

# Park City Transit Plan

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## **Chapter Three:** Feasibility and Logistics

# Park City Transit Plan

## Section 1: Budget

In general, the two districts agree that with respect to funding, it will be important to formulate a method for quantifying the benefit of a transit link to each region in order to fairly divide the costs. Such an approach would allow for annual updating so that budgets can be adjusted accordingly, and the details of this method and its use could be included in an inter-local agreement. This section looks at potential funding sources and some of the issues that will influence the amount of funds required.

### 1a. Federal Funding Sources

1ai. Section 5311 Non-Urbanized Area Formula Program:

The non-urbanized area formula program for public transportation is authorized by Title 49 U.S.C. §5311. The Federal Transit Administration (FTA), on behalf of the Secretary of Transportation, apportions the funds appropriated annually to the governor of each state for public transportation projects in nonurbanized areas. The statutory formula is based solely on the nonurbanized population of the states. Each state prepares an annual program of projects, which must provide for fair and equitable distribution of funds within the states, including Indian reservations, and must provide for maximum feasible coordination with transportation services assisted by other federal sources.

Program funds may be used for capital, operating, and administrative assistance to state agencies, local public bodies and nonprofit organizations (including Indian tribes and groups), and operators of public transportation services. There is no limitation on operating assistance. The state must use fifteen percent of its annual apportionment to support intercity bus service, unless the Governor certifies that the intercity bus needs of the state are adequately met. The amount which the state may use for state administration and for planning, and technical assistance activities is limited to fifteen percent of the annual apportionment. A separate annual allocation to the state under Section 5311 (b)(2) the Rural Transit Assistance Program (RTAP), may be used only for training, technical assistance, research, and related support activities. The maximum Federal share for capital and project administration is 80 percent (except for projects to meet the requirement of the Americans with Disabilities Act (ADA), the Clean Air Act, or bicycle access projects, which may be funded at 90 percent). The maximum FTA share for operating assistance is 50 percent of the net operating costs. No local share is required for state administration or RTAP.

These funds may be used to enhance the access of people in non-urbanized areas to health care, shopping, education, employment, public services and recreation; to assist in the maintenance, development, improvement, and use of public transportation systems in rural and small urban areas.

- Available to rural counties and small cities (non-urbanized areas under 50,000 in population);
- FTA apportionment directly to states, program administered by state DOT's;
- Formula based on each state's share of the nation's non-urbanized population;
- Funds may be used for capital or operating purposes;
- Federal matching share for capital projects is 80%;

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- State provides 50% of the non-federal share of capital projects (up to 10% of project cost) through the Omnibus and Transit Purposes appropriation in the State Transportation budget;
- Federal matching share for operating projects is 50%; State operating funds (STOA) may be used as federal match;

## **1 aii. Over-the-Road Bus Accessibility Program**

- New program to finance the incremental capital and training costs of complying with USDOT's final rule regarding accessibility of over-the-road buses (as required by the Americans with Disabilities Act);
- Apportioned directly to transit systems;
- Program funding awarded by FTA through a competitive grant application process;
- The FFY 2002 Transportation Appropriations Act provides \$6.95 million for this program;
- \$5.25 million is available to providers of fixed-route intercity service; and
- \$1.7 million is available to other providers of over-the-road bus services, including local fixed-route, commuter, and charter and tour services.
- State provides 50% of the non-federal share of capital projects (up to 10% of project cost) through the Omnibus and Transit Purposes appropriation in the State Transportation budget.

**Source:** New York State Department of Transportation web site <http://www.dot.state.ny.us/pubtrans/funding.html#5311>, Utah Department of Transportation

## **1 aiii. Rural Transit Assistance Program (RTAP)**

- **Purpose:**  
The purpose is to provide resources for training, technical assistance, research, and related support services to support rural transit providers.
- **Eligible Projects:**  
Eligible projects include activities that support rural transit providers with training and technical assistance, research, and related support services. Each state gets an annual allocation of funds for RTAP that can be used for projects such as newsletters, training courses, scholarships for training, and circuit riders. In addition, RTAP funds are used for a national project that supports the state RTAP managers, maintains a rural transit database, produces training modules, and provides a rural transit resource center. There is no local share requirement.
- **Contacts:**  
State Transportation Agencies
- **Funding:**  
Funding is \$30.75 million for FYs 1998 - 2003. Funds are allocated to each state by formula, but the minimum amount for a state is \$65,000.

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**Source:** U.S. Department of Transportation – Federal Highway Administration – Planning: Serving Rural America, <http://www.fhwa.dot.gov/planning/rural/ruralamerica/4providing.html#tp>

## **1aiv. Section 5316 Job Access and Reverse Commute**

- Purpose: To provide funding for local programs that offer job access and reverse commute services to provide transportation for low income individuals who may live in the city core and work in suburban locations.
- Formula program with allocations based on number of low-income persons:
  - 60% to designated recipients in areas with populations over 200,000
  - 20% to States for areas under 200,000
  - 20% to States for non-urbanized areas
  - States may transfer funds between urbanized and non-urbanized area programs
- States and designated recipients must select grantees competitively
- Projects must be included in a locally-developed human service transportation coordinated plan beginning in FY 2007
- 10% may be used for planning, administration and technical assistance
- Sources for matching funds are expanded (non-DOT Federal funds can be used as match) to encourage coordination with other programs such as those funded by the Department of Health and Human Services

**Source:** [www.fta.dot.gov/documents/FTA\\_JARC\\_Fact\\_Sheet\\_Sept05.pdf](http://www.fta.dot.gov/documents/FTA_JARC_Fact_Sheet_Sept05.pdf)

### **Analysis:**

With a population under 8,000, Park City meets size criteria for a “small city” as defined by the rural transit program. Kent Cashel reports that there are few applications for these funds, and that the state of Utah’s allocation therefore often goes unused, suggesting that there would be little competition for such funds. Assuming that Park City/Summit County meets all program requirements, this suggests that it would likely be successful in acquiring them and should conduct the necessary research to complete an application for them (much of which is budget data and goals/problem solving capacity of the transit program for which funds would be used).

**NOTE:** We intend to acquire a clearer picture of the amount of funding that could likely be generated from any of the above federal sources, and whether they are available annually or on a one-time basis. This will be critical in making other budget-related decisions that we touch upon below.

## **1b. Capital Costs**

- Capital costs can be estimated at \$500,000 per vehicle and \$100,000 per ADA compliant bus stop (though this can vary considerably depending on vehicle and stop types selected).

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- For stops, costs can range from \$25,000 for a basic roadside stop to upwards of \$1,000,000 for a stop with park-and-ride facilities and other amenities.
- Headway of 30 miles/Travel time of 50 Min.: 1.6 (2 buses each way)
- 4 Buses X .2 Spare Buses: 6 Buses
- 6 Buses X \$500,000: \$3,000,000
- 12 Stops/Stations X \$50,000: \$600,000
- \$600,000 Riders / 2,000 Riders: \$300/Rider at System Launch

**Source:** Johnson, Hal, Chestnut, Chris, UTA; Kent Cashell, Park City Transit., Personal interviews.

## 1c. Operating & Maintenance Costs

- For these costs, it is estimated at \$35.00 per hour of operation plus \$1.08 per mile for maintenance.
- Another estimate is \$5.00 per mile, which rolls operation and maintenance into one, which is used below to calculate rough costs.
- 32.5 Miles X 60 Trips: 1950 Miles
- 1950 Miles X \$5/mile: \$9,750/Day
- \$9,750 X 292 Days: \$2,847,000/Year
- \$2,847,000 X .2 FBR: \$569,400
- \$2,847,000 - \$569,400: \$2,277,600
- At 33% each:
  - UTA: \$751,608
  - PCT: \$751,608
  - Other: \$751,608

**Source:** Johnson, Hal., Chestnut, Chris, UTA; Kent Cashell, Park City Transit. Personal interviews.

## 1d. Establishing Fares

Survey respondents indicate that \$28.00 to \$29.64 would be a 'reasonable' price for a monthly pass. Regular monthly passes for UTA service currently cost \$50.00, while Express Service passes cost \$100.00.

Note how these numbers compare with costs of driving in Chapter 1, Sec. 3e, even when indirect costs - which are borne by everyone, not only drivers - are excluded.

## Section 2: Legal and Logistical Issues

Numerous legal and logistical issues arise when two agencies must manage a system that traverses two jurisdictional areas. Below is a list of questions and sub-questions as identified by representatives of Park City Transit and UTA.

### 2a. Cost-Sharing

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- How shall cost-sharing be distributed?
  1. This issue is both legal and political. What is the benefit ratio between the two regions?
  2. How might quantifiable benefit be determined? In terms of demand, vehicles taken off the road, riders served, economic needs met, etc.?
  3. Should benefit be considered in real numbers, or as a percentage of total district service?
  4. Shall maintenance, storage, operation, etc. be distributed 50-50, or according to agency capability? Park City has a greater capacity to manage operation because its operating costs are lower, but UTA is better equipped to maintain equipment. Would such a division be a more practical and financially equitable approach?
  5. Can UDOT fulfill a funding role through the 5311 and 5316 programs?

## **2b. Crossing District Boundaries**

- Where does Summit County's boundary end and UTA's begin?
  1. In terms of liability, Park City is self-insured. May it add the inter-county link to its existing policy as an additional risk?
  2. How will the two districts establish a communication system? Could Park City get onto UTA's frequency and train drivers on UTA protocol?
  3. How shall accidents and other incidents be managed along the inter-county corridor?
  4. Once beyond the basic connecting corridor, are there legal restrictions that would prevent pick-up and drop-off, for instance in downtown Salt Lake City or Park City, and if so, what are the geographical boundaries of such restrictions?

## **2c. Employees**

- What issues might arise with drivers potentially being drawn from two separate districts?
  1. How do you establish a pay scale for drivers that will not trigger union issues? What may be the result if drivers collectively bargain with respect to wages?
  2. Greater differences exist in terms of driver responsibilities, such as Park City's requirement that drivers clean buses, which UTA does not impose. Therefore, an even more important consideration is how shall mutually acceptable work expectations be established?
  3. What is the potential outcome of collective bargaining?

## **2d. System Management**

- Will the system be jointly managed, or shall a third entity be created to fulfill this function?

