2010 Arlington County Household Survey

June 16, 2011
Presentation Outline

- Survey background and methodology
- Demographic profiles of County and region
- Demographic profiles of County sub-areas
- Arlington residents’ travel purpose and destinations
- Arlington residents’ travel modes
- Trip counts and VMT
- Work travel to Arlington
- Arlington commute assistance services
- Travel by planning area
- Mode use characteristics
Survey Background and Methodology
Methodology

- Regional survey of travel patterns of households of the 11-jurisdiction COG region and surrounding counties

- Data collected primarily to update COG’s regional travel demand/travel behavior models

- Households were selected through address-based sampling to include cell-phone only households
  - Selected HH were contacted by mail with telephone follow-up to recruit for survey
  - Willing households completed questionnaire on characteristics of HH and each HH member
  - Travel data were collected for each HH member through one-day travel diary survey
Data Collected at Three Levels

Household Level (2 HH)
- Household A
  - Person A-1
    - Trip A-1-a
    - Trip A-1-b
    - Trip A-1-c
    - Trip A-1-d
    - Trip A-1-e
  - Person A-2

Person Level (5 persons)
- Person B-1
- Person B-2
- Person B-3
  - Trip B-1-a
  - Trip B-1-b
  - Trip B-1-c
  - Trip B-2-a
  - Trip B-2-b
  - Trip B-2-c
  - Trip B-3-a
  - Trip B-3-b
  - Trip B-3-c

Trip Level (14 trips)
Household and Person Data Collected

- **Household level data:**
  - Home location
  - HH demographics – e.g., housing type and income
  - Vehicle and bicycle ownership

- **Person level data:**
  - Personal demographics – e.g., age, ethnicity
  - Employment status
  - Work characteristics
  - School status and locations
Trip Data Collected

- Respondents used a trip diary to record all trips made during one 24-hour day – starting with location at 3 am.
- Trips were recorded for all members of the HH, including children.
- Information recorded:
  - Trip start and end time
  - Trip origin and destination
  - Trip purpose and activity
  - Type of transportation used
- Trips were “linked” – e.g., end point for one trip was the starting point for the next trip, so the total number of trips originating at a location is about the same as the number of trips destined to that location.
Survey Timeframe and Sample Size

• COG survey conducted over 14 months to minimize effects of seasonal variation (Feb 2007-Mar 2008)
  – 652 Arlington Co HH surveyed in regional survey

• Arlington Co purchased 496 additional HH (100 in 2007 and 396 in early 2010) to oversample Rosslyn-Ballston corridor, Columbia Pike, Jefferson Davis corridor, and Shirlington

• Regional total of 11,836 HH and 25,810 residents
  – 1,148 HH and 2,034 residents in Arlington
Note that the survey areas were defined to follow the adopted planning area boundaries.
## Sample Sizes – Arlington Subareas

<table>
<thead>
<tr>
<th>Sample Area</th>
<th>Number of HH</th>
<th>Number of Persons</th>
<th>Resident Trips*</th>
<th>Non-Resident Trips*</th>
<th>Total Trips*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rosslyn-Ballston</td>
<td>170</td>
<td>265</td>
<td>1,222</td>
<td>882</td>
<td>2,104</td>
</tr>
<tr>
<td>Jefferson Davis</td>
<td>188</td>
<td>286</td>
<td>971</td>
<td>756</td>
<td>1,727</td>
</tr>
<tr>
<td>Columbia Pike</td>
<td>288</td>
<td>492</td>
<td>1,172</td>
<td>92</td>
<td>1,264</td>
</tr>
<tr>
<td>Shirlington</td>
<td>102</td>
<td>156</td>
<td>411</td>
<td>52</td>
<td>463</td>
</tr>
<tr>
<td>Other</td>
<td>400</td>
<td>844</td>
<td>2,899</td>
<td>515</td>
<td>3,414</td>
</tr>
<tr>
<td>Outside Arlington</td>
<td>---</td>
<td>---</td>
<td>1,064</td>
<td>---</td>
<td>1,064</td>
</tr>
<tr>
<td>Total</td>
<td>1,148</td>
<td>2,043</td>
<td>7,739</td>
<td>2,297</td>
<td>10,036</td>
</tr>
</tbody>
</table>

* - Trips to, from, or within sample areas made by residents and non-residents.
Arlington Analysis Focus

• Initial analysis for Arlington by location:
  – County overall
  – Five “sub-areas of interest” – Rosslyn-Ballston, Jeff Davis, Columbia Pike, Shirlington, Other Arlington
  – Station areas

• Particular focus on travel characteristics:
  – Trips per HH, per person
  – Traveler demographics
  – Trip origin / destination
  – Mode split
  – Trip purpose – especially work and non-work
  – Walk trips and transit trips
Demographic Profile of Arlington Respondents
Arlington County Exhibits Some “Urban Location” Demographics

- In several demographic characteristics, Arlington is more like Washington DC than it is like the rest of VA or the region:
  - Smaller households and fewer students
  - Young adult age profile
  - More renters / more multi-family housing

- Arlington has slightly lower vehicle availability than does the region, but not as low as DC

- But Arlington is more affluent than other urban core jurisdictions and more affluent than the regional average
Household Size

