

November 21, 2022

Dear Planning Commission and City Council Members,

Since the Transportation Master Plan is a vital step in meeting the transportation needs of our community, we wanted to outline our values, which focus on quality of life and economic vitality.

We cannot build out of congestion: Many residents in Orem will only drive. Orem is to a point that building more roads is either too costly to acquire land rights, or just not helpful because demand will increase to fill the new capacity. When growth requires construction, we suggest keeping city-owned streets to five lanes or fewer. Level of service may drop to our recommended acceptable level E during certain times of the day. To reduce this congestion, we need to also spend time and resources addressing other modes of transportation like public transit, biking, or on a neighborhood level, walking.

We have to balance the needs of drivers and pedestrians and bikers: An open road, with wide lanes that encourages high speeds may move cars effectively, but has elements that are detrimental to encouraging walking or biking. The needs of traffic flow and the safety and comfort of active transportation must be balanced. Traffic calming techniques should be employed where appropriate.

Good planning and transportation infrastructure encourage active transportation: Planning for growth will maintain our quality of life. We suggest a strong correlation between land-use, transportation, and infrastructure planning. The goal is to optimize safety for all road users while encouraging the use of alternative transportation including transit, bikes and walking.

We must be fiscally and socially responsible: Within a limited budget, we must prioritize projects that meet current needs and anticipate growth. This means selecting the right projects, at the right time, with the most cost-effective solutions, and with consideration for our neighborhoods and quality of life. For example, we support Bus Rapid Transit (BRT) because it is more economical and flexible than light rail.

We recognize that city streets are the largest public space we have; roads are for everyone. A large portion of our tax dollars supports the building and maintenance of streets. We look forward to working with you in encouraging transportation plans that focus on quality of life and economic vitality, keeping Orem's status as a great place to live and work.

Sincerely,

The Transportation Advisory Commission
Becky Buxton
Marlan Coe
CJ Mecham
Jay Przybyla
Laura Redford
Kathleen Turner
Russ Verhoef
Sam Kelly, City Engineer
Jeff Lambson, City Council

Orem leaders and Planning Commission members,

This is a very thorough plan – with very good guidance on how to manage Orem’s growth. There is a lot of great work that went into this.

As I will be absent from the next Planning Commission meeting, here are suggested edits to the Plan. This includes my comments sent in December, which suggested the plan include a statement about safety and the preservation of neighborhoods. I believe this should be placed up front, in the following sentence of paragraph 2 of the Executive Summary: (my suggested edits in **BOLD**).

Due to growth within the City and the large growth throughout the county, a comprehensive transportation plan must be developed and regularly maintained in order to combat congestion, **safety hazards, and traffic’s impact on neighborhoods** caused by growth.

This same issue suggests to me an edit in Section 4.9 Connectivity. (my suggested edits in **BOLD**).

4.9 Connectivity

Orem desires a connected street system for all new developments, minimizing the use of cul-de-sacs. **Yet greater connectivity may compromise the integrity of Orem’s neighborhoods, and in certain circumstances, increase safety risks to pedestrians, cyclists and other motorists. Connectivity and traffic flow will be balanced with these needs (preserving Orem’s neighborhoods and safety) moving ahead. Developers should be made aware that proposed transportation changes that open residential neighborhoods to commercial and high density areas (with flow-through traffic) are inconsistent with the direction of Orem’s future growth.** Infill parcels ~~will~~ **may** be required to provide future street stubs to adjacent parcels with the potential for development. Retail and office development ~~must~~ **may** provide cross access easements to create circulation patterns to adjacent properties, to eliminate multiple access points to the major street system. Consequently, this ~~will~~ **could** reduce travel time and congestion by allowing drivers to make shorter and more direct trips. In addition, connectivity will allow the option of walking or bicycling, due to shorter routes to schools, parks, and businesses. Emergency vehicles including police, fire trucks, and ambulances will similarly benefit from connectivity, by use of alternate routes if one is blocked. Overall fuel consumption and pollution will also result by shortening trips through connectivity. ~~An Examples of projects to improve connectivity in Orem is are the connection of 800 West to Campus Drive and the 1600 West extension to Geneva Road.~~

The revision above was written because we turned down a development behind 400 W/1430 S because it connected a road that had apartments on it to a residential neighborhood. The developer put in the connection because they were told it was required by the Transportation Master Plan. This also adversely affected the owner of the land who was selling to the developer.

Please consider these revisions, taking into account that the suggested edits above are a bit clunky and need to be word smithed.

Thanks again for all the hard work.