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1. Both parties suggest that an inter-local agreement could include provisions for the majority of inter-agency issues. What steps are needed to bring together each district's legal department, as well as representatives who understand logistical considerations?
2. In addition, both districts have suggested that a joint committee made up of members of each, rather than a separate agency, is a strong option for overseeing the system. What individuals ought to be included on such a committee?
3. How shall a statement be crafted in an inter-local agreement regarding the process and persons responsible for resolving issues as they arise?

**Source:** Kent Cashel & Chris Chesnut, meeting comments

## **Analysis:**

An inter-local agreement appears to be the best option for covering, in general terms, issues that may arise in the context of inter-agency cooperation. A third entity of some form that represents both agencies is desirable, and specific issues can be addressed by this group as they arise. A mutually approved method for quantifying the benefit of an inter-county system must be established. This will serve not only to determine cost-share, but also help to satisfy concerns among taxpayers in terms of the perception of providing subsidies outside of district boundaries. While each agency's legal department can answer many of the specific legal questions, other specific questions should be identified early, and will likely be answered as negotiations progress.

## **Section 3: Alternatives**

### **3a. Previous Suggestions**

The following alternatives displayed on the following page were recommended based on the results of the Park City Survey summarized in Chapter 3.

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**TABLE 11: Additional Summit County and Regional Commuter Alternatives**

Estimated Fiscal Year 2007-2008

Alternatives Options/Details	Additional Vehicles <sup>(1)</sup>	Runs Per Day	Annual				Ridership Impact		Annual		Performance Analysis		
			Vehicle Service.. Miles	Hours	Operating Days	Total Operating Cost	(One-Way Trips) Daily	Annual	Farebox Revenue	Subsidy Required	Passenger- Trips per VSH	Passenger- Trips per VSM	Op. Cost per Passenger-Trip
<b>REGIONAL COMMUTER SERVICE</b>													
<b>Heber City Commuter Service</b>													
Winter Service	1	2	6,292	242	121	\$18,800	22	2,720	\$8,160	\$10,640	11.2	0.4	\$3.91
Non-Winter Service	1	2	12,688	488	244	\$34,150	23	5,490	\$16,470	\$17,680	11.3	0.4	\$3.22
<b>Subtotal</b>	<b>1</b>	<b>2</b>	<b>18,980</b>	<b>730</b>	<b>365</b>	<b>\$52,950</b>	<b>22</b>	<b>8,210</b>	<b>\$24,630</b>	<b>\$28,320</b>	<b>11.2</b>	<b>0.4</b>	<b>\$3.45</b>
<b>Coalville Commuter Service</b>													
Winter Service	1	2	11,858	363	121	\$29,000	19	2,300	\$6,900	\$22,100	6.3	0.2	\$9.61
Non-Winter Service	1	2	21,070	645	215	\$48,650	26	5,490	\$16,470	\$32,180	8.5	0.3	\$5.86
<b>Subtotal</b>	<b>1</b>	<b>2</b>	<b>32,928</b>	<b>1,008</b>	<b>336</b>	<b>\$77,650</b>	<b>23</b>	<b>7,790</b>	<b>\$23,370</b>	<b>\$54,280</b>	<b>7.7</b>	<b>0.2</b>	<b>\$6.97</b>
<b>Kamas Commuter Service</b>													
Winter Service	1	2	7,744	363	121	\$24,500	31	3,750	\$11,250	\$13,250	10.3	0.5	\$3.53
Non-Winter Service	1	2	13,760	645	215	\$40,660	26	5,490	\$16,470	\$24,190	8.5	0.4	\$4.41
<b>Subtotal</b>	<b>1</b>	<b>2</b>	<b>21,504</b>	<b>1,008</b>	<b>336</b>	<b>\$65,160</b>	<b>28</b>	<b>9,240</b>	<b>\$27,720</b>	<b>\$37,440</b>	<b>9.2</b>	<b>0.4</b>	<b>\$4.05</b>
All Day Service (Year-Round)	1	5	50,400	2,363	315	\$139,090	19	6,000	\$18,000	\$121,090	2.5	0.1	\$23.18
<b>Salt Lake City Public Commuter Service</b>													
<i>Winter Service</i>													
Three AM & PM Roundtrips - Both Directions	3	2	18,150	484	121	\$47,390	165	20,000	\$60,000	(\$12,610)	41.3	1.1	(\$0.63)
Three Roundtrips - "Uphill" Service Only	3	1	5,687	182	121	\$23,510	116	14,000	\$42,000	(\$18,490)	76.9	2.5	(\$1.32)
<b>EXPAND SENIOR MOBILITY COUNTY SERVICE</b>													
	1	0	13,959	851	365	\$47,890	6	2,280	N/A	\$47,890	2.7	0.2	\$21.00
<b>EXPAND GENERAL DIAL-A-RIDE SERVICE TO JEREMY RANCH / TIMBERLINE / SUMMIT PARK</b>													
Winter	1	N/A	N/A	1,815	121	\$65,410	20	2,451	N/A	\$65,410	1.4	N/A	\$26.69
Non-Winter	1	N/A	N/A	3,660	244	\$128,130	6	1,381	N/A	\$128,130	0.4	N/A	\$92.77
<b>Total</b>	<b>1</b>	<b>N/A</b>	<b>N/A</b>	<b>5,475</b>	<b>365</b>	<b>\$189,840</b>	<b>10</b>	<b>3,832</b>	<b>N/A</b>	<b>\$189,840</b>	<b>0.7</b>	<b>N/A</b>	<b>\$49.54</b>

Note 1: Additional vehicles can only be evaluated as part of the whole fleet mix.  
 Note 2: All services depart from Park City.  
 Source: LSC Transportation Consultants, Inc.

## Alternative One: Winter Salt Lake City and Park City Commuter Services in Both Directions

The most effective route would be begin at the Old Town Transit Center in Park City, and travel along SR 224, I-80, Foothill Drive (SR 186, and South State Street to downtown Salt Lake City. A loop would be served around major employers in downtown Salt Lake City, and at least one stop convenient to TRAX would be served.

### Serving Westbound Commuters:

Stops would be limited in order to provide a travel time as close to that of the private operated commuter service. Other possible and major stops would be at Kimball Junction, Jeremy Ranch, Parley's Summit, and the University of Utah.

### Serving Eastbound Commuters:

The stops would be similar to the westbound commuters, except that stops would be made at the existing Park-and-Ride lots along Foothill Drive and possibly along I-215.

Schedules should be developed to serve work shifts that start at 7:00 AM, 8:00 AM, and 9:00 AM and end at 4:00 PM, 5:00 PM, and 6:00 PM. An initial service would be a minimum of three runs in each direction during each commute period.

One-way fare of the potential commuter services would be three dollars.

This service is projected to serve approximately 34,700 one-way passenger-trips. It is also estimated that in the first year of service, ridership of roughly 20,000 would be expected and eventually over time, the increasing ridership level will pay off the entire service.

### Advantages:

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- Both Summit County residents and employees would have access to transit service which would reduce the number of vehicles traveling in the area as well as expanding the potential employment base for Summit County employers.
- Existing winter employee services contracted by the ski area resorts could be folded into this service, which could be jointly marketed to a variety of user groups.

## **Disadvantages:**

- Staff resources that would be needed to implement the new service
- Need for additional capital funds

## **Alternative 2: Winter Salt Lake City to Park City Uphill Commuter Service Only**

Another alternative is to provide a public commuter bus between Park City and Salt Lake City that would operate in the uphill direction only during the winter season. A reasonable potential public service plan would have the following characteristics.

### **Serving Westbound Commuters**

Service would begin in the morning in Salt Lake City, but would not serve the downtown as shown in the map. Service would begin at the 2100 South TRAX station, serve one or more Park-and-Ride lots near the I-80/I-215 interchange, then would travel westbound along I-80 to SR 224 and finally the Old Town Transit Center in Park City.

### **Serving Eastbound Commuters**

Major stops could be at Parley's Summit, Kimball Junction, The Canyons, Park City Mountain Resort, and the OTTC.

The schedules would be the same as the commuter service in both directions, however, the initial service would be a minimum of three runs up the hill and three runs down the hill in the evening during the commute period.

One-way fare for the potential commuter services would be \$3.00

## **Advantages:**

- Salt Lake City area residents would have access to transit service, which therefore would reduce the number of vehicles traveling in the area.
- Existing winter employee services contracted by the area ski resorts could be jointly marketed to a variety of user groups.
- Lower capital and operating costs

## **Disadvantage:**

- Will not include service to the airport

## **Analysis:**

Both alternative bus routes show important stop destinations as to where the potential riders will be picked up and or dropped off. Due to the multiple stop destinations such as University of Utah, downtown Trax station, Kimball Junction, and the Old Town Transit Center, these stops will enable students, employees, and residents to use the system efficiently to get to their

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destinations. Though there are disadvantages to the bus service, however, the bus system will improve congestion, traffic, and help increase market revenue as people commute to and from Salt Lake to Summit County.