Arlington has More Single-Person HH than Does the Region and Smaller HH Size

Arlington HH size is similar to that for DC and Alexandria – Much Lower than for Other VA

Average HH size =

- Arlington: 1.9
- Wash. DC: 1.9
- Alexandria: 1.9
- Other VA: 2.5
- Fairfax: 2.4

District of Columbia
n = 1,656

Alexandria
n = 408

Other Virginia
n = 2,913

Region
n = 11,836

Arlington resident
District of Columbia
Alexandria
Other Virginia
Region

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25% of Arlington Residents are 19-34 vs 16% Region
Arlington’s Age Profile is Similar to DC and Alexandria, with Fewer Children and More Young Adults
Housing Type

51% of Arlington Residents Live in Multi-Family Housing - More than Double the Regional Rate

Arlington’s housing is similar to DC and Alexandria

- Single-family detached
  - Arlington resident: 37%
  - District of Columbia: 21%
  - Alexandria: 21%
  - Other Virginia: 17%
  - Region: 64%

- Single-family attached
  - Arlington resident: 19%
  - District of Columbia: 25%
  - Alexandria: 17%
  - Other Virginia: 17%
  - Region: 59%

- Multi-family
  - Arlington resident: 51%
  - District of Columbia: 53%
  - Alexandria: 53%
  - Other Virginia: 12%
  - Region: 25%

Arlington n = 1,148
District of Columbia n = 1,656
Alexandria n = 408
Other Virginia n = 2,913
Region n = 11,836

Share of Renters

- Arlington - 40%
- DC - 42%
- Alexandria - 36%
- Other VA - 17%
- Region - 22%
Vehicles In HH
92% of Arlington HH Own a Vehicle - Similar to the 94% Region-wide; Much Higher than the 72% for DC

93% of Arlington residents 16+ have a drivers license – about the regional average of 92%

Arlington resident
District of Columbia
Region
n = 1,148
n = 1,656
n = 11,836

Average vehicles per HH
Arlington = 1.4
Washington DC = 1.0
Region = 1.9
Vehicles Per Licensed Driver

But Arlington is “car lite;” only 78% of Arlington HH have 1+ Vehicle per Driver, vs 84% in the Region.

- Arlington resident: 29%
- District of Columbia: 19%
- Alexandria: 13%
- Other Virginia: 9%
- Region: 82%

Arlington: n = 1,148
District of Columbia: n = 1,656
Alexandria: n = 408
Other Virginia: n = 2,913
Region: n = 11,836
Bicycles In HH
50% of Arlington HH Own 1 or more Bicycles – Slightly Lower than the Region, but Higher than DC and Alexandria

Arlington
n = 1,148

District of Columbia
n = 1,656

Alexandria
n = 408

Other Virginia
n = 2,913

Region
n = 11,836

1 or more bicycles
Arlington - 50%
DC - 45%
Alexandria - 48%
Other Virginia - 56%
Region - 53%
47% of Arlington Residents have Annual Household Incomes of $100,000 or More
Arlington is More Affluent than Other Urban Core Areas

- **Less than $60,000**
  - Arlington: 25%
  - District of Columbia: 28%
  - Alexandria: 24%
  - Other Virginia: 30%
  - Region: 45%

- **$60,000 - 99,900**
  - Arlington: 27%
  - District of Columbia: 23%
  - Alexandria: 30%
  - Other Virginia: 26%
  - Region: 27%

- **$100,000 or more**
  - Arlington: 47%
  - District of Columbia: 32%
  - Alexandria: 30%
  - Other Virginia: 28%
  - Region: 43%

$100K or more
47% Arlington
43% region

Arlington n = 1,148
District of Columbia n = 1,656
Alexandria n = 408
Other Virginia n = 1,534
Region n = 11,836

Southeastern Institute of Research
Demographic Profiles of County Sub-Areas
Arlington County Sub-Areas are Distinctly Different Demographically

- **Rosslyn-Ballston** – Young adults, small HH, high income, low vehicle availability, multi-family housing
- **Jefferson Davis** – Young adults, small HH, lowest vehicle availability, all multi-family housing, renters
- **Columbia Pike** – Larger HH, more children, highest non-white population, lowest income
- **Shirlington** – Small HH, more affluent, young adults, multi-family housing, high vehicle availability
- **Other Arlington** – largest HH, more children, highest income, high vehicle ownership
Household Size by Area

HH were Smallest in R-B, Jeff Davis, and in Shirlington; “Other Arlington” HH were Largest

Average HH size =

- Rosslyn-Ballston: 1.6
- Jefferson Davis: 1.6
- Columbia Pike: 1.8
- Shirlington: 1.6
- Other Arlington: 2.2

- Rosslyn-Ballston: 56% 29% 15%
- Jefferson Davis: 55% 37% 8%
- Columbia Pike: 50% 31% 19%
- Shirlington: 58% 30% 12%
- Other Arlington: 35% 29% 36%

Rosslyn-Ballston: n = 170
Jefferson Davis: n = 188
Columbia Pike: n = 288
Shirlington: n = 102
Other Arlington: n = 400

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Age by Area

R-B, Jeff Davis, and Shirlington Have Large Shares of Young Adults (19-34); Columbia Pike and Other Arlington Have Largest Shares of Children