Murray

Murray Low

801.874.5775 murray.low@comcast.net

Specific concerns and recommended changes to TMP:

- Page 25 – overpass on 1200 north and 800 South, need to look into it more depth or eliminate.
- Page 25 – 800 South connection to Campus Drive should remain closed – UVU has to change their traffic pattern.
- Page 35 – MAG Regional Transportation Plan – remove the I-15/Orem 800 S/Campus Drive (Geneva Road to UVU).
- Page 35 – MAG Regional Transportation Plan – Orem Center Street/I-15 Ramp and Lane Improvements.
- Page 49 – remove Item #4 from 2030 Capital Improvements Plan list which is the I-15/Orem 800 South overpass – New Overpass.

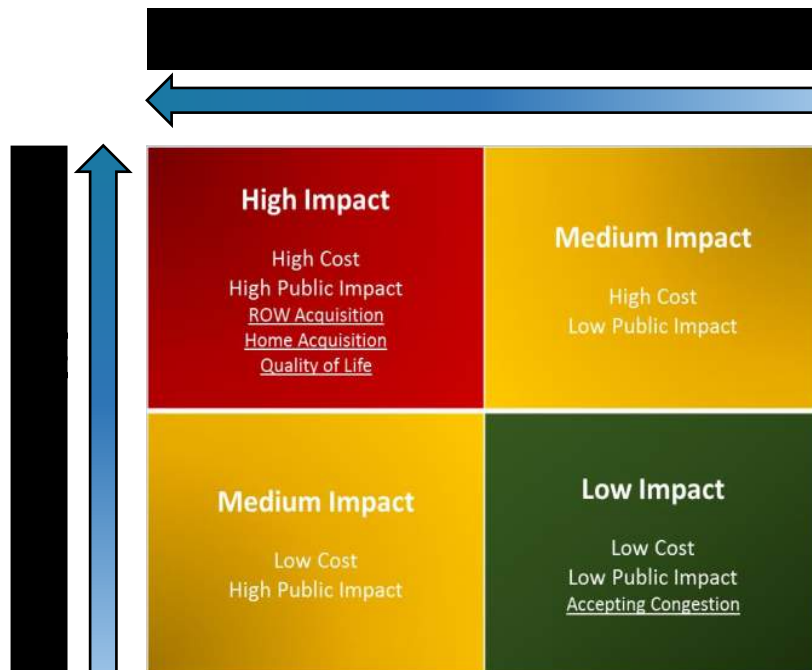
Mike Carpenter:

I propose that we support the traffic plan with the following projects being removed.

The overpass/interchanges at 800 S and 1200 N, both projects are a huge expense to the city, 8 million, provides little alleviation for the residents and will only exacerbate the traffic in the neighborhoods.

The widening projects related to the 800 E and 800 W corridors, neither of these corridors have an excessive demand for increased throughput by the surrounding neighborhoods or the people of Orem at large so the impact and expense wouldn't be warranted even as a long-term plan.

Figure 13: Cost vs. Public Impact Matrix



2.5.2 Special Considerations

As part of future development, specific “hot spot” locations were modeled throughout the city. These locations investigated specific roadway improvements and the impacts of those improvements on the surrounding roadways and are represented in [Figure 14](#). The additional modeling hot spots were in the following locations and the following sections describe the results and if any additional roadway improvements are necessary:

- **800 South – Overpass over I-15**
- **1200 North – Overpass over I-15**
- **1200 West – (1600 North to 400 North) – Widen to 5 Lanes**
- **800 West – (1600 North to 800 South) – Widen to 5 Lanes (3 Lanes 800 South to Campus Dr.)**
- **800 West – (800 South to Campus Drive) – Connection to UVU campus**

2.5.2.1 1200 West Additional Lanes

Due to the potential future impacts of development in the area around 1200 North and 1200 West, an additional model run was completed to determine if 1200 West requires additional travel lanes. Due to the additional traffic, additional travel lanes will be necessary by 2050. As part of the future Transportation Improvement Program (TIP), 1200 West from 1600 North to 800 North will be widened to 5 lanes.

2.5.2.2 800 South Additional Lanes

A new overpass on I-15 at 800 South is included in Phase 2 of the MAG RTP. With the new overpass, travel lanes were increased from three to five lanes from the interchange to State Street (800 South east of State Street is currently five lanes). An advantage of increasing the number of travel lanes on 800 South is to alleviate traffic at Utah Valley University (UVU) using University Parkway. The analysis indicates that a daily volume increase between 4,000 to 10,000 vehicles along the 800 South corridor with minimal decreases along University Parkway between 1,000 to 2,400 vehicles. Since the additional vehicles on 800

2.7.2 Regional Transportation Plan

There are many roadways in Orem that are included on MAG's RTP. The projects included on the RTP are shown in [Figure 19](#). Included is a list of the roadway improvements included on the RTP for all three phases (2019-2050).