**Source:** LSC Transportation Consultants, Inc., Park City/Summit County Short Range Transit Plan Update, Technical Memorandum Number Two

## 3b. Route Analysis

### Salt Lake City/Route Options

Route	Starting Location	Ending Location	Total Time	Total Dist.	Total Cost	Mirrored UTA Route	Mirrored Park City Route	Round Trip Time	Round Trip Milage	Round Trip Cost
2100 South/ Kimball Junction	2100 South Foot Hill	Kimball Junction	18	17.78	\$93.17	N/A	N/A	36	35.56	\$186.33
Parley's Way 2600 E/ Kimball Junction Kmart (Parley's Way)/ Kimball Junction	Parley's Way 2600 E	Kimball Junction	19	17.69	\$92.70	N/A	N/A	38	35.38	\$185.39
2100 S SLC/Kmart (Parley's Way)	Central Pointe (2100 S) TRAX	(Parley's Way)	20	6.38	\$33.43	30	N/A	40	12.76	\$66.86
<b>2100 S SLC/ Kimball Junction</b>	<b>Central Pointe (2100 S) TRAX</b>	<b>Kimball Junction</b>	<b>38</b>	<b>23.75</b>	<b>\$124.45</b>	<b>30</b>	<b>N/A</b>	<b>76</b>	<b>47.5</b>	<b>\$248.90</b>
Central Pointe/ Park City	Central Pointe (2100 S) TRAX	Down Town Park City Parley's Way 2600 E	50	30.65	\$160.61	30	Kimball Junction West Pine Brook	100	61.3	\$321.21
100 S State/ Parley's Way	100 S State	E	30	8.85	\$46.37	5	N/A	60	17.7	\$92.75
<b>100 S State/ Kimball Junction</b>	<b>100 S State</b>	<b>Kimball Junction</b>	<b>49</b>	<b>26.54</b>	<b>\$139.07</b>	<b>5</b>	<b>N/A</b>	<b>98</b>	<b>53.08</b>	<b>\$278.14</b>
100 S State/Park City	100 S State	Down Town Park City 2100	61	33.41	\$175.07	5	Kimball Junction West Pine Brook	122	66.82	\$350.14
West Temple/Foot Hill	319 South West Temple St.	South Foot Hill	29	10.53	\$55.18	14	N/A	58	21.06	\$110.35
<b>West Temple/ Kimball Junction</b>	<b>319 South West Temple St.</b>	<b>Kimball Junction</b>	<b>37</b>	<b>28.31</b>	<b>\$148.34</b>	<b>14</b>	<b>N/A</b>	<b>74</b>	<b>56.62</b>	<b>\$296.69</b>
West Temple/Park City	319 South West Temple St.	Down Town Park City	49	35.18	\$184.34	14	Kimball Junction West Pine Brook Kimball Junction West Pine Brook Kimball Junction West Pine Brook	98	70.36	\$368.69
Park City/Kimball Junction	Down Town Park City	Kimball Junction	12	6.87	\$36.00	N/A	Kimball Junction West Pine Brook Kimball Junction West Pine Brook	24	13.74	\$72.00
Park City/Kmart (Parley's Way)	Down Town Park City	Kmart (Parley's Way)	30	24.27	\$127.17	N/A	Kimball Junction West Pine Brook Kimball Junction West Pine Brook	60	48.54	\$254.35
Park City/Parley's Way 2600 E	Down Town Park City	Parley's Way 2600 E	31	24.56	\$128.69	N/A	Kimball Junction West Pine Brook Kimball Junction West Pine Brook	62	49.12	\$257.39
Park City/2100 South Foot Hill	Down Town Park City	2100 South Foot Hill	32	24.65	\$129.17	N/A	Kimball Junction West Pine Brook	64	49.3	\$258.33

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## Round Trip Costs Per Day

Route	Starting Location	Ending Location	Round Trip Time	Round Trip Mileage	1 Round Trip Cost	2 Round Trips
2100 South/ Kimball Junction	2100 South Foot Hill	Kimball Junction	36	35.56	\$186.33	\$372.67
2101 South/ Kimball Junction	Parley's Way 2600 E	Kimball Junction	38	35.38	\$185.39	\$370.78
2100 South/ Kimball Junction	Kmart (Parley's Way)	Kimball Junction Kmart	36	34.8	\$182.35	\$364.70
2100 S SLC	Central Pointe (2100 S) TRAX	(Parley's Way)	40	12.76	\$66.86	\$133.72
2100 S SLC	Central Pointe (2100 S) TRAX	Kimball Junction	76	47.5	\$248.90	\$497.80
<b>2100 S SLC</b>	<b>Central Pointe (2100 S) TRAX</b>	<b>Down Town Park City</b>	<b>100</b>	<b>61.3</b>	<b>\$321.21</b>	<b>\$642.42</b>
Parley's Way SLC	100 S State	Parley's Way 2600 E	60	17.7	\$92.75	\$185.50
Parley's Way SLC	100 S State	Kimball Junction	98	53.08	\$278.14	\$556.28
<b>Parley's Way SLC</b>	<b>100 S State</b>	<b>Down Town Park City</b>	<b>122</b>	<b>66.82</b>	<b>\$350.14</b>	<b>\$700.27</b>
East Millcreek Leg	319 South West Temple St.	2100 South Foot Hill	58	21.06	\$110.35	\$220.71
<b>East Millcreek Leg</b>	<b>319 South West Temple St.</b>	<b>Kimball Junction</b>	<b>74</b>	<b>56.62</b>	<b>\$296.69</b>	<b>\$593.38</b>
East Millcreek Leg	319 South West Temple St.	Down Town Park City	98	70.36	\$368.69	\$737.37
Down Town Park City	Down Town Park City	Kimball Junction Kmart	24	13.74	\$72.00	\$144.00
Down Town Park City	Down Town Park City	(Parley's Way)	60	48.54	\$254.35	\$508.70
Down Town Park City	Down Town Park City	Parley's Way 2600 E	62	49.12	\$257.39	\$514.78
Down Town Park City	Down Town Park City	2100 South Foot Hill	64	49.3	\$258.33	\$516.66

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## Round Trip Costs Per Day Continued

3 Round Trips	4 Round Trips	5 Round Trips	6 Round Trips	7 Round Trips	8 Round Trips	9 Round Trips	10 Round Trips
\$559.00	\$745.34	\$931.67	\$1,118.01	\$1,304.34	\$1,490.68	\$1,677.01	\$1,863.34
\$556.17	\$741.56	\$926.96	\$1,112.35	\$1,297.74	\$1,483.13	\$1,668.52	\$1,853.91
\$547.06	\$729.41	\$911.76	\$1,094.11	\$1,276.46	\$1,458.82	\$1,641.17	\$1,823.52
\$200.59	\$267.45	\$334.31	\$401.17	\$468.04	\$534.90	\$601.76	\$668.62
\$746.70	\$995.60	\$1,244.50	\$1,493.40	\$1,742.30	\$1,991.20	\$2,240.10	\$2,489.00
<b>\$963.64</b>	<b>\$1,284.85</b>	<b>\$1,606.06</b>	<b>\$1,927.27</b>	<b>\$2,248.48</b>	<b>\$2,569.70</b>	<b>\$2,890.91</b>	<b>\$3,212.12</b>
\$278.24	\$370.99	\$463.74	\$556.49	\$649.24	\$741.98	\$834.73	\$927.48
\$834.42	\$1,112.56	\$1,390.70	\$1,668.84	\$1,946.97	\$2,225.11	\$2,503.25	\$2,781.39
<b>\$1,050.41</b>	<b>\$1,400.55</b>	<b>\$1,750.68</b>	<b>\$2,100.82</b>	<b>\$2,450.96</b>	<b>\$2,801.09</b>	<b>\$3,151.23</b>	<b>\$3,501.37</b>
\$331.06	\$441.42	\$551.77	\$662.13	\$772.48	\$882.84	\$993.19	\$1,103.54
<b>\$890.07</b>	<b>\$1,186.76</b>	<b>\$1,483.44</b>	<b>\$1,780.13</b>	<b>\$2,076.82</b>	<b>\$2,373.51</b>	<b>\$2,670.20</b>	<b>\$2,966.89</b>
\$1,106.06	\$1,474.75	\$1,843.43	\$2,212.12	\$2,580.80	\$2,949.49	\$3,318.18	\$3,686.86
\$215.99	\$287.99	\$359.99	\$431.99	\$503.98	\$575.98	\$647.98	\$719.98
\$763.05	\$1,017.40	\$1,271.75	\$1,526.10	\$1,780.45	\$2,034.80	\$2,289.15	\$2,543.50
\$772.17	\$1,029.56	\$1,286.94	\$1,544.33	\$1,801.72	\$2,059.11	\$2,316.50	\$2,573.89
\$775.00	\$1,033.33	\$1,291.66	\$1,549.99	\$1,808.32	\$2,066.66	\$2,324.99	\$2,583.32

# Park City Transit Plan

## Overall Annual Running Costs

### Running Cost for 365 Days A Year For 2100 S SLC/Kimball Junction Route With 25% Fair Box Recovery

Average Round Trips Per Day For 365 Days	5	6	7	8	9
Daily Costs Round Trip Cost	\$1,606.06	\$1,927.27	<b>\$2,248.48</b>	\$2,569.70	\$2,890.91
Minus FBR Fair Box Recovery (FBR)	\$439,658.93	\$527,590.71	<b>\$615,522.50</b>	\$703,454.28	\$791,386.07
Cost Before Fair Box Recovery	\$146,552.98	\$175,863.57	<b>\$205,174.17</b>	\$234,484.76	\$263,795.36
	\$586,211.90	\$703,454.28	<b>\$820,696.66</b>	\$937,939.04	\$1,055,181.42

### Running Cost for 365 Days A Year For 100 S State/Kimball Junction Route With 25% Fair Box Recovery

Average Round Trips Per Day For 365 Days	5	6	7	8	9
Daily Costs Round Trip Cost	\$1,750.68	\$2,100.82	<b>\$2,450.96</b>	\$2,801.09	\$3,151.23
Minus FBR Fair Box Recovery (FBR)	\$479,249.75	\$575,099.69	<b>\$670,949.64</b>	\$766,799.59	\$862,649.54
Cost Before Fair Box Recovery	\$159,749.92	\$191,699.90	<b>\$223,649.88</b>	\$255,599.86	\$287,549.85
	\$638,999.66	\$766,799.59	<b>\$894,599.52</b>	\$1,022,399.46	\$1,150,199.39

### Running Cost for 365 Days A Year For West Temple/Kimbal Junction Route With 25% Fair Box Recovery

Average Round Trips Per Day For 365 Days	5	6	7	8	9
Daily Costs Round Trip Cost	\$1,483.44	\$1,780.13	<b>\$2,076.82</b>	\$2,373.51	\$2,670.20
Minus FBR Fair Box Recovery (FBR)	\$406,092.80	\$487,311.35	<b>\$568,529.91</b>	\$649,748.47	\$730,967.03
Cost Before Fair Box Recovery	\$135,364.27	\$162,437.12	<b>\$189,509.97</b>	\$216,582.82	\$243,655.68
	\$541,457.06	\$649,748.47	<b>\$758,039.88</b>	\$866,331.30	\$974,622.71

# Park City Transit Plan

## Section 4: Projections

With population increasing by 85% in Salt Lake County and by 346% in Summit County by 2050 (yielding an approximate doubling in study area population), management of traffic congestion, available funding options (such as the rural transit program), anticipated major residential and commercial development areas, and effective promotion of public transit ridership will all become increasingly important considerations. As ridership increases, the addition of stops, frequency, and park-and-ride lots will be justified and must balance speed and efficiency with reaching the major nodes from which riders may be drawn. Higher-than-average incomes mean that promotion of public transit must look not only at providing affordability, but also on meeting needs of time-sensitivity, avoidance of traffic frustrations, environmental benefits, and the opportunity to make travel time productive, such as through the provision of a wireless Internet option.