Rosslyn-Ballston
n = 265

Jefferson Davis
n = 286

Columbia Pike
n = 492

Shirlington
n = 156

Other
n = 844

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Housing Type by Area

Large Majorities of Residents in R-B, Jeff Davis, and Shirlington Live in Multi-family Housing

Rosslyn-Ballston
n = 265

Jefferson Davis
n = 286

Columbia Pike
n = 492

Shirlington
n = 156

Other Arlington
n = 844

Share of Renters
R-B – 57%
Jeff Davis – 77%
Columbia Pike - 47%
Shirlington - 57%
Other Arlington - 20%

Southeastern Institute of Research
Race/Ethnicity by Area
Columbia Pike has the Largest Share of Non-White Residents in the County

<table>
<thead>
<tr>
<th>Area</th>
<th>White</th>
<th>Non-white</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rosslyn-Ballston</td>
<td>20%</td>
<td>80%</td>
</tr>
<tr>
<td>Jefferson Davis</td>
<td>21%</td>
<td>79%</td>
</tr>
<tr>
<td>Columbia Pike</td>
<td>35%</td>
<td>65%</td>
</tr>
<tr>
<td>Shirlington</td>
<td>17%</td>
<td>83%</td>
</tr>
<tr>
<td>Other Arlington</td>
<td>12%</td>
<td>88%</td>
</tr>
</tbody>
</table>

Note: These results are believed to under-represent minority residents. Due to unavailability of reliable sub-area race/ethnicity data at the time the survey was conducted, the data were not adjusted for ethnicity, but COG anticipates revisiting this issue when the 2010 Census data are available at the census tract level in summer/fall 2011.
Annual HH Income by Area

Highest HH Incomes are in Other Arlington; Lowest HH Incomes are in Columbia Pike
Vehicle per Driver by Area

R-B and Jeff Davis area Resident were Less Likely to have a Vehicle for Each Driver than were Residents in Other Parts of the County.
Trip Purposes and Destinations
Arlington Residents’ Trip Purposes Mirror Those of the Region

- Arlington residents travel for the same purposes as do other regional residents
- Both Arlington residents and all regional residents make about three-quarters of their trips with HOME as one trip end
- But Arlington residents make more of their trips outside their home jurisdiction than do residents region-wide
19% of Arlington Residents’ Trips are Made for Work; 21% to Go Home to Sleep or Eat

Arlington residents make a slightly higher share of trips for work than do other regional residents, but they generally have similar trip purposes as do other residents.
73% of Arlington Residents’ Trips are “Home-based” with Either the Origin or Destination at Home – The Same Share as for The Region

27% of Arlington residents’ trips start AND end away from home

6% of Arlington’s non-home-based trips are “work-based shop” and 6% are “work-based other”
Arlington Residents Make 69% of their Daily Trips to an Arlington Locations*

**Arlington destinations:**
- RB corridor – 16%
- Jeff Davis corridor – 7%
- Columbia Pike – 6%
- Shirlington – 1%
- Other Arlington – 39%

*Trips are one-way, so each trip away from Arlington is matched by a return trip.

Trip Destinations

- Arlington 68%
- Washington DC 14%
- Fairfax County 11%
- Alexandria 3%
- Other 4%

n = 7,784
But Arlington Residents Make a Smaller Share of their Daily Trips within their Home Jurisdiction than Do Residents Region-wide

Arlington residents make 50% of their trips completely within Arlington. By contrast, residents region-wide make 71% of their trips within their home jurisdiction.

Arlington
n = 7,784

District of Columbia
n = 10,215

Alexandria
n = 2,640

Other Virginia
n = 23,786

Suburban Maryland (Montgomery / Prince George’s) n = 21,324

Region
n = 90,203

Arlington
47%

District of Columbia
74%

Alexandria
75%

Other Virginia
73%

Suburban Maryland
75%

Region
71%
Arlington Residents’ Travel Modes
Arlington’s Low Drive Alone Mode Split Reflects its Urban Core Location

• Arlington residents make only 40% of daily trips by driving alone

• They make a larger share of trips by transit and walking than do any other residents in the region except DC

• Their travel mode choice is related to the purpose of the trips they make and the destinations of the trips
Arlington Residents Drive Alone for Only 40% of Trips – 16% of Trips are Made on Foot

Residents make three in ten daily trips by driving or riding with others and 11% of trips by train or bus
Arlington Residents Drive Alone Slightly Less than do Residents Region-wide; They Walk and use Transit Twice as Much

Mode split - All daily trips
When Children’s Travel is Excluded, the Difference Between Arlington’s DA Rate and the Regional Rate is More Pronounced

Mode split - All daily trips, residents 19+ years old

Arlington residents 19 years or older
Regional residents 19 years or older

Arlington n = 6,854
Region n = 74,257
Arlington’s Drive Alone Rate is Lower than for Any Part of the Region Except DC

Mode split - All daily trips

- Drive alone
  - Arlington residents: 40%
  - District of Columbia: 42%
  - Alexandria: 31%
  - Other Virginia: 44%
  - Suburban MD: 44%

- Drive / ride with others
  - Arlington residents: 44%
  - District of Columbia: 40%
  - Alexandria: 40%
  - Other Virginia: 40%
  - Suburban MD: 40%

- Walk / bicycle
  - Arlington residents: 17%
  - District of Columbia: 28%
  - Alexandria: 28%
  - Other Virginia: 30%
  - Suburban MD: 23%

- Transit
  - Arlington residents: 11%
  - District of Columbia: 9%
  - Alexandria: 9%
  - Other Virginia: 3%
  - Suburban MD: 6%
Arlington Residents **Drive Alone** Most Often for Work, Shopping, and Personal Business Trips

They make fewer drive alone trips for recreation, socializing, and to go to school.

