</th>
<th>'00</th>
<th>'06</th>
<th>'13</th>
<th>Annual Traffic</th>
<th>Yearly Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>US-26 at High School Road</td>
<td>14,00</td>
<td>19,29</td>
<td>19,25</td>
<td>19,980</td>
<td>+ 2.9% /yr</td>
</tr>
<tr>
<td>WY-22/US-26 Y Intersection</td>
<td>0</td>
<td>21,90</td>
<td>0</td>
<td>25,400</td>
<td>+ 2.9% /yr</td>
</tr>
<tr>
<td>US-26 At Pearl St.</td>
<td>13,60</td>
<td>18,00</td>
<td>15,22</td>
<td>15,220</td>
<td>+ 0.9% /yr</td>
</tr>
<tr>
<td>US-26 Cache &amp; Broadway</td>
<td>0</td>
<td>9,980</td>
<td>11,66</td>
<td>11,660</td>
<td>+ 1.2% /yr</td>
</tr>
</tbody>
</table>

Source: WYDOT
Traffic Trends – Other Locations
(Average Annual Daily Traffic)

- **WY-390 @ Teton Village**
  - '00: 4,900
  - '06: 5,440
  - '13: 5,389
  - Growth: +0.8%/yr

- **WY-22 in Wilson**
  - '00: 4,600
  - '06: 5,230
  - '13: 6,067
  - Growth: +2.5%/yr

- **WY-22 Teton Pass**
  - '00: 4,100
  - '06: 4,670
  - '13: 4,734
  - Growth: +1.2%/yr

- **US-26 @ Hoback Jct.**
  - '00: 5,120
  - '06: 5,690
  - '13: 6,269
  - Growth: +1.7%/yr

Source: WYDOT
Related Trends

Town Population

Year | Population
--- | ---
'00 | 8,692
'06 | 9,181
'13 | 9,840

+ 1.0 %/yr

County Population

Year | Population
--- | ---
'00 | 18,257
'06 | 20,014
'13 | 22,268

+ 1.7 %/yr
Related Trends

GTNP Attendance (Millions)

- '00: 2.590
- '06: 2.406
- '13: 2.689

+ 0.3 %/yr

Daily In-Commuters

- '00: 2,284
- '06: 3,324
- '12: 3,643

+ 5.0 %/yr

Source: NPS

Source: Census Bureau
GTNP Traffic Trend: Moose Entrance

(July Average Daily Traffic)

Source: NPS
GTNP Traffic Trend: Moose-Wilson Entrance
(July Average Daily Traffic)

No consistent growth

Source: NPS
GTNP Annual Visitorship Trend

(millions)

Source: NPS
Transit Ridership Trend
(Annual Boardings)

Rides/Bus Hour:
2003 – 15.7
2013 – 22.6

+ 16.8%/yr

Service Reductions

Source: START
Average Annual Traffic Growth: 2000 - 2013

- 0% - 1% (doubles in 100+ years)
- 1% - 2% (doubles in 50 - 100 years)
- 2% - 3% (doubles in 33 - 50 years)

transit growth corridor

(straight line growth rates, not compounded)
Observations
Traffic Trends 2000 - 2013

• Rate of traffic growth has been highest within the Town of Jackson & within Wilson
• National Park-related traffic growth has been less than 1% / year
• Fastest traffic growth has been concentrated in the US-26 corridor at Y Intersection & High School Road
• Except at the Y Intersection, little traffic growth has occurred in Teton County since 2006
• START service increases + Village TDM program have limited traffic growth in the Town to Village corridor
Conclusions

• Traffic growth has been driven by economics
  – increased commercial space, esp. West Jackson
  – increased in-commuting (both Teton Pass & Snake River)
• Growing visitorship has not been a significant source of increased traffic
• Teton County population has been decentralizing
• Transit has been effective in specific corridors
• The most important capital needs may be core area circulation – all modes
Estimated Existing Countywide Seasonal VMT
Teton County, WY
Baseline Countywide VMT Forecast