### Population: Households, Household Population, Total Population, Group Quarters, Household Size County and Multi-County District 2000-2050 Projections

County	Category	2005	2010	2020	2030	2040	2050
Salt Lake	Households	329,497	362,825	429,889	493,268	551,047	608,614
Salt Lake	Household Population	955,541	1,037,048	1,211,775	1,357,637	1,490,696	1,625,063
Salt Lake	Total Population	970,748	1,053,258	1,230,817	1,381,519	1,521,926	1,663,994
Salt Lake	Group Quarters Population	15,207	16,210	19,042	23,882	31,230	38,931
Salt Lake	Household Size	2.9	2.9	2.8	2.8	2.7	2.7
Summit	Households	12,948	16,235	24,524	33,620	43,551	54,813
Summit	Household Population	36,341	44,415	64,873	85,504	107,368	132,460
Summit	Total Population	36,417	44,511	65,001	85,660	107,554	132,681
Summit	Group Quarters Population	76	96	128	156	186	221
Summit	Household Size	2.8	2.7	2.7	2.5	2.5	2.4
<b>Area</b>							
Wasatch Front	Households	507,463	565,333	679,589	780,369	870,671	960,756
Wasatch Front	Household Population	1,496,312	1,639,423	1,935,425	2,168,509	2,378,446	2,591,582
Wasatch Front	Total Population	1,520,189	1,665,238	1,966,372	2,207,282	2,429,057	2,654,682
Wasatch Front	Group Quarters Population	23,877	25,815	30,947	38,773	50,611	63,100
Wasatch Front	Household Size	3.0	2.9	2.9	2.8	2.7	2.7
Mountainland	Households	151,872	181,228	236,852	304,454	379,770	463,307
Mountainland	Household Population	502,556	588,565	750,812	920,316	1,108,158	1,319,823
Mountainland	Total Population	510,532	597,529	763,402	935,965	1,127,626	1,345,024
Mountainland	Group Quarters Population	7,976	8,964	12,590	15,649	19,468	25,201
Mountainland	Household Size	3.3	3.3	3.2	3.0	2.9	2.9
State of Utah	Households	827,150	943,143	1,179,874	1,417,632	1,657,488	1,914,879
State of Utah	Household Population	2,488,169	2,788,604	3,429,422	4,015,588	4,611,439	5,256,513
State of Utah	Total Population	2,528,926	2,833,337	3,486,218	4,086,319	4,701,369	5,368,567
State of Utah	Group Quarters Population	40,757	44,733	56,796	70,731	89,930	112,054
State of Utah	Household Size	3.0	3.0	2.9	2.8	2.8	2.8
United States	Households	112,364,642	119,093,022	132,045,912	144,576,527	156,388,900	167,189,990
United States	Household Population	287,239,003	300,151,625	326,413,534	352,629,324	378,949,980	405,209,424
United States	Total Population	295,507,134	308,935,581	335,804,546	363,584,435	391,945,658	419,853,587
United States	Group Quarters Population	8,268,131	8,783,956	9,391,012	10,955,111	12,995,678	14,644,163
United States	Household Size	2.6	2.5	2.5	2.4	2.4	2.4

Note: All populations are dated July 1.

Source: 2005 Baseline Projections, Governor's Office of Planning and Budget.

# Park City Transit Plan

## Population: Households County and Multi-County District 2000-2050

	2005	2010	2020	2030	2040	2050
<b>County</b>						
Salt Lake	329,497	362,825	429,889	493,268	551,047	608,614
Summit	12,948	16,235	24,524	33,620	43,551	54,813
<b>Area</b>						
Wasatch						
Front	507,463	565,333	679,589	780,369	870,671	960,756
Mountainland	151,872	181,228	236,852	304,454	379,770	463,307
State of Utah	827,150	943,143	1,179,874	1,417,632	1,657,488	1,914,879
United States	112,364,642	119,093,022	132,045,912	144,576,527	156,388,900	167,189,990

## Population: Household Population County and Multi-County District 2000-2050

	2005	2010	2020	2030	2040	2050
<b>County</b>						
Salt Lake	955,541	1,037,048	1,211,775	1,357,637	1,490,696	1,625,063
Sanpete	23,892	26,206	30,895	33,258	35,038	36,678
<b>Area</b>						
Wasatch						
Front	1,496,312	1,639,423	1,935,425	2,168,509	2,378,446	2,591,582
Mountainland	502,556	588,565	750,812	920,316	1,108,158	1,319,823
State of Utah	2,488,169	2,788,604	3,429,422	4,015,588	4,611,439	5,256,513
United States	287,239,003	300,151,625	326,413,534	352,629,324	378,949,980	405,209,424

## Population: Group Quarters County and Multi-County District 2000-2050

	2005	2010	2020	2030	2040	2050
<b>County</b>						
Salt Lake	15,207	16,210	19,042	23,882	31,230	38,931
Summit	76	96	128	156	186	221
<b>Area</b>						
Wasatch Front	23,877	25,815	30,947	38,773	50,611	63,100
Mountainland	7,976	8,964	12,590	15,649	19,468	25,201
State of Utah	40,757	44,733	56,796	70,731	89,930	112,054
United States	8,268,131	8,783,956	9,391,012	10,955,111	12,995,678	14,644,163

Note: All populations are dated July 1.

Source: 2005 Baseline Projections, Governor's Office of Planning and Budget

# Park City Transit Plan

## Population: Household Size County and Multi-County District 2000-2050

County	2005	2010	2020	2030	2040	2050
Salt Lake	2.9	2.9	2.8	2.8	2.7	2.7
Summit	2.8	2.7	2.7	2.5	2.5	2.4
<b>Area</b>						
Wasatch Front	3.0	2.9	2.9	2.8	2.7	2.7
Mountainland	3.3	3.3	3.2	3.0	2.9	2.9
Utah	3.0	3.0	2.9	2.8	2.8	2.8
United States	2.6	2.5	2.5	2.4	2.4	2.4

## Population: Total Population County and Multi-County District 2000-2050

County	2005	2010	2020	2030	2040	2050
Salt Lake	970,748	1,053,258	1,230,817	1,381,519	1,521,926	1,663,994
Summit	36,417	44,511	65,001	85,660	107,554	132,681
<b>Area</b>						
Wasatch						
Front	1,520,189	1,665,238	1,966,372	2,207,282	2,429,057	2,654,682
Mountainland	510,532	597,529	763,402	935,965	1,127,626	1,345,024
State of Utah	2,528,926	2,833,337	3,486,218	4,086,319	4,701,369	5,368,567
United States	295,507,134	308,935,581	335,804,546	363,584,435	391,945,658	419,853,587

## 2005 Baseline City Population Projections 2000-2050

Area	Census 2000	Population					
		2005	2010	2020	2030	2040	2050
<b>State Total</b>	2,233,169	2,528,926	2,833,337	3,486,218	4,086,319	4,701,369	5,368,567
<b>Salt Lake County</b>	898,387	970,748	1,053,258	1,230,817	1,381,519	1,521,926	1,663,994
Alta town	370	380	419	505	580	683	798
Bluffdale city	4,700	6,120	8,747	24,144	41,940	48,803	56,535
Cottonwood Heights	36,121	35,423	35,562	37,906	40,764	44,812	49,476
Draper city (pt.)	25,220	34,457	39,881	45,556	50,077	55,000	60,676
Herriman town	1,523	11,609	20,390	28,963	38,256	52,779	61,510
Holladay city	19,998	25,247	25,148	26,193	27,142	28,574	30,306
Midvale city	27,029	29,062	36,440	45,006	47,431	49,832	52,748
Murray city	43,957	35,105	38,432	40,991	42,097	44,747	47,899
Riverton city	25,011	33,845	45,588	49,346	51,773	57,486	63,081
Salt Lake City city	181,743	182,046	184,889	196,491	203,059	212,976	225,066
Sandy city	88,418	92,602	96,656	107,268	111,465	116,722	123,157
South Jordan city	29,437	39,316	57,219	74,898	99,168	105,211	112,482
South Salt Lake city	22,038	21,678	21,968	24,298	25,473	26,597	27,983
Taylorsville city	58,757	59,356	61,006	68,142	71,696	75,167	79,402
West Jordan city	78,721	93,193	110,189	126,427	144,925	167,337	182,080
West Valley City city	108,896	116,781	122,807	137,224	144,207	155,386	167,413
Balance of Salt Lake County	146,448	154,528	147,917	197,459	241,466	279,814	323,382
<b>Summit County</b>	29,736	36,417	44,511	65,001	85,660	107,554	132,681
Coalville city	1,382	1,465	1,735	2,002	2,558	4,538	7,642
Francis town	698	815	1,068	1,822	2,843	4,326	6,985
Henefer town	684	781	1,022	1,745	2,870	5,092	8,574
Kamas city	1,274	1,529	1,860	2,738	3,529	5,369	8,670
Oakley city	948	1,256	1,645	2,807	4,380	6,389	7,409
Park City city (pt.)	7,371	9,033	10,987	15,339	19,776	19,325	20,904
Balance of Summit County	17,379	21,537	26,194	38,549	49,703	62,516	72,497

# Park City Transit Plan

**Sources:**

- 1) U.S. Census
- 2) Associations of Government; Governor’s Office of Planning & Budget Bureau

**Notes:**

- 1) All populations are date July 1, except for the April 1, 2000 figures produced by the U.S. Census Bureau.
- 2) The Utah Population Estimates Committee produced Vintage 2003 population estimates for the following cities: Leeds, Koosharem, Central Valley, Cottonwood Heights, and Fairfield. The 2000 Census estimates do not reflect the actions of UPEC. These special estimates are the base for the long-term projections that follow.
- 3) 2005 through 2050 subcounty projections were produced by the Associations of Government analysts controlling to GOPB county totals.
- 4) County totals for 2005 through 2050 are the from 2005 Baseline Long Term Demographic and Economic Projection Series.
- 5) Initial projections of subcounty populations maintained a constant share based on the distribution of the most recent Census Bureau estimates.