![Share of Trips Made by Driving alone](chart)

<table>
<thead>
<tr>
<th>Category</th>
<th>Share of Trips Made by Driving alone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work-related</td>
<td>66%</td>
</tr>
<tr>
<td>Commute</td>
<td>50%</td>
</tr>
<tr>
<td>Shop/errand</td>
<td>49%</td>
</tr>
<tr>
<td>Personal business</td>
<td>46%</td>
</tr>
<tr>
<td>Pick-up/Drop off</td>
<td>36%</td>
</tr>
<tr>
<td>Recreation</td>
<td>33%</td>
</tr>
<tr>
<td>Socialize</td>
<td>29%</td>
</tr>
<tr>
<td>Meals away from home</td>
<td>20%</td>
</tr>
<tr>
<td>School/daycare</td>
<td>11%</td>
</tr>
</tbody>
</table>

**Notes:**
- **Work** n = 1,405
- **Work-related** n = 153
- **Shop / errand** n = 1,110
- **Personal business** n = 560
- **Meals away from home** n = 420
- **Pick up / Drop off** n = 371
- **Recreation** n = 312
- **Socialize** n = 224
- **School / daycare** n = 233

*Southeastern Institute of Research*
Residents **Ride with Others** Most Often for School, to Pick Up / Drop Off, and for Recreation

Arlington residents make 10% of work trips by carpool or vanpool

<table>
<thead>
<tr>
<th>Activity</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work-related</td>
<td>153</td>
</tr>
<tr>
<td>Shop / errand</td>
<td>1,110</td>
</tr>
<tr>
<td>Personal business</td>
<td>560</td>
</tr>
<tr>
<td>Meals away from home</td>
<td>420</td>
</tr>
<tr>
<td>Pick up / Drop off</td>
<td>371</td>
</tr>
<tr>
<td>Recreation</td>
<td>312</td>
</tr>
<tr>
<td>Socialize</td>
<td>224</td>
</tr>
<tr>
<td>School / daycare</td>
<td>233</td>
</tr>
</tbody>
</table>

**Share of Trips Made by Driving/Riding with others**
Residents Use **Transit** Primarily for Commuting, Work-Related Travel, and for Visits/Socializing

Residents use transit for few shopping / errand trips, likely due to the need to carry packages.

**Share of Trips Made by Transit**

- Work-related: 11%
- Commute: 22%
- Shop/errand: 5%
- Personal business: 8%
- Pick-up/Drop off: 3%
- Recreation: 4%
- Socialize: 10%
- Meals away from home: 7%
- School/daycare: 5%
Residents walk for All Trip Purposes, but Most Often for Recreation, Meals, and Social/Entertainment Trips

Residents walk for 17% of work trips and 17% of school trips.

Share of Trips Made by Walking

- Work-related: 9%
- Commute: 17%
- Shop/errand: 15%
- Personal business: 8%
- Pick-up/Drop off: 16%
- Recreation: 22%
- Socialize: 21%
- Meals away from home: 34%
- School/daycare: 17%
Arlington Residents’ also Walk to Access Transit
More than do Residents Region-wide

Arlington Residents

Train access
82%

Bus access
100%

Regional Residents

Train access
67%

Bus access
92%
Residents Drive Alone for 33% and Walk for 23% of Trips they Make **Within** Arlington

They use transit for 22% of trips that have one trip end outside the County and walk for 31% of trips that are **entirely** outside Arlington.
Residents of R-B Corridor and Jeff Davis Corridor Drive Alone Less and Walk and Use Transit More than Do Other Arlington Residents

<table>
<thead>
<tr>
<th>Location</th>
<th>Drive alone</th>
<th>Drive/ride with others</th>
<th>Walk</th>
<th>Transit</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-B Corridor</td>
<td>34%</td>
<td>25%</td>
<td>23%</td>
<td>15%</td>
</tr>
<tr>
<td>J D Corridor</td>
<td>29%</td>
<td>19%</td>
<td>29%</td>
<td>21%</td>
</tr>
<tr>
<td>Columbia Pike</td>
<td>42%</td>
<td>31%</td>
<td>13%</td>
<td>10%</td>
</tr>
<tr>
<td>Shirlington</td>
<td>49%</td>
<td>24%</td>
<td>16%</td>
<td>9%</td>
</tr>
<tr>
<td>Other Arlington</td>
<td>39%</td>
<td>38%</td>
<td>13%</td>
<td>5%</td>
</tr>
</tbody>
</table>

Share of Daily Trips by Mode

R-B Corridor n = 1,516
J D Corridor n = 1,168
Columbia Pike n = 910
Shirlington n = 326
Other Arlington n = 2,595
Arlington Work Travel
Commuting Trips Represent a Significant Element of Inbound Travel

• There is substantial inbound/outbound traffic for Arlington commuting – 67% of employed Arlington residents travel outside the County to work and 79% of Arlington workers live outside Arlington.