Phase 1: 2019-2030

- **Orem 1600 North** (1200 West to State Street) – Widen to 5 Lanes
- **Orem Center Street** (Geneva Road to I-15) – Widen to 5 Lanes
- **Orem 1200 West** (Center Street to Sandhill Road) – Widen to 5 Lanes
- **Geneva Road** (Lakeview Parkway to Southern Border) – Widen to 5 Lanes
- **Lakeview Parkway/Geneva Road** (University Parkway to Southern Border) – New 5 Lane Road
- **I-15/Orem 800 S/Campus Drive** (Geneva Road to UVU) – New 5 Lane Road/I-15 Bridge
- **I-15/Orem Center St** – Ramp and Lane Improvements
- **I-15/University Pkwy** – Grade separated off-ramp

Phase 2: 2031-2040

- **Orem Center St** (1200 W to State St) – Widen to 7 Lanes
- **Orem Geneva Rd** (Orem 1600 N to University Pkwy) – Widen to 7 Lanes
- **State St/University Pkwy Bridge** – New Bridge
- **I-15 Parallel Corridor** (University Pkwy to Payson) – New Freeway
- **I-15 Parallel Corridor** (Pioneer Crossing Blvd to University Pkwy) – New Freeway
- **I-15 Widening** (12 Lane Freeway; University Pkwy to SF US-6 then 8 Lanes to Payson)

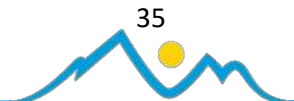
Phase 3: 2041-2050

- **Orem 800 E/Orem 1600 N** (State St to 800 S) – Widen to 5 Lanes
- **University Pkwy/Sandhill Rd** – New Interchange

Although the improvements on the RTP will improve congestion in the specific project areas, there are many other areas of the city where the roadways perform at a LOS E or worse. The burden of the following improvements will fall on Orem to improve unless the city is willing to wait for funding through other sources.

- **1600 North** (I-15 Interchange to Main Street)
- **Center Street** (I-15 to State Street)
- **1200 West** (800 North to 1200 North; Center Street to Sandhill Road)
- **University Parkway** (Geneva Road to I-15; Sandhill Road to State Street)
- **Geneva Road** (University Parkway to 2000 South)
- **800 South** (1200 West to Campus Drive; Main St to Orem Blvd; 800 East to Eastern Border)
- **800 North** (I-15 to 400 East; 800 East to Eastern Border)
- **State Street** (800 North to 800 South)
- **800 East** (400 North to 800 South)
- **1200 South** (Main Street to 200 East)
- **Main Street** (University Parkway to 2000 South)

The indicated roadway segments above as well as the additional modeling results from the [Special Considerations](#) section form the basis of the improvements included on the 2050 roadway improvement map shown in [Figure 19](#). Intersection improvements in 2050 are shown in [Figure 20](#). Applying all



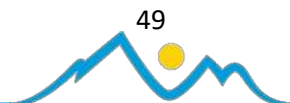
Orem Transportation Master Plan (TMP)