**Employment by Area and NAICS Category By County and Multi-County District 2001-2050**

(1 of 3)

Area	NAICS Sector	2005	2010	2020	2030	2040	2050
Salt Lake	Natural Resources and Mining	3,453	2,908	2,667	2,678	2,752	3,063
Salt Lake	Construction	39,696	44,384	53,902	59,163	62,728	61,830
Salt Lake	Manufacturing	51,852	53,455	58,520	66,471	75,652	89,228
Salt Lake	Trade, Trans., Utilities	135,998	150,173	166,426	178,321	186,937	196,920
Salt Lake	Information	18,794	20,363	21,149	21,237	21,322	22,057
Salt Lake	Financial Activity	79,539	88,945	103,296	113,318	120,348	127,898
Salt Lake	Professional & Business Services	111,856	130,799	164,036	196,655	229,821	271,079
Salt Lake	Education & Health Services	68,395	82,774	124,715	171,749	219,758	274,734
Salt Lake	Leisure & Hospitality	54,005	62,177	73,989	81,577	86,671	90,412
Salt Lake	Other Services	34,005	38,075	44,733	49,925	54,028	58,463
Salt Lake	Government	89,846	101,041	120,867	133,653	142,609	147,850
Salt Lake	Total	687,439	775,094	934,300	1,074,747	1,202,626	1,343,534
Summit	Natural Resources and Mining	917	880	871	928	1,049	1,275
Summit	Construction	2,165	2,399	2,680	3,147	4,088	4,937
Summit	Manufacturing	536	590	763	1,084	1,594	2,409
Summit	Trade, Trans., Utilities	3,303	3,639	3,928	4,588	5,775	7,395
Summit	Information	306	347	435	587	822	1,175
Summit	Financial Activity	3,826	4,389	5,619	7,271	9,422	12,158
Summit	Professional & Business Services	2,684	3,141	4,195	5,869	8,432	12,237
Summit	Education & Health Services	1,184	1,535	2,555	4,181	6,670	10,080
Summit	Leisure & Hospitality	6,546	7,598	9,508	12,248	15,980	20,647
Summit	Other Services	1,220	1,404	1,713	2,233	3,046	4,177
Summit	Government	2,448	3,071	4,554	5,950	7,317	8,652
Summit	Total	25,135	28,993	36,821	48,086	64,195	85,142

**Notes:**

- 1) Employment in a given year is computed as the annual average of 12 monthly observations and is the number of wage and salary jobs plus the numbers of sole proprietorships and of members of partnerships except for limited partners.
- 2) NAICS is the acronym for North American Industry Classification System

**Source:** 2005 Baseline Projections, Governor’s Office of Planning and Budget

# Park City Transit Plan

## Employment by Area and NAICS Category By County and Multi-County District 2001-2050 (2of3)

Area	NAICS Sector	2005	2010	2020	2030	2040	2050
Wasatch	Natural Resources and						
Front	Mining	7,691	7,077	6,624	6,455	6,488	6,931
Wasatch	Construction	58,708	65,930	79,660	86,975	91,685	91,222
Front	Manufacturing	77,464	80,636	88,937	101,339	116,507	138,182
Wasatch	Trade, Trans.,						
Front	Utilities	183,681	203,344	224,127	238,712	249,779	262,198
Wasatch	Information	22,034	23,968	24,930	25,074	25,296	26,291
Front	Financial						
Wasatch	Activity	102,379	114,900	133,449	146,097	155,203	164,513
Front	Professional						
Wasatch	& Business						
Front	Services	139,941	163,703	204,223	243,325	283,514	332,840
Wasatch	Education &						
Front	Health Services	94,305	114,209	171,820	237,661	306,857	386,480
Wasatch	Leisure &						
Front	Hospitality	75,057	86,397	101,804	111,311	117,721	122,292
Wasatch	Other Services	50,253	56,486	66,287	73,998	80,437	87,252
Front	Government	144,201	160,130	187,244	203,229	214,077	219,253
Wasatch	Total	955,714	1,076,780	1,289,105	1,474,176	1,647,564	1,837,454
Front							
	Natural Resources and						
Mountainland	Mining	5,190	5,104	4,904	5,077	5,392	5,946
Mountainland	Construction	21,100	25,935	31,446	36,606	44,734	51,605
Mountainland	Manufacturing	22,030	24,342	28,319	35,737	44,925	55,851
Mountainland	Trade, Trans.,						
Mountainland	Utilities	40,465	47,150	53,374	62,511	73,866	85,500
Mountainland	Information	8,833	10,820	12,241	14,135	16,236	18,348
Mountainland	Financial						
Mountainland	Activity	23,071	26,972	32,661	40,014	48,143	56,050
Mountainland	Professional						
Mountainland	& Business						
Mountainland	Services	35,065	43,750	57,381	76,845	101,411	130,378
Mountainland	Education &						
Mountainland	Health Services	39,132	48,598	73,668	112,676	164,717	231,029
Mountainland	Leisure &						
Mountainland	Hospitality	25,270	30,408	37,224	45,907	56,562	67,728
Mountainland	Other Services	15,319	18,364	23,060	29,633	37,531	46,020
Mountainland	Government	30,433	36,756	48,058	58,411	68,514	77,658
Mountainland	Total	265,908	318,199	402,336	517,552	662,031	826,113

Notes:

- 1) Employment in a given year is computed as the annual average of 12 monthly observations and is the number of wage and salary jobs plus the numbers of sole proprietorships and of members of partnerships except for limited partners.
- 2) NAICS is the acronym for North American Industry Classification System

**Source:** 2005 Baseline Projections, Governor's Office of Planning and Budget

# Park City Transit Plan

## Median Age by Gender by County and Multi-County District 2000-2050

County	Gender	2005	2010	2020	2030	2040	2050
Salt Lake	Male	29.7	31.2	33.2	33.6	34.0	34.4
Salt Lake	Female	30.7	31.9	33.3	33.7	34.5	35.2
Salt Lake	Total	30.2	31.5	33.2	33.6	34.2	34.8
Summit	Male	33.1	33.0	34.8	37.2	38.8	39.9
Summit	Female	33.6	33.4	34.2	36.5	37.9	38.9
Summit	Total	33.3	33.2	34.5	36.9	38.4	39.4
Area							
Wasatch Front	Male	29.1	30.6	32.6	33.3	33.8	34.2
Wasatch Front	Female	30.1	31.2	32.7	33.5	34.3	35.0
Wasatch Front	Total	29.6	30.9	32.7	33.4	34.0	34.6
Mountainland	Male	26.5	28.3	29.3	30.0	31.6	32.7
Mountainland	Female	26.2	28.7	29.3	30.0	31.7	32.9
Mountainland	Total	26.4	28.5	29.3	30.0	31.6	32.8
State of Utah	Male	28.3	30.0	31.9	32.5	33.2	33.8
State of Utah	Female	28.7	30.3	32.0	32.5	33.4	34.2
State of Utah	Total	28.5	30.2	31.9	32.5	33.3	34.0
United States	Male	35.0	35.6	36.7	37.7	37.6	37.8
United States	Female	37.6	38.5	39.3	40.4	40.6	40.5
United States	Total	36.2	37.0	38.0	39.0	39.1	39.1

Note: All populations are dated July 1.

Source: 2005 Baseline Projections, Governor's Office of Planning and Budget

# Park City Transit Plan

## Dependency Ratios By County and Multi-County Districts 2000-2050

<b>County</b>	<b>Age Group</b>	<b>2005</b>	<b>2010</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>
Salt Lake	Under 5	15.3	15.1	15.4	15.7	16.2	16.5
Salt Lake	5 to 17	33.1	34.1	36.7	37.3	38.2	39.7
Salt Lake	Under 18	48.3	49.1	52.1	53.0	54.4	56.2
Salt Lake	Over 64	13.1	14.2	20.3	27.0	33.3	39.9
Salt Lake	Dependent	61.5	63.3	72.4	80.0	87.8	96.1
Summit	Under 5	11.5	11.4	11.8	11.9	12.1	12.2
Summit	5 to 17	29.0	27.5	29.2	29.5	29.3	30.2
Summit	Under 18	40.5	38.9	41.0	41.5	41.4	42.4
Summit	Over 64	8.9	12.1	20.3	27.8	31.8	38.0
Summit	Dependent	49.4	51.1	61.3	69.3	73.2	80.5
<b>Area</b>							
Wasatch Front	Under 5	15.6	15.3	15.5	15.8	16.2	16.5
Wasatch Front	5 to 17	34.5	34.9	36.9	37.4	38.1	39.7
Wasatch Front	Under 18	50.0	50.2	52.5	53.2	54.2	56.2
Wasatch Front	Over 64	13.4	14.2	19.7	26.1	31.6	38.6
Wasatch Front	Dependent	63.5	64.4	72.2	79.3	85.8	94.8
Mountainland	Under 5	19.4	19.1	17.2	15.9	16.0	16.7
Mountainland	5 to 17	36.9	39.4	41.8	37.9	36.9	39.1
Mountainland	Under 18	56.3	58.5	59.0	53.8	52.9	55.7
Mountainland	Over 64	9.8	10.3	13.1	16.0	20.7	30.3
Mountainland	Dependent	66.2	68.8	72.1	69.8	73.6	86.0
State of Utah	Under 5	16.4	16.1	15.8	15.5	15.7	16.0
State of Utah	5 to 17	35.2	35.7	37.7	37.0	36.9	38.5
State of Utah	Under 18	51.6	51.8	53.4	52.5	52.6	54.5
State of Utah	Over 64	13.9	14.4	18.4	22.8	26.6	33.6
State of Utah	Dependent	65.5	66.1	71.9	75.3	79.1	88.1
United States	Under 5	11.1	11.0	11.4	11.8	11.9	12.0
United States	5 to 17	28.7	27.3	28.6	29.8	29.7	30.0
United States	Under 18	39.8	38.3	40.0	41.5	41.6	42.0
United States	Over 64	19.8	20.7	27.2	34.6	36.4	37.0
United States	Dependent	59.6	59.0	67.2	76.1	78.0	79.0

Note: All populations are dated July 1.