• But less than six in ten Arlington residents and workers drive alone to work, compared with 71% region-wide.
67% of Employed Arlington Residents Travel Outside Arlington to Work - 38% Work in DC and 17% work in Fairfax County

76% of residents 16 years or older are employed.
21% of Arlington Workers Live in Arlington; Half Live in Other Virginia Jurisdictions

- Arlington: 21%
- District of Columbia: 7%
- Fairfax: 30%
- Loudoun/Prince William: 10%
- Maryland: 21%
- Alexandria: 6%
- Other Virginia: 5%

n = 1,020

Monday, June 20, 2011
26% of Employed Arlington Residents and 36% of Arlington Workers Work for a Federal Agency

Arlington residents
n = 1,291

Arlington workers
n = 1,020

Region
n = 13,355

- Private employer
  - Arlington resident: 43%
  - Arlington worker: 41%
  - All region: 47%

- Non-profit organization
  - Arlington resident: 17%
  - Arlington worker: 9%
  - All region: 13%

- Federal agency
  - Arlington resident: 26%
  - Arlington worker: 36%
  - All region: 20%

- State/local agency
  - Arlington resident: 7%
  - Arlington worker: 7%
  - All region: 12%

- Self-employed
  - Arlington resident: 7%
  - Arlington worker: 5%
  - All region: 9%
Both Arlington Residents and Workers Drive Alone to Work Much Less than the 71% Regional Average

Arlington residents and workers make a quarter of their work trips by transit, more than double the transit share of the region.

- **Drive alone**: 71% (All region), 55% (Arlington residents), 58% (Arlington workers)
- **Transit**: 25% (All region), 12% (Arlington residents), 25% (Arlington workers)
- **Walk/bike**: 4% (All region), 6% (Arlington residents), 3% (Arlington workers)
- **Work at home**: 9% (All region), 8% (Arlington residents), 5% (Arlington workers)
- **Carpool**: 5% (All region), 3% (Arlington residents), 8% (Arlington workers)
Work Start Times are Similar for Arlington Residents, Arlington Workers, and for Regional Workers

More than eight in ten Arlington residents and workers start work between 6 am and 9am.

Arlington residents  
n = 1,291

Arlington workers  
n = 1,020

Region  
n = 13,355
But Arlington Residents and Workers End Work Later than do Other Regional Workers

83% of employed Arlington residents and 82% of Arlington workers end work between 3 pm and 7 pm, compared with 76% of all regional workers.
36% of Arlington Residents and 27% of Arlington Workers are Eligible to Telework

Approximately half of workers who were eligible for telework teleworked in the past week.
Travel To Arlington
Travel to Arlington Reflects Its Characteristics and Travel Opportunities

• 35% of all “Arlington trips” start and end in Arlington; 65% have at least one end point outside Arlington

• 41% of trips to Arlington are destined for the R-B corridor or Jeff Davis corridor.

• Just over a third of trips to R-B corridor and J D corridor are drive alone.

• R-B and Shirlington capitalize on their walkability – a quarter of R-B trips and 18% of Shirlington trips are by walking.
35% of All “Arlington Trips” have Both Origin and Destination in Arlington – “Internal Trips”

- Arlington origin only: 29%
- Arlington destination only: 29%
- Origin and destination outside Arlington: 8%
- Arlington origin and destination: 35%

* Arlington resident trips

“Arlington trip” includes trips with an Arlington origin or destination, and all trips made by Arlington residents, regardless of the trip location.
55% of Trips TO Arlington Start in Arlington, 18% Come From Fairfax, and 12% Start in Washington DC

**Arlington origins:**
- RB corridor – 16%
- Jeff Davis corridor – 6%
- Columbia Pike – 4%
- Shirlington – 1%
- Other Arlington – 28%

Trip Origins

- Arlington 54%
- Fairfax County 18%
- Alexandria 5%
- OtherVA 4%
- Maryland 7%
- Washington DC 12%

n = 7,784

Monday, June 20, 2011
23% of all Trips TO Arlington End in the Rosslyn-Ballston Corridor and 18% End in the Jefferson Davis Corridor

Trip Destinations within Arlington*

*Destination boundaries follow planning area boundaries

But note that Jeff Davis corridor includes trips to the Pentagon and National Airport

n = 6,515

Monday, June 20, 2011
Columbia Pike and Other Arlington are the Most Common Internal Destinations. Jeff Davis has the Highest Share of Inbound Trips

- R-B Corridor: 53% Trip starts and ends in Arlington, 47% Trip starts outside Arlington, ends in Arlington
- J D Corridor: 36% Trip starts and ends in Arlington, 64% Trip starts outside Arlington, ends in Arlington
- Columbia Pike: 57% Trip starts and ends in Arlington, 43% Trip starts outside Arlington, ends in Arlington
- Shirlington: 50% Trip starts and ends in Arlington, 50% Trip starts outside Arlington, ends in Arlington
- Other Arlington: 64% Trip starts and ends in Arlington, 36% Trip starts outside Arlington, ends in Arlington

R-B Corridor: n = 1,517
J D Corridor: n = 1,168
Columbia Pike: n = 910
Shirlington: n = 326
Other Arlington: n = 2,595

Monday, June 20, 2011
27% of Daily Trips TO Arlington were for Work and 12% were for Shopping / Errands

The “work/work-related” share of trips TO Arlington (27%) is higher than the work share of Arlington residents’ trips (19%) – reflects Arlington’s draw as a work location.
69% of All Arlington Trips are “Home-based” with Either the Origin or Destination at Home

The remaining 31% of trips start and end at a non-home location; among non-home based trips, 16% have one end point at work.