Annual VMT growth: 1.3%
**Baseline Traffic Forecast**

<table>
<thead>
<tr>
<th>Location</th>
<th>2013</th>
<th>2024</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TETON VILLAGE (#141)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>July MAWDT</td>
<td>15,652</td>
<td>18,678</td>
<td>21,693</td>
</tr>
<tr>
<td>AADT</td>
<td>10,522</td>
<td>12,556</td>
<td>14,583</td>
</tr>
<tr>
<td>% Change</td>
<td>19%</td>
<td>39%</td>
<td></td>
</tr>
<tr>
<td><strong>GROS VENTURE (#84)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>July MAWDT</td>
<td>14,362</td>
<td>16,561</td>
<td>18,754</td>
</tr>
<tr>
<td>AADT</td>
<td>7,319</td>
<td>8,440</td>
<td>9,557</td>
</tr>
<tr>
<td>% Change</td>
<td>15%</td>
<td>31%</td>
<td></td>
</tr>
<tr>
<td><strong>JACKSON SOUTH (#32)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>July MAWDT</td>
<td>15,652</td>
<td>18,678</td>
<td>21,693</td>
</tr>
<tr>
<td>AADT</td>
<td>10,522</td>
<td>12,556</td>
<td>14,583</td>
</tr>
<tr>
<td>% Change</td>
<td>19%</td>
<td>39%</td>
<td></td>
</tr>
<tr>
<td><strong>JACKSON WEST (#158)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>July MAWDT</td>
<td>22,829</td>
<td>26,548</td>
<td>30,257</td>
</tr>
<tr>
<td>AADT</td>
<td>15,607</td>
<td>18,150</td>
<td>20,685</td>
</tr>
<tr>
<td>% Change</td>
<td>16%</td>
<td>33%</td>
<td></td>
</tr>
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</table>

**Notes:**
- **MAWDT** = Monthly Average Weekday Traffic
- **AADT** = Annual Average Daily Traffic
Prioritization Framework
Framework for Setting Priorities

- Capital Projects
- Programs
- Other Actions
Major Capital Projects

• Approach implementation strategically
• Make explicit link to WYDOT’s PEL study
• Use benchmarks to trigger project development
Capital Project Integration

- **Group 1: WY-22**
  - Y Intersection
  - Tribal Trails Connector
  - WY-22 Multimodal/Roadway: Jackson – WY-390
  - WY-22 Pathway Connection: Wilson – Jackson
  - Intersection of Spring Gulch & WY-22

- **Group 2: WY-390**
  - Intersection of WY-390 & WY-22

- **Group 3: US 26 Jackson Bypass – NEPA Process**
  - Pave & Upgrade Spring Gulch Road
  - Fixed Guideway Transit
  - New North Bridge and Highway Corridor
### Major Capital Project Timing

<table>
<thead>
<tr>
<th>Capital Project Group</th>
<th>Lead Time to Build</th>
<th>Benchmark Trigger</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. WY-22</td>
<td>5 years</td>
<td>93% of LOS D: 18,600 vpd</td>
</tr>
<tr>
<td>2. WY-390</td>
<td>5 years</td>
<td>93% of LOS D: 18,600 vpd</td>
</tr>
<tr>
<td>3. Jackson Bypass</td>
<td>10 years</td>
<td>86% of LOS D: 17,200 vpd</td>
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## Capital Group 1 Projects

<table>
<thead>
<tr>
<th>GROUP</th>
<th>Project</th>
<th>NEPA PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Y Intersection</td>
<td>Complete</td>
</tr>
<tr>
<td>1</td>
<td>Tribal Trails Connector</td>
<td>Complete</td>
</tr>
<tr>
<td>1</td>
<td>WY-22 PEL Segment 1</td>
<td>Complete</td>
</tr>
<tr>
<td>1</td>
<td>WY-22 Pathway</td>
<td>Complete</td>
</tr>
<tr>
<td>1</td>
<td>Spring Gulch Intersection</td>
<td>Complete</td>
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</table>
Capital Group 1 Indicator Station
## Capital Group 1 Benchmarks