**Source:** 2005 Baseline Projections, Governor's Office of Planning and Budget

# Park City Transit Plan

## Salt Lake County/Summit County Ridership Increase Component 2005-2050

Area	2005	2010	2020	2030	2040	2050
<b>Salt Lake County</b>						
Ridership	29361	31598	36925	41446	45658	49908
Ridership Increase		7.6%	16.9%	12.2%	10.2%	9.3%
<b>Summit County</b>						
Ridership	1064	1335	1950	2570	3227	3980
Ridership Increase		25.5%	46.0%	31.8%	25.6%	23.4%
<b>Combined</b>						
Ridership	30425	32933	38875	44015	48884	53888
Ridership Increase		8.2%	18.0%	13.2%	11.1%	10.2%

### Sources:

- 1) U.S. Census Bureau, 2006 Population Estimates, Census 2000, 1990 Census
- 2) <http://www.upgrade.slco.org/demographics/population.html>
- 3) <http://www.governor.utah.gov/dea/05BaselineCityProj.pdf>
- 4) <http://governor.utah.gov/dea/Rankings/Counties/04CoPerCapInc.PDF>
- 5) Bureau of Economic Analysis

### Notes:

- 1) Household income is based on a 3.2% annual increase and 22.2% increase per 10 years.
- 2) Ridership is based on estimates that 3% of the total population will be riding transit.
- 3) If information is not provided it is not yet accessible.

# Park City Transit Plan

## Salt Lake County/Summit County Household Income Increase Component 2005-2050

Area	2005	2010	2020	2030	2040	2050
<b>Salt Lake County</b>						
Average Household Income	\$33,889.90	\$37,889.90	\$51,918.30	\$71,140.58	\$97,479.75	\$133,570.75
Average Household Income Increase		7.6%	16.9%	12.2%	10.2%	9.3%
<b>Summit County</b>						
Average Household Income	\$48,904.87	\$53,730.76	\$64,858.19	\$78,290.07	\$94,503.64	\$114,074.97
Average Household Income Increase		25.5%	46.0%	31.8%	25.6%	23.4%
<b>Combined</b>						
Average Household Income	\$41,397.38	\$45,810.33	\$58,388.25	\$74,715.33	\$95,991.69	\$123,822.86
Average Household Income Increase		8.2%	18.0%	13.2%	11.1%	10.2%

### Sources:

- 1) U.S. Census Bureau, 2006 Population Estimates, Census 2000, 1990 Census
- 2) <http://www.upgrade.slco.org/demographics/population.html>
- 3) <http://www.governor.utah.gov/dea/05BaselineCityProj.pdf>
- 4) <http://governor.utah.gov/dea/Rankings/Counties/04CoPerCapInc.PDF>
- 5) Bureau of Economic Analysis

### Notes:

- 1) Household income is based on a 3.2% annual increase and 22.2% increase per 10 years.
- 2) Ridership is based on estimates that 3% of the total population will be riding transit.
- 3) If information is not provided it is not yet accessible.
- 4) During 2005/2006 there were approximately 8223 total commuter round trips between Salt Lake City and Park City per day.

# Park City Transit Plan

## **Long-Term Projections:**

The Utah Governor's Office of Planning and Budget prepares projections of population by age and sex and employment by industry for counties in Utah to the year 2050. These projections are reviewed below.

### **Population Size and Change**

Salt Lake County's total population is projected to increase to 1.7 million by 2050. This represents an average annual rate of growth from 2000 to 2050 of 1.2 percent, lower than what is projected for the state as a whole: 1.8 percent. The county's share of the state population is projected to decline from 40.2 percent in 2000 to 31.0 percent in 2050. While the projections show continued population growth in Salt Lake County, net in-migration is projected to turn negative in 2022, with net out-migration projected for the remainder of the projection period. Implicit in the projections are assumptions about spatial development patterns and population densities. If population densities increase more rapidly in the county than assumed in the projections, net out-migration would be moderated or perhaps reversed. Natural increase (annual births minus annual deaths) is projected to become increasingly positive. The number of households in Salt Lake County is projected to increase more rapidly than population—more than doubling from 2000 (297,064) to 2050 (608,614). The result is a decline in persons per household, from 2.99 in 2000 to a projected 2.67 in 2050.

Summit County's total population is projected to increase to 132,681 by 2050. This represents an average annual rate of growth from 2000 to 2050 of 3 percent, higher than what is projected for the state as a whole: 1.8 percent. The county's share of the state population is projected to increase from 1.5 percent in 2000 to 2.3 percent in 2050. While the projections show continued population growth in Summit County, percentage of net in-migration is projected decrease from 2.9 percent in 2000 to 1 percent in 2050. Natural increase (annual births minus annual deaths) is projected to become increasingly negative. The number of households in Summit County is projected to increase more rapidly than population—more than doubling from 2000 (10,441) to 2050 (54,813). The result is a decline in persons per household, from 2.88 in 2000 to a projected 2.42 in 2050. Much of this decline in household size is attributable to the aging of the population.

In the rest of the state, persons per household are projected to decline from 3.22 to 2.78. Nationally, average household size is expected to fall from 2.59 to 2.42. Much of this decline in household size is attributable to the aging of the population.

### **Age Structure**

As is true for the state in general, the above-replacement-level fertility rate is assumed to continue, generating successively larger numbers of births in Salt Lake County. The statewide age waves will also continue to create successive echoes and to impact the age structure of the county. As mentioned earlier, recent Utah birth cycles peaked in 1962 and 1980-2, and the echo boom currently underway will possibly peak around 2011. The

# Park City Transit Plan

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national Baby Boom peaked in 1957, while its echo peaked in 1990 at a lower level than the original boom. In contrast to the national age waves, each Utah echo has surpassed the previous in magnitude. Utah's post war boom peaked in 1960, and has had two subsequent echoes, peaking in the early 1980s and again expected to peak again by 2011.

## **Aging Population**

For the nation, median age is expected to increase by 3.7 years, from 35.4 in 2000 to 39.1 in 2050. By comparison, the Utah median age in 2000 was significantly lower, at 27.2 years, and should reach 34.0 years by 2050, an increase of 6.8 years. For Salt Lake County, median age is expected to increase by 5.9 years, going from 28.9 to 34.8 by 2050. For Summit County, median age is expected to increase by 6.1 years, going from 33.3 to 39.4 by 2050. The gap between the Salt Lake County and U.S. median ages will narrow from 6.5 years in 2000 to 4.3 years in 2050. The gap between the Summit County and U.S. median ages will narrow from 2.1 years in 2000 to negative .3 years in 2050. The aging of the population is the combined result of increasing life expectancy and an increase in the share of the population in older age groups.

While the number of persons under 5 years old outnumbered those 65 and older in 2000, by 2013 the ranking reverses in Salt Lake County, and by 2009 in Summit County with the 65-and-older population eventually being more than double this youngest age group by 2050. Similarly, the 60 years and older population in Salt Lake County will surpass the school age population (5 through 17 years old) by 2033 and exceed it by over 70,000 by 2050. Summit County will surpass the school age population (5 through 17 years old) by 2035. The number of persons at least 85 years old in Salt Lake County is projected to increase by a factor of nearly 12, from just over 8,700 in 2000 to over 103,000 in 2050.

If these projections are correct, Summit and Salt Lake counties will decrease in percent of the total state population from 41.5 in 2000 percent to 33.5 percent in 2050. And Salt Lake County's shares of Utah's younger and working-age groups will be nearly proportionate to its share of the total population.

Between 2000 and 2050, the total combined population of Salt Lake and Summit counties is projected to increase by 838,650. Much of this will occur in the 65 years and older age group. The 65-and-older population is projected to be the most rapidly growing age group in Utah. While the total population of the county is projected to increase by 84.3 percent from 2000 to 2050, the 65-and-older population is projected to increase by 380 percent.

**Source:** Salt Lake County: Demographic and Economic Overview prepared Pamela S. Perlich, Ph.D., December 2006; pages 34,35,42,43.

# Park City Transit Plan

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## **Analysis:**

During the course of the next several decades Summit and Salt Lake counties are expecting rapid growth. Ethnic demographics, median age, sex distribution, annual VMT transit ridership are only a few of the factors that represent the coming exponential growth. Increasing diversity in demography and household income and ridership will ultimately set a tone for future public transit demand.

Currently the combined population of Summit and Salt Lake counties is about 1,014,170. At current growth rates by the year 2040 this population will increase to 1629480. Increasing Salt Lake County from 978701 to 1521926 and Summit County from 35469 to 107554.

Currently the average combined household income of Summit and Salt Lake counties is approximately \$41,397.38 and is expected to rise to \$95,991.69 by 2040. Salt Lake County is expected to increase from \$33,889.90 to \$97,479.75 and Summit County from \$48,904.87 to \$94,503.64.

Currently the average combined ridership of Summit and Salt Lake counties is approximately 30425 and is expected to rise to 48884 by 2040. Salt Lake County is expected to increase from 29361 to 45658 and Summit County from 1064 to 3227.

Combined demographic statistics in Salt Lake and Summit counties are to change from 2005 to 2040 as follows:

- Median age from 31.1 to 37.7
- Male population from 50.5% to 50.4%
- Female population from 49.5% to 49.6%
- White population from 77.4% to 21.2%
- Black or African American population from .09% to 2.2%
- American Indian and Alaska Native population from .08% to .04%
- Asian population from 2.2% to 2.5%
- Native Hawaiian/Other Pacific Islander population from 1.1% to .01%
- Some other race population from 4.8% to 7.0%
- Two or more races population from 2.3% to .01%
- Hispanic or Latino (of any race) population from 10.5% to 15.6%

# Park City Transit Plan

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## Chapter Four: Preferred Plan

# Park City Transit Plan

## Section 1: Key Findings

### 1a. Chapter 1

- Future development will be concentrated in existing nodes & maintain community character
- Sensitive and critical lands in the study area require legal protection.
- Summit County ranks among the worst 20% of U.S. counties for air quality, with 67% of pollutants emitted from mobile sources and commuters producing 261.2 tons daily.
- In 2000, 35.6 percent of Summit County workers made an inter-county commute, representing an increase of 4.7 percent from 1980.
- In 2000, there were 4,501 Summit County residents working in Salt Lake City while 17.3% (2,678 persons) percent of the total work force in Summit County lived in Salt Lake City. A 5% ridership rate would yield 718 daily transit trips among commuters alone.
- A five-day-per-week commute between Park City and Salt Lake City costs drivers \$834.13 per month in direct expenses, and \$1154.20 when indirect costs are included. Survey respondents indicate a willingness to spend \$28-\$30 on a monthly transit pass, with an average rider traveling 3.4 days per week. UTA express service passes currently cost \$100 per month.