- Home-based work trips: 24%
- Home-based shop trips: 14%
- Home-based other: 32%
- Non-home based: 7% are “work-based shop”; 9% are “work-based other”
Travel by Planning Area
Work Trips Comprise Large Shares of Trips To R-B and J D Corridors

Nearly half of the trips to Shirlington are for meals or shopping. Columbia Pike is primarily a “go home” destination.
More than Half of Trips to R-B and J D Corridors are Made by Non-Residents vs Less than a Third of Trips to Other Arlington Locations

- R-B Corridor: 49% Arlington resident, 51% Non-resident, n = 1,516
- J D Corridor: 43% Arlington resident, 57% Non-resident, n = 1,168
- Columbia Pike: 18% Arlington resident, 82% Non-resident, n = 910
- Shirlington: 32% Arlington resident, 68% Non-resident, n = 326
- Other Arlington: 26% Arlington resident, 74% Non-resident, n = 2,595

Monday, June 20, 2011
Fairfax is a Major Origin for All Sub-Areas; Other VA and MD are Significant Origins for JD Corridor

- R-B Corridor: Fairfax is the major origin with 53%.
- J D Corridor: Fairfax has a significant presence with 34%.
- Columbia Pike: Fairfax is still important with 14%.
- Shirlington: Fairfax has a notable share with 22%.
- Other Arlington: Fairfax is a major contributor with 11%.

Legend:
- Arlington
- Alexandria
- Fairfax
- Other

Southeastern Institute of Research
Trips to Jeff Davis are Considerably Longer than are Trips to Other Arlington Areas – 29% are 10 Miles or Longer

Less than two in ten trips to any other Arlington area are 10 miles or more. About three in ten trips to R-B Corridor and Shirlington are less than 2 miles.
The Age Profile of Travelers to the Planning Areas Differ Substantially

Columbia Pike and Other Arlington areas have sizeable shares of children as travelers, while R-B corridor and Shirlington attract travelers from 19 to 34.

- **R-B Corridor**: 6% Under 19, 28% 19 to 34, 66% 35 or older
- **J D Corridor**: 4% Under 19, 24% 19 to 34, 71% 35 or older
- **Columbia Pike**: 17% Under 19, 24% 19 to 34, 58% 35 or older
- **Shirlington**: 5% Under 19, 35% 19 to 34, 62% 35 or older
- **Other Arlington**: 16% Under 19, 25% 19 to 34, 59% 35 or older

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Southeastern Institute of Research
Just Over a Third of Trips to Rosslyn-Ballston Corridor and Jeff Davis Corridor are Drive Alone

- R-B Corridor: 36% Drive Alone, 21% Drive/Ride with Others
- Jeff Davis Corridor: 35% Drive Alone, 21% Drive/Ride with Others
- Columbia Pike: 45% Drive Alone, 31% Drive/Ride with Others
- Shirlington: 47% Drive Alone, 27% Drive/Ride with Others
- Other Arlington: 42% Drive Alone, 38% Drive/Ride with Others

Monday, June 20, 2011
Walk Trips Comprise a Quarter of Trips to Rosslyn-Ballston Corridor and 18% to Shirlington

- R-B Corridor: 20% Walk, 25% Transit, n=1,516
- J D Corridor: 15% Walk, 25% Transit, n=1,168
- Columbia Pike: 11% Walk, 10% Transit, n=910
- Shirlington: 8% Walk, 8% Transit, n=326
- Other Arlington: 4% Walk, 11% Transit, n=2,595

Monday, June 20, 2011
Peak Arrivals Vary by Arlington Destination – RB and JD have Large Share of Arrivals in the Morning Peak – Trips to Other Destinations are Balanced through the Day

Note Scale extends only to 60% to highlight differences.
Arlington Person Trips, Vehicle Trips, and VMT
Estimate of Trips and VMT Region-wide and To, From, and Within Arlington

- The survey collected data for each trip on the origin, destination, mode, and distance. These data can be used to:
  - Estimate the number of **person trips** and **vehicle trips** during a typical day
  - Estimate the number of **daily person miles** and **daily vehicle miles of travel** (VMT)
  - Calculate total trips and VMT for trips **to, from, and within Arlington**
Arlington Residents Travel Fewer Person Miles and Fewer VMT than Do Residents Region-wide

- Arlington residents make more total trips per day than the regional average – 3.9 vs 3.5
- But they travel fewer daily person miles (15.8 mi) than the regional average (25.6 mi) because their trips are shorter
- They also travel fewer vehicle miles (VMT) (11.1 mi) than the average for the region (17.2 mi), due to higher use of transit and walking
Arlington Residents Make 3.9 Daily Trips, Above the 3.5 Regional Average

93% of Arlington residents made 1 or more trips on their surveyed day – higher than the 88% regional percentage.

Arlington residents 19 years or older make an average of 4.1 daily trips compared with 3.7 trips region-wide.