<table>
<thead>
<tr>
<th>WY-22 @ Snake R Bridge</th>
<th>Average July VPD</th>
<th>Average Annual VPD</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013 Actual Traffic</td>
<td>22,829</td>
<td>15,607</td>
</tr>
<tr>
<td>2024 Forecast Traffic</td>
<td>26,548</td>
<td>18,150</td>
</tr>
<tr>
<td>2035 Forecast Traffic</td>
<td>30,257</td>
<td>20,685</td>
</tr>
<tr>
<td>Project Development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trigger</td>
<td>18,600</td>
<td>--</td>
</tr>
<tr>
<td>Construction Trigger</td>
<td>20,000</td>
<td>--</td>
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</table>
Capital Group 2 Projects

<table>
<thead>
<tr>
<th>GROUP</th>
<th>Project</th>
<th>NEPA PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>WY-22/WY-390 Intersection</td>
<td>Complete</td>
</tr>
<tr>
<td>2</td>
<td>WY-390 Segment 5</td>
<td>Complete</td>
</tr>
<tr>
<td>2</td>
<td>WY-390 Segment 6</td>
<td>Complete</td>
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</table>
Capital Group 2 Indicator Station
# Benchmark 3 (Final Design)

<table>
<thead>
<tr>
<th>WY-390 North of WY-22</th>
<th>Average July VPD</th>
<th>Average Annual VPD</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013 Actual Traffic</td>
<td>15,652</td>
<td>10,522</td>
</tr>
<tr>
<td>2024 Forecast Traffic</td>
<td>18,678</td>
<td>12,556</td>
</tr>
<tr>
<td>2035 Forecast Traffic</td>
<td>21,693</td>
<td>14,583</td>
</tr>
<tr>
<td>Project Development Trigger</td>
<td>18,600</td>
<td>--</td>
</tr>
<tr>
<td>Construction Trigger</td>
<td>20,000</td>
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</table>
## Capital Group 3 Alternatives

<table>
<thead>
<tr>
<th>GROUP</th>
<th>Project</th>
<th>NEPA PEL</th>
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<tbody>
<tr>
<td>3</td>
<td>New North Bridge Corridor</td>
<td>Not Initiated</td>
</tr>
<tr>
<td>3</td>
<td>Pave and Upgrade Spring Gulch Road</td>
<td>Not Initiated</td>
</tr>
<tr>
<td>3</td>
<td>Fixed Guideway Transit</td>
<td>Not Initiated</td>
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</table>
Capital Group 3 Indicator Stations
## Capital Group 3 Benchmarks

<table>
<thead>
<tr>
<th>Indicator Count Location</th>
<th>US-26 North of Jackson</th>
<th>Average July VPD</th>
<th>Average Annual VPD</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013 Actual Traffic</td>
<td>14,362</td>
<td>7,319</td>
<td></td>
</tr>
<tr>
<td>2024 Forecast Traffic</td>
<td>16,561</td>
<td>8,440</td>
<td></td>
</tr>
<tr>
<td>2035 Forecast Traffic</td>
<td>18,754</td>
<td>9,557</td>
<td></td>
</tr>
<tr>
<td>Initiate NEPA</td>
<td>Trigger</td>
<td>17,200</td>
<td>--</td>
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</table>

<table>
<thead>
<tr>
<th>Indicator Count Location</th>
<th>US-26 South of Jackson</th>
<th>Average July VPD</th>
<th>Average Annual VPD</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013 Actual Traffic</td>
<td>12,192</td>
<td>7,676</td>
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</tr>
<tr>
<td>2024 Forecast Traffic</td>
<td>13,992</td>
<td>8,809</td>
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<tr>
<td>2035 Forecast Traffic</td>
<td>15,778</td>
<td>9,940</td>
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</tr>
<tr>
<td>Initiate NEPA</td>
<td>Trigger</td>
<td>17,200</td>
<td>--</td>
</tr>
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</table>
First Discussion:
Framing a Plan Scenario
Framing a Plan Scenario

• Baseline Scenario – base forecast
• Plan Scenario
  – 5% Mode Shift (same as in 2000 plan)
  – No growth in VMT
  – Double Transit Ridership
Potential Plan Scenario/Frame