### 1b. Chapter 2

- Summit County was the fastest growing county within the state of Utah, nearly doubling its size. The population has grown from 10,400 in 1980 to an estimated 31,279 in 2001.
- Both Summit and Salt Lake Counties have older populations, smaller households, higher housing costs, and higher incomes than statewide, with Summit County more markedly so.
- However, differences create a significant mismatch between housing costs and job opportunities.
- Many major employers and most activity centers are located in each county's urban core, and are locally accessible along existing transit corridors.
- The majority of non-driving populations are concentrated in eastern and southeastern portions of Summit County.
- Park City transit provides free fixed-route and demand response bus service within Park City, and has contracted with Summit County to provide fixed-route and demand response services in the Snyderville Basin area, including Quinn's Junction.
- Ridership by Month and Route: The majority of ridership is experienced during the peak winter months, during which 87.0 percent of total one-way passenger-trips were provided over the 28-week period.

# Park City Transit Plan

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- Ridership Trends by Season: Between Winter 2004/2005 to Winter 2005/2006, Kimball service increased by 85,561 one-way passenger-trips (63.3 percent). There was a jump in ridership between Summer 2005 and Summer 2006, with a 111.7 percent increase on the Kimball routes
- Ridership by Time of Day and Season: The greatest number of stops in the peak winter season occurred during the hours of 4:00 PM and 5:00 PM, with the peak rider ship occurring at around 4:00 PM when there was an average of 1,429 stops per hour system wide.
- Ridership by Stop and Season: The Transit Center facility averages the highest passengers per day, with approximately 2,456 average stops per day (21.3 percent of the total stops system-wide). Transit Center is the most popular facility during the peak summer months, as well, with 599 average stops per day (23.5 percent of the total stops system-wide).
- A 5.2% average annual growth rate of Summit County's work force projects 59,962 Summit County workers by 2027, and based on the current 10.8% who are commuting alone from Salt Lake City, this will place at least 6,476 single-occupant vehicles on I-80 twice daily.
- More than 64% of surveyed commuters travel to work between 7 and 9 a.m., while over 56% journey home between 4 and 6 p.m., making higher rush-hour frequency extremely viable and enabling a majority to be served within these time windows.
- 83% of likely riders who commute prefer one of the following Summit County stop locations: Kimball Junction, Pinebrook, Jeremy Ranch, Downtown Park City, and the Canyons Resort.
- 51% of likely riders who commute prefer one of the following Salt Lake County stop locations: I-215/Wasatch Boulevard, the mouth of Parley's Canyon, the University of Utah, Downtown Salt Lake City, and any Trax stop.
- 4-6% of study area commuters have been identified as likely transit users.
- Unique to study area:
  - The two districts have differential demographics
  - Large number of recreation/resort travelers
  - Large number of downtown attraction travelers
  - Large number of special event travelers
- UTA trip purposes are distributed as follows:
  - 45% Work-Related
  - 24% School/College-Related
  - 15% Shopping/Medical/Recreational
  - 16% Other
- Likely transit users in the study area share these characteristics:
  - Fixed schedule
  - Travel during rush hours
  - Sensitivity to time

# Park City Transit Plan

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- 65% of UTA users in our study area's income range use express bus service.
- 5% of 2005's 44,690 average annual daily trips would yield 2235 daily transit trips along the inter-county route.

## **1c. Chapter 3**

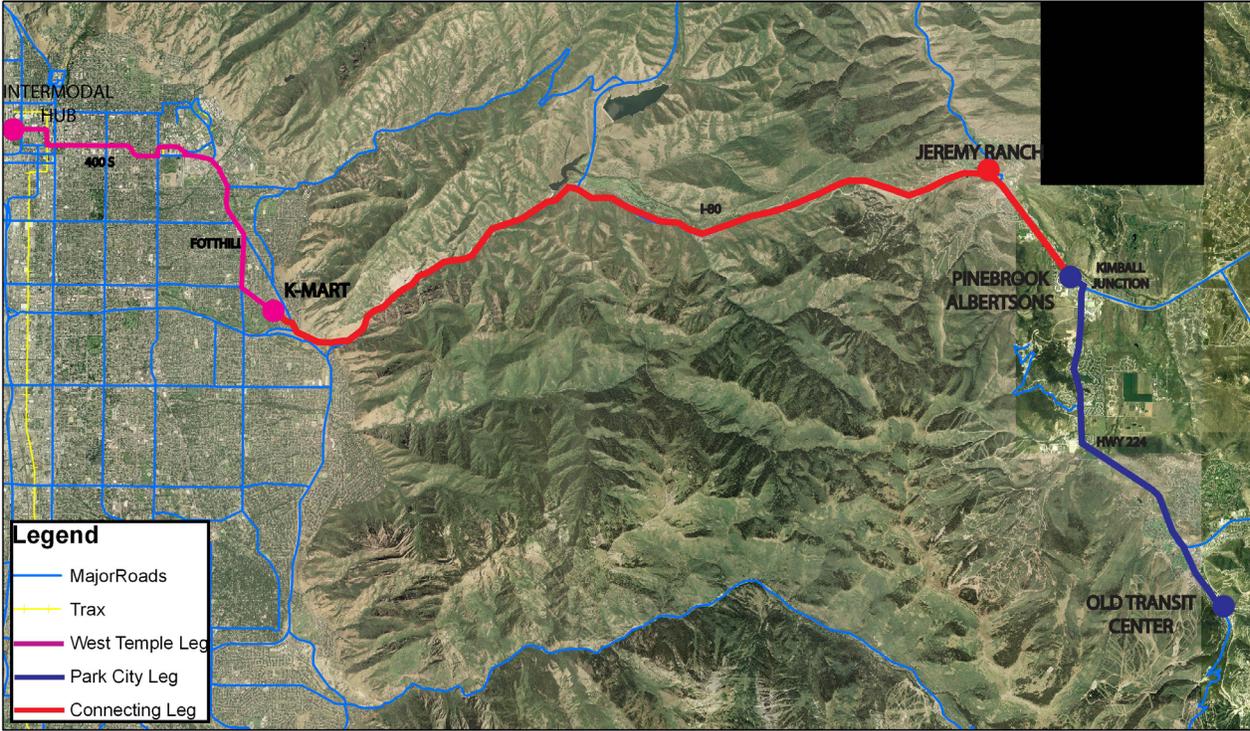
- Federal Funding Sources potentially available to the study area include:
  - Non-Urbanized Area Formula Program
  - Over-the-Road Bus Accessibility Program
  - Rural Transit Assistance Program
  - Job Access and Reverse Commute Program
- Cost distribution should be established according to quantifiable benefit ratio.
- Operating costs are lower for Park City, while UTA is better equipped to maintain equipment.
- A 32.5-mile route linking the two districts' transit centers would take 50 minutes and cost \$2,277,600 annually for operation and maintenance, to be divided between the two districts and outside sources.
- Capital costs would total \$300 per rider at system launch.
- Legal, logistical, and management issues that arise when crossing district boundaries should be addressed in an inter-local agreement.
- Study area population is projected to double by 2050, allowing for substantial increases in ridership and service expansion.