Average Trips per person per day
Middle-Aged Residents Make the Most Daily Trips

Some of the trip count difference between Arlington and the region is due to the smaller share of children in Arlington’s population – very young and very old residents make fewer daily trips.
Households with Lower Vehicle Availability Make Fewer Overall Trips

But the age influence likely is tempered by lower vehicle ownership - Car-free households make 2.7 average daily trips per person. “Car-lite” households make 3.3 trips per person, vs 3.5 trips for HH with a car for every driver.
Shirlington and “Other Arlington” Residents Make More Trips per Day than do Residents of R-B, Jeff Davis, or Columbia Pike

<table>
<thead>
<tr>
<th>Neighborhood</th>
<th>Average Trips per person per day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shirlington</td>
<td>3.9</td>
</tr>
<tr>
<td>Other Arlington</td>
<td>4.1</td>
</tr>
<tr>
<td>Columbia Pike</td>
<td>3.6</td>
</tr>
<tr>
<td>Jeff Davis</td>
<td>3.6</td>
</tr>
<tr>
<td>Rosslyn-Ballston</td>
<td>3.6</td>
</tr>
</tbody>
</table>

n = Number of respondents

Monday, June 20, 2011
Arlington residents make the same number of daily drive alone trips as the regional average, but DA accounts for a smaller share of total trips.

<table>
<thead>
<tr>
<th>Region</th>
<th>Drive alone</th>
<th>Drive/ride with others</th>
<th>Walk</th>
<th>Transit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arlington</td>
<td>1.5</td>
<td>1.2</td>
<td>0.6</td>
<td>0.4</td>
</tr>
<tr>
<td>District of Columbia</td>
<td>1.0</td>
<td>0.8</td>
<td>0.9</td>
<td>0.7</td>
</tr>
<tr>
<td>Alexandria</td>
<td>1.6</td>
<td>1.2</td>
<td>0.6</td>
<td>0.3</td>
</tr>
<tr>
<td>Other Virginia</td>
<td>1.5</td>
<td>1.5</td>
<td>0.2</td>
<td>1.1</td>
</tr>
<tr>
<td>Region</td>
<td>1.5</td>
<td>1.4</td>
<td>0.5</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Average Trips per person by mode
Jeff Davis and Rosslyn-Ballston Residents Make Substantially More Daily Transit/Walk Trips than do Other Arlington Residents

Average Trips per person by mode

- **Rosslyn-Ballston**: 1.2 (Drive alone) + 0.9 (Drive/ride with others) + 0.7 (Walk) + 0.7 (Transit) = 1.4
- **Jeff Davis**: 1.0 (Drive alone) + 0.7 (Drive/ride with others) + 1.0 (Walk) + 0.8 (Transit) = 1.8
- **Columbia Pike**: 1.6 (Drive alone) + 1.1 (Drive/ride with others) + 0.4 (Walk) + 0.4 (Transit) = 0.8
- **Shirlington**: 2.3 (Drive alone) + 0.6 (Drive/ride with others) + 0.5 (Walk) + 0.5 (Transit) = 1.0
- **Other Arlington**: 1.7 (Drive alone) + 1.3 (Drive/ride with others) + 0.6 (Walk) + 0.3 (Transit) = 0.8
Arlington Residents’ Travel Times are Very Close to Region-wide Averages

64% of residents’ trips take 20 minutes or less, compared with 62% of trips region-wide.
But Arlington Residents’ Trips are Much Shorter Distances than the Regional Average

44% of residents’ trips are under 2 miles, compared with 35% of trips region-wide. Only 8% of residents’ trips are 10 or more miles, compared with 22% of all regional trips.
Transit Trips were by Far the Longest Trips in Terms of Time – Six in Ten Take More than 40 Minutes

By contrast, 90% of walk / bike trips take 20 minutes or less and 67% of walk/bike trips take 10 minutes or less.
Arlington Residents Travel Shorter Distances by All Modes than do Regional Residents

Arlington Residents Travel Shorter Distances by All Modes than do Regional Residents

Arlington residents
Region

**Arlington Residents**
- Drive alone: 5.8 miles
- Drive / ride with others: 3.7 miles
- Bike / walk: 0.5 miles
- Transit: 4.7 miles
- Other: 2.8 miles

**Region**
- Drive alone: 8.6 miles
- Drive / ride with others: 6.2 miles
- Bike / walk: 0.5 miles
- Transit: 11.5 miles
- Other: 4.3 miles

**One-Way Miles**

- **Arlington Residents**
  - Drive alone: 5.8 miles
  - Drive / ride with others: 3.7 miles
  - Bike / walk: 0.5 miles
  - Transit: 4.7 miles
  - Other: 2.8 miles

- **Region**
  - Drive alone: 8.6 miles
  - Drive / ride with others: 6.2 miles
  - Bike / walk: 0.5 miles
  - Transit: 11.5 miles
  - Other: 4.3 miles

Monday, June 20, 2011
When Trip Counts and Average Distances are Combined, Arlington Residents Travel 39% Fewer Total Daily Miles and 35% Fewer VMT Than do Residents Region-wide