November 8, 2022



Table 6: 2030 CIP Projects

| 2030 Capital Improvements Plan – The City of Orem Responsibility | | | | | | |
|--|---|------------------------------|----------------|------|--------|-----------------------------|
| Ref. No. | Location | Total Price (With Inflation) | Funding Source | Year | Orem % | Orem Total (With Inflation) |
| 2 | Center Street (Geneva Road to I-15) – Widen to 5 Lanes | \$9,425,000 | Orem/MAG | 2030 | 6.77% | \$638,073 |
| 3 | 1200 West (Sandhill Road to Orem Center Street) - Widen to 5 Lanes | \$12,905,000 | Orem/MAG | 2030 | 6.77% | \$873,669 |
| 4 | I-15/Orem 800 S Overpass - new Overpass | \$116,000,000 | Orem/MAG | 2030 | 6.77% | \$7,853,200 |
| 5 | 1600 West (Connection to Geneva Rd.) | \$2,658,600 | Orem | 2023 | 100% | \$2,658,600 |
| 6 | Intersection Improvements (Additional Funds) | \$480,000 | Orem | 2023 | 100% | \$480,000 |
| 7 | 1200 South (State Street to 800 East) | \$2,460,260 | Orem | 2023 | 100% | \$2,460,260 |
| 8 | Roundabout (700 N - Orem Blvd.) (Safety Improvement) | \$685,750 | Orem | 2023 | 100% | \$685,750 |
| 9 | Intersection Improvements (Additional Funds) | \$506,400 | Orem | 2023 | 100% | \$506,400 |
| 10 | Safety Improvement - Turn Lane (WB RTL) 1100 East and 800 North | \$2,537,698 | UDOT | 2023 | 0% | \$0 |
| 11 | Intersection Improvements (Additional Funds) | \$534,252 | Orem | 2023 | 100% | \$534,252 |
| 13 | Intersection Improvements (Additional Funds) | \$558,293 | Orem | 2023 | 100% | \$558,293 |
| 14 | University Parkway and State Street Grade Separated Intersection | \$55,424,572 | UDOT | 2023 | 0% | \$0 |
| 16 | Enlarge Roundabout (1200 South and 400 West) | \$583,416 | Orem/MAG/UTA | 2023 | 0% | \$0 |
| 17 | Traffic Signal Update (Geneva Road and 1600 North) | \$291,708 | UDOT | 2023 | 0% | \$0 |
| 18 | Intersection Improvements (Additional Funds) | \$583,416 | Orem | 2023 | 100% | \$583,416 |
| 20 | Traffic Signal (800S-1200W) | \$289,594 | Orem | 2023 | 100% | \$289,594 |
| 21 | Lakeview Parkway (Geneva Road to Southern Border) – New 5 Lane Road | \$14,698,200 | Orem/MAG | 2026 | 6.77% | \$2,839,053 |
| 22 | Signal Update (400 North and 1200 West) | \$304,835 | Orem | 2023 | 100% | \$304,835 |
| 23 | Signal Update (400 North and Orem Blvd.) | \$304,835 | Orem | 2023 | 100% | \$304,835 |
| 24 | Signal Update (Center Street and 400 West) | \$304,835 | Orem | 2023 | 100% | \$304,835 |



cases may require more information than the standard requires. The City reserves the right to waive all TIS requirements as well as requiring extra information at the discretion of the City Engineer.

4.9 Connectivity

Orem desires a connected street system for all new developments, minimizing the use of cul-de-sacs. Infill parcels will be required to provide future street stubs to adjacent parcels with the potential for development. Retail and office development must provide cross access easements to create circulation patterns to adjacent properties, to eliminate multiple access points to the major street system. Consequently, this will reduce travel time and congestion by allowing drivers to make shorter and more direct trips. In addition, connectivity will allow the option of walking or bicycling, due to shorter routes to schools, parks, and businesses. Emergency vehicles including police, fire trucks, and ambulances will similarly benefit from connectivity, by use of alternate routes if one is blocked. Overall fuel consumption and pollution will also result by shortening trips through connectivity. Examples of projects to improve connectivity in Orem are the connection of 800 West to Campus Drive and the 1600 West extension to Geneva Road. Orem's Street Connection Master Plan can be found at <http://orem.org/engineering/>.

DRAFT



Cheryl Vargas <chvargas@orem.org>

TMP comments for Planning Commission

1 message

Shauna Mecham <shaunakb90@gmail.com>

Wed, Sep 6, 2023 at 10:50 AM

To: Cheryl Vargas <chvargas@orem.org>, Sam Kelly <srkelly@orem.org>

Commissioner,

Please consider the following specific comments on the proposed Transportation Master Plan. In addition, I fully support the Transportation Advisory Commission's summary of transportation needs. The plan is well-done; I particularly like the traffic calming toolbox and seeing areas with a high % of pass-through traffic. The analysis is wonderfully done. With that said, there are some areas of concern as stated below.

Thank you for your time,

Shauna Mecham

Page 11 says parking should be discouraged on arterials, yet State St continues to have on-street parking for most of its length. Springville, Provo, Lindon, PG, and American Fork all have substantial sections of State St with a buffered bike lane.

Pages 14-16 have cross-sections and lane widths. [NACTO](#) recommends 10' lanes in urban areas and 11' where more truck traffic is expected. Most lanes in the TMP are 12', with 14' on sub-local roads. We don't need the unnecessary expense.

Page 56: Orem's neglect of proper marking for bike lanes has made a net zero gain on miles of bike infrastructure in the past 5 years. Several of these routes are nothing more than a shoulder and should be fixed or not included as existing infrastructure. The AT plan needs a massive overhaul as things like Bike Routes, suggested in 2010, are no longer considered adequate for facilitating safe bike and ped movement.

Page 56: Curb radius This should explicitly depict proper curb cuts; not the kind where anyone crossing must start on a downslope facing the intersection, but rather 2 legs on each corner for safer and more ADA acceptable movement. See these [examples](#) from other DOTs.

Page 61: Speed map. If everyone is speeding, doesn't that say something about the design of our roads? We should design for the speeds we want instead of relying on signs and enforcement. Please use the wonderful traffic calming toolbox in the appendix.