# Park City Transit Plan

## Section 2: The Plan

### 2a. System Map

#### SALT LAKE CITY/PARK CITY PROPOSED BUS ROUTES

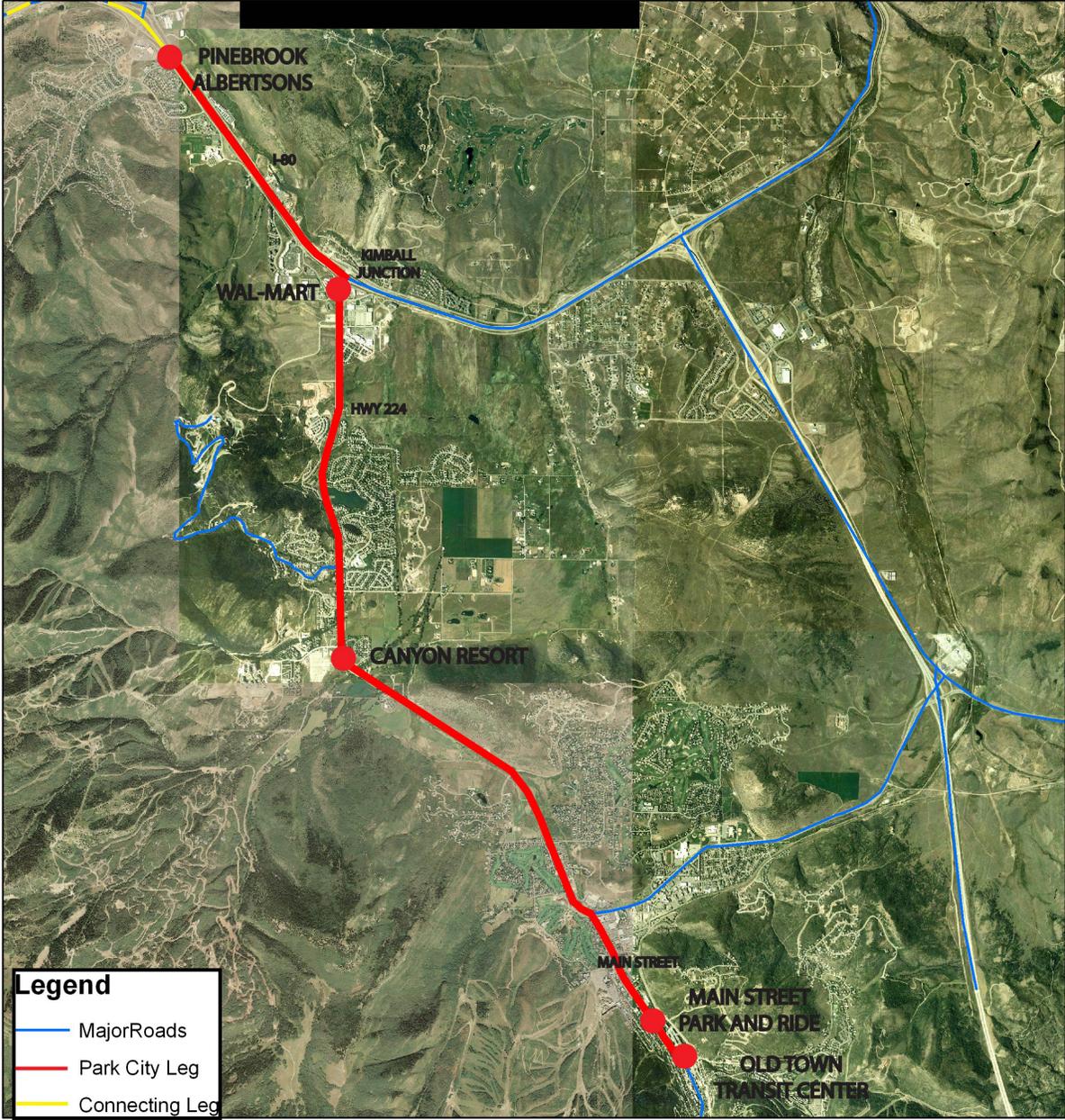


BRIAN BARNEY  
LAURA HUGHES  
JULIANNE SABULA

# Park City Transit Plan

## 2b. Park City Stop Map

### PARK CITY LEG OF BUS ROUTE

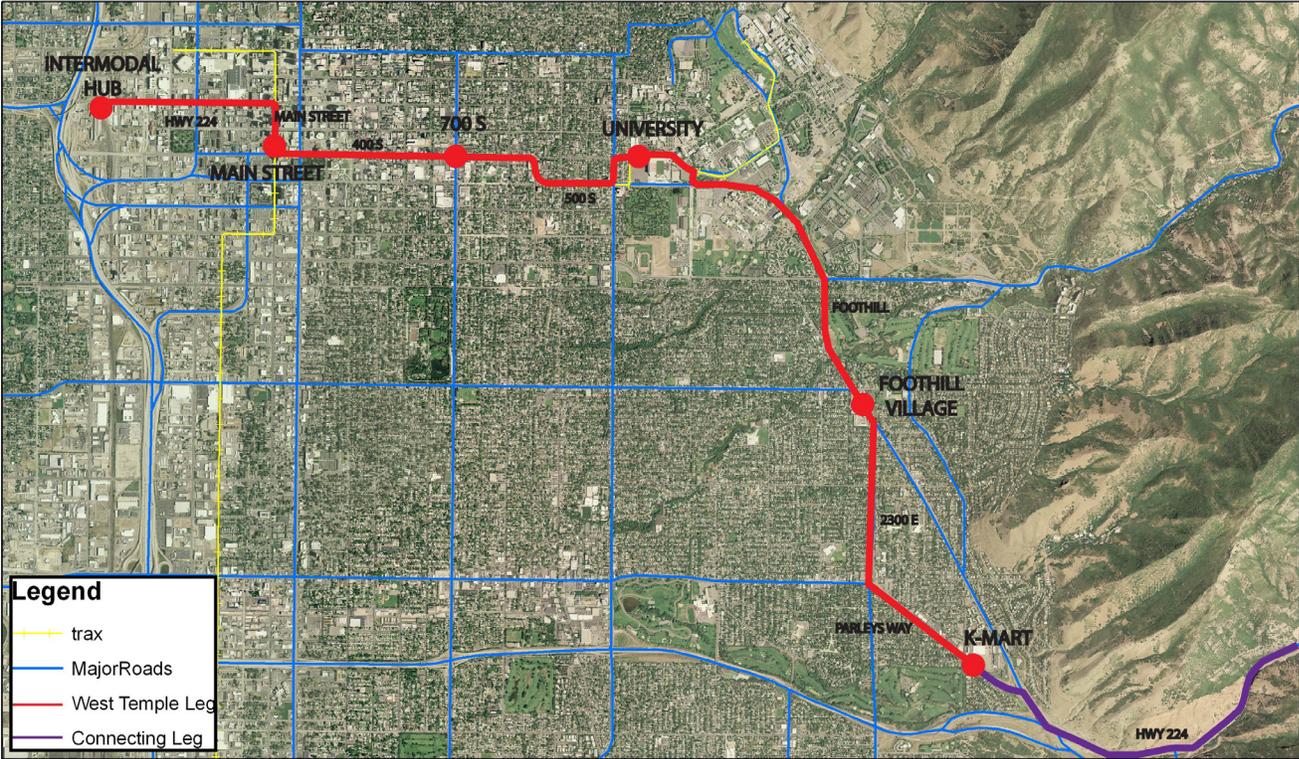


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# Park City Transit Plan

## 2c. Salt Lake City Stop Map

### SALT LAKE CITY LEG OF BUS ROUTE



0 0.25 0.5 1 1.5 2 Miles



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LAURA HUGHES  
JULIANNE SABULA

# Park City Transit Plan

## Section 3: How the Plan Addresses Key Issues

### 3a. Traffic & Environmental Issues

- Preferred stop locations contain park-and-ride potential that will not disrupt existing development, and will be of a design that conforms to community character.
- The preferred route will operate in areas already developed, so that sensitive lands will be unaffected and may even be protected by reducing the need for roadway expansion.
- A 5% ridership rate would mitigate approximately 13.06 tons of air pollutants daily among commuters alone and would take 648 single-occupancy vehicles off the road daily by 2027.
- A \$100 monthly pass would mean a typical study area commuter traveling 3.4 days per week spends about \$7.35 per day, representing a profound savings over driving expenses.

### 3b. Market Issues

- The preferred route will operate within the time, schedule, and location as to where the majority of travelers are commuting throughout Salt Lake and Summit County.
- The preferred frequency will be higher during rush hours, but will also accommodate evening and weekend workers and visitors.
- Preferred stops correspond with most rider preferences and cater to a variety of trip purposes, either directly or by linking with existing district transit service:

#### Salt Lakestops:

- K-mart on Parley's Way/Foothill with desired future park-and-ride
- Foothill Village
- University of Utah Stadium Trax Station with existing park-and-ride
- Trolley Trax Station
- Main Street & 400 South
- Intermodal Transit Hub

#### Summit Stops:

- Albertsons at Pinebrook
- Jeremy Ranch with potential park-and-ride agreement through the L.D.S. Church
- Walmart/Outlet Stores
- The Canyons Resort
- Main Street – Park City Transit Center with existing park-and-ride
- Preferred vehicles will provide a combination of motor coach and standard service to meet with mixed market preferences.
- Preferred marketing will target the traveler who wants rapid, reliable service using Frontrunner Commuter Rail branding.

### 3c. Logistical Issues

- Multiple funding sources are available for the study area's unique characteristics and are underutilized in Utah.

# Park City Transit Plan

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- Costs are affordable in light of both existing and future ridership potential, without sacrificing quality of service.
- Legal and logistical issue can be readily accommodated through an inter-local agreement – supported by historical precedent – and overseen by a third-party committee.
- The preferred plan responds to the degree and locations of future growth.

# Park City Transit Plan

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## **Chapter Five:** Implementation Strategies and Next Steps

# Park City Transit Plan

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Effective implementation strategies and next steps will address further market analysis and targeting, system management and operation, funding and budget issues, equipment and maintenance, and legal and political issues. The following lists such strategies and steps suggested by the conclusions reached in this report.

## **Section 1: Laying the Groundwork**

- Identify persons at Park City Transit, UTA, and any other participating agencies who shall be responsible for initiating the inter-county transit link, with a goal of forming an inter-agency committee to provide oversight and management.
- Conduct a thorough, targeted, scientifically grounded market analysis. This should include rider surveys, origin-destination data, as well as Chamber of Commerce and major employer data.
- Consult with legal representation regarding obligations inherent in transit enabling legislation, regulations impacting the crossing of district boundaries, insurance and liability, and the negotiation of inter-district employment issues.
- Develop an inter-local agreement that addresses these legal issues, as well as logistical matters such as shared funding, maintenance, and operation.
- Develop a plan for negotiating extra-district logistical issues, such as communications and accidents, break-downs, and delays.
- Work with unions to trouble-shoot potential pay scale and driver responsibility conflicts.
- Develop a promotion strategy that caters to the study areas variety of likely users, including a bifurcated commuter demographic, recreation and tourist travelers, students, and incidental transit users. Such a strategy should emphasize rapid, reliable service and mirror Frontrunner Commuter Rail branding.

## **Section 2: Sharing Costs & Responsibilities**

- Work with the Utah Department of Transportation to obtain available funding for which the system may be eligible (see Chapter 4 for details on applicable federal programs).
- Consider making each district responsible for funding within its own boundaries, while developing a shared funding plan for the portion outside the boundaries of both districts.
- UTA has a greater capacity to manage maintenance, while Park City Transit has lower operational costs. Such a division of responsibilities may therefore prove more feasible than a 50-50 split of each area of responsibility.
- Contact Salt Lake and Summit County major employers to negotiate transit support programs for inter-county commuters (see appendix (X) for contact information).

# Park City Transit Plan

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- Work with key agencies, such as the LDS Church and the owners of the property where the Parley's Way K-Mart is currently located to provide park-and-ride facilities.

## **Section 3: Getting on the Road**

- Pursue the purchase of vehicles that provide a combination of standard bus and motor coach-level options.
- Evaluate improvement and upgrade needs at the following stop locations:

### **Salt Lakestops:**

- K-mart on Parley's Way/Foothill with desired future park-and-ride
- Foothill Village
- University of Utah Stadium Trax Station with existing park-and-ride
- Trolley Trax Station
- Main Street & 400 South
- Intermodal Transit Hub

### **Summit Stops:**

- Albertsons at Pinebrook
- Jeremy Ranch with potential park-and-ride agreement through the L.D.S. Church
- Walmart/Outlet Stores
- The Canyons Resort
- Main Street – Park City Transit Center with existing park-and-ride
- Work with key agencies, such as the LDS Church and the owners of the property where the Parley's Way K-Mart is currently located to provide park-and-ride facilities.
- Use projected population, worker, and transportation data, as well as major planned growth areas, to develop detailed system expansion plans through 2030 and beyond.