<table>
<thead>
<tr>
<th>Travel Mode</th>
<th>Daily Trips</th>
<th>Average daily miles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Arlington</td>
<td>Region</td>
</tr>
<tr>
<td>Drive alone</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Rideshare</td>
<td>1.2</td>
<td>1.4</td>
</tr>
<tr>
<td>Transit</td>
<td>0.4</td>
<td>0.3</td>
</tr>
<tr>
<td>Walk/Bike</td>
<td>0.6</td>
<td>0.2</td>
</tr>
<tr>
<td>Other</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3.9 trips</strong></td>
<td><strong>3.5 trips</strong></td>
</tr>
<tr>
<td><strong>Daily Veh Mi</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Vehicle trip estimate = drive alone VMT + ½ rideshare VMT assuming a 2-person carpool
Arlington Residents Make 3.6 Trips per Person per Day in Arlington; Non-Residents Contribute an Additional 2.3 Trips per Day in Arlington

All Arlington Residents = 2,043
Arlington residents with trip in Arlington = 1,875
Non-residents with trip in Arlington = 997

Arlington Trip = a trip with an origin and/or destination in Arlington

Arlington residents

3.6 Arlington trips

- Drive alone: 1.4
- Drive / ride with others: 1.1
- Bike / walk: 0.5
- Transit: 0.4
- Other: 0.1

Non-residents

2.3 Arlington trips

- Drive alone: 1.0
- Drive / ride with others: 0.6
- Bike / walk: 0.2
- Transit: 0.5
- Other: 0.0

Average Arlington trips by mode
### Estimated Daily Person and Vehicle **Trips** to and Within Arlington by Residents / Non-Residents

<table>
<thead>
<tr>
<th>Travel Mode</th>
<th>Daily Trips</th>
<th>Person and Vehicle Trips</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Resident</td>
<td>Non-Resident</td>
</tr>
<tr>
<td>Drive alone</td>
<td>1.4</td>
<td>1.0</td>
</tr>
<tr>
<td>Rideshare</td>
<td>1.1</td>
<td>0.6</td>
</tr>
<tr>
<td>Transit</td>
<td>0.4</td>
<td>0.5</td>
</tr>
<tr>
<td>Walk/Bike</td>
<td>0.5</td>
<td>0.2</td>
</tr>
<tr>
<td>Other</td>
<td>0.1</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>Daily Person Trips</td>
<td>3.6</td>
<td>2.3</td>
</tr>
</tbody>
</table>

**Daily Veh Trips**

337,500

296,000

633,500

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Vehicle trip estimate = drive alone trips + ½ rideshare trips assuming a 2-person carpool

All Arlington Residents = 2,043

Arlington residents with trip in Arlington = 1,875

Non-residents with trip in Arlington n = 997

Monday, June 20, 2011
About Half of All Arlington Trips are Less than 6 Miles; 85% of Walk / Bike Trips are Less than 1 mile

But 19% of drive alone trips and 22% of transit trips are more than 15 miles long.
Trips Arlington Residents’ Make to, from, or within Arlington also are Much Shorter for All Modes than are Arlington Trips Made by Non-Residents

<table>
<thead>
<tr>
<th>Mode</th>
<th>Arlington residents</th>
<th>Non-residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive alone</td>
<td>5.6</td>
<td>13.3</td>
</tr>
<tr>
<td>Drive / ride with others</td>
<td>3.5</td>
<td>13.1</td>
</tr>
<tr>
<td>Transit</td>
<td>5.0</td>
<td>14.5</td>
</tr>
<tr>
<td>Bike / walk</td>
<td>0.6</td>
<td>1.3</td>
</tr>
<tr>
<td>Other</td>
<td>2.8</td>
<td>12.7</td>
</tr>
</tbody>
</table>

All Arlington Residents = 2,043
Arlington residents with trip in Arlington = 1,875
Non-residents with trip in Arlington = 997
## Estimated Daily Miles and VMT to and Within Arlington by Residents and Non-Residents

<table>
<thead>
<tr>
<th>Travel Mode</th>
<th>Daily VMT</th>
<th>Person and Vehicle Miles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Resident</td>
<td>Non-Resident (1,000s)</td>
</tr>
<tr>
<td>Drive alone</td>
<td>7.9</td>
<td>13.7</td>
</tr>
<tr>
<td>Rideshare</td>
<td>3.9</td>
<td>7.5</td>
</tr>
<tr>
<td>Transit</td>
<td>2.1</td>
<td>6.6</td>
</tr>
<tr>
<td>Walk/Bike</td>
<td>0.3</td>
<td>0.2</td>
</tr>
<tr>
<td>Other</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td><strong>Total Miles</strong></td>
<td><strong>14.6</strong></td>
<td><strong>28.3</strong></td>
</tr>
</tbody>
</table>

**Vehicle Miles**

<table>
<thead>
<tr>
<th></th>
<th>Resident</th>
<th>Non-Resident</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,685</td>
<td>3,915</td>
</tr>
<tr>
<td><strong>Total Vehicle Miles</strong></td>
<td><strong>5,600</strong></td>
<td></td>
</tr>
</tbody>
</table>

---

All Arlington Residents = 2,043

Arlington residents with trip in Arlington = 1,875

Non-residents with trip in Arlington = 997

Vehicle trip estimate = drive alone trips + ½ rideshare trips assuming a 2-person carpool

Monday, June 20, 2011