Daily VMT (millions)

- 2013 Actual: 1.36
- 2024 Base Forecast: 1.55
- 2014 5% Mode Shift: 1.46
- 2014 No Growth in VMT: 1.36
- 2024 Double Transit Service: 1.53

2013 Person Miles of Travel: 777 million

2024 Person Miles of Travel: 888 million
Potential Plan Scenario/Frame

<table>
<thead>
<tr>
<th>Year</th>
<th>Daily VMT</th>
<th>Daily Transit Ridership</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>1.36</td>
<td>2,464</td>
</tr>
<tr>
<td>2024</td>
<td>1.55</td>
<td>2,832</td>
</tr>
<tr>
<td>2014</td>
<td>1.46</td>
<td>14,793</td>
</tr>
<tr>
<td>2014</td>
<td>1.36</td>
<td>28,967</td>
</tr>
<tr>
<td>2024</td>
<td>1.54</td>
<td>5,664</td>
</tr>
</tbody>
</table>

- **2013 Actual**
- **2024 Base Forecast**
- **2014 5% Mode Shift**
- **2014 No Growth in VMT**
- **2024 Double Transit Service**
Potential Plan Scenario/Frame

Daily VMT

2013 Actual: 1.36
2024 Base Forecast: 1.55
2014 5% Mode Shift: 1.46
2014 No Growth in VMT: 1.36
2024 Double Transit Service: 1.54

Capital Project Group 1 (WY-22)

- Project Development: Yes
- Construction: Yes

- 2013 Actual: Yes
- 2024 Base Forecast: Yes
- 2014 5% Mode Shift: Yes
- 2014 No Growth in VMT: Yes
- 2024 Double Transit Service: Yes
### Potential Plan Scenario/Frame

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual VMT</th>
<th>Base Forecast</th>
<th>5% Mode Shift</th>
<th>No Growth in VMT</th>
<th>Double Transit Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>1.36</td>
<td>1.55</td>
<td>1.46</td>
<td>1.36</td>
<td>1.54</td>
</tr>
<tr>
<td>2014</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>2024</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

#### Capital Project Group 2 (WY-390)

- **Project Development**
  - 2013: Yes
  - 2024: No

- **Construction**
  - 2013: No
  - 2024: No
Potential Plan Scenario/Frame

Daily VMT

- 2013 Actual: 1.36
- 2024 Base Forecast: 1.55
- 2014 5% Mode Shift: 1.46
- 2014 No Growth in VMT: 1.36
- 2024 Double Transit Service: 1.54

Capital Project Group 3 (US-26 Bypass)

- NEPA: No
- Construction: No

No growth in VMT for 2014 and no increase in transit service for 2024.
Preview:
Transit System Development
Existing START Services

- Corridor Transit
- Commuter Transit
- Circulator Transit

Existing Private Sector Services

- Skier Shuttles
- Visitor Excursions
- Village/Town - Airport
- Town - GTNP
Commute Transit Mode Share
(American Community Survey 2008 – 2012)

Teton County
- Commute to: 11%
- Commute from: 10%

Teton Village
- Commute to: 8%
- Commute from: 18%

Town of Jackson
Transit – Strategic Options

1. Fares and Passes
   - Fare-free Valley services ($1 million/year)
   - Implement bulk-rate discount commuter pass

2. Commuter Services
   - Increase service levels (# of runs/day)
   - Implement express runs + local runs
Transit – Strategic Options

3. Corridor Services
   - Further increases in level of service (runs/day)
   - New service to airport
   - New service to Grant Teton National Park

4. Circulator Services
   - Split Town Shuttle into 3 routes
   - Other circulators?
Major Program Elements

• Employer coordination
• Transit passes, other benefits
• Events, promotions
• Information clearinghouse – esp. transit
• Tourism outreach
• Monitoring & reporting for ITP
• Bikeshare?
• Car share?
Next Steps, Upcoming Events
Project Schedule

- October 29 – Public Workshop
- December 9 – JIM Presentation – Plan Contents
- January 27 – JIM Presentation – Draft